

**ADDENDUM  
NO. 02**

**January 28, 2026**

**Kalamazoo Public Schools Kalamazoo Central High School Secure Vestibule & Mechanical Upgrades  
2432 North Drake Rd  
Kalamazoo, MI 49006**

**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 January 5, 2026, by TowerPinkster. 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 2-1 through ADD 2-2, and TowerPinkster Addendum No. 02 dated January 28, 2026, consisting of 43 pages.

**A. SPECIFICATION SECTION 00 20 00 - INFORMATION AVAILABLE TO BIDDERS**

1. Refer to the attached Pre Award Schedule.

**B. SPECIFICATION SECTION 00 43 50 - SUBCONTRACTORS AND PRODUCTS LIST**

1. Relace Section 00 43 50 Subcontractors And Products List with attached.
2. Add new Bid Category No. 06 Fire Protection.

**C. SPECIFICATION SECTION 01 12 00 - MULTIPLE CONTRACT SUMMARY**

1. Replace Section 01 12 00 Multiple Contract Summary with attached.
2. Add new Bid Category No. 06 Fire Protection.

**D. SPECIFICATION 01 21 00 – ALLOWANCES**

1. Replace Section 01 21 00 Allowances with attached.
2. Add new Bid Category No. 06 Fire Protection.

**E. Refer to the attached Request For Information summary, Pre-Bid RFI No. 01 through 04 are included.**

## KPS - K-Central Vestibule and Piping

### Pre-Award Conference Schedule

1/27/2026

\*Apparent Low Bidder

| Thursday (2/5) | 8:00am | 9:00am | 10:00am | 11:00am  | 12:00pm | 1:00pm  | 2:00pm                                 | 3:00pm                                | 4:00pm   |
|----------------|--------|--------|---------|--|---------|---|--|---------------------------------------|--|
|                |        |        |         | BC 01 - General<br>Trades*<br>11:00am - 11:45am. |         | BC 02 -<br>Drywall/Ceilings*<br>1:00pm - 1:45pm | BC 03 - Mechanical*<br>2:00pm - 2:45pm | BC 03 - Mechanical<br>3:00pm - 3:45pm | BC 06 - Fire<br>Protection*<br>4:00pm - 4:45pm |

| Friday (2/6) | 8:00am | 9:00am | 10:00am                                   | 11:00am                                 | 12:00pm                                 | 1:00pm | 2:00pm | 3:00pm | 4:00pm |
|--------------|--------|--------|---|---|---|--------|--------|--------|--------|
|              |        |        | BC 04 - Electrical *<br>10:00am - 10:45am | BC 04 - Electrical<br>11:00am - 11:45am | BC 05 - Elevators*<br>12:00pm - 12:45pm |        |        |        |        |

## **SECTION 00 43 50 - SUBCONTRACTORS AND PRODUCTS LIST**

### **PART 1 - GENERAL**

#### **1.01 DESCRIPTION**

- A. The two (2) low responsive Bidders in each Bid Category shall furnish electronically, the following Subcontractors and Products List to the Construction Manager within two (2) working days (48 hrs.) of bid opening, unless submitted with Bid. The blanks appropriate to the Bid Category(ies) on which they bid shall be completed.
  1. The Owner and Architect shall have the right to select any material or equipment named in the Specifications for any particular item where the Bidder either fails to list same or lists more than one name for the item in question.
  2. It is intended that this list will show the manufacturer and supplier of major items of work that will be subcontracted and to whom.

#### **1.02 INSTRUCTIONS FOR SUBCONTRACTORS AND PRODUCTS LISTS**

- A. Each Bidder shall submit a copy of his list of subcontractors and manufacturers of products and equipment proposed for work indicated as required above.
- B. The list shall be submitted on forms provided and shall be completely executed. "As Specified" or "With Equipment" type of terminology will not be accepted.
- C. Under "Subcontractor", insert the name of the firm which the Bidder proposes to have perform the respective work. If work will be done by the Prime Bidder and no subcontract will be awarded, state "By Own Forces".
- D. Submission does not constitute acceptance for use of listed manufacturers' products. Materials and subcontractors are subject to the provisions of the General Conditions and "Standard of Product Acceptability" and must be formally reviewed and adjudged acceptable by the Architect/Engineer.
- E. Engineer, Architect and Owner reserve the right to reject submissions of materials, work, or subcontractors that do not, in their opinion, meet the requirements of Drawings, Specifications or job conditions.
- F. Materials and subcontractors used for work on the Project shall be in accordance with accepted material list.
  1. The list is intended to assure use of materials and vendors acceptably equivalent to those specified and is not a substitution sheet or complete listing of required materials or services.

2. Substitutions for listed items will not be allowed, except when termed acceptable, in writing by the Architect/Engineer, provided that substitution will result in a cost savings to the Owner, determined by the Owner to be a better product, or is made necessary due to unavailability of listed item. Unavailability shall be confirmed in writing by manufacturer named on accepted list.

## **1.03 CIVIL AND ARCHITECTURAL WORK SUBCONTRACTORS AND PRODUCTS LIST**

### **BID CATEGORY NO.01 – GENERAL TRADES**

NAME OF BIDDER \_\_\_\_\_

The undersigned hereby submits the following Subcontractors and Products List which becomes a part of the undersigned Contract proposal. Subcontractor purchased material, equipment, and labor shall be under the direct management and control of the Prime Contractor. If a dual listing of manufacturers and subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice. State the XBE Designation.

### **CIVIL AND ARCHITECTURAL WORK**

| <b><u>Section</u></b> | <b><u>Description</u></b>                  | <b><u>Cost \$\$\$</u></b> | <b><u>Subcontractor</u></b> | <b><u>Manufacturer</u></b> |
|-----------------------|--|---------------------------|-----------------------------|----------------------------|
| 01 21 00              | Allowances                                 |                           |                             |                            |
| 01 51 60              | Temporary Sanitary Facilities              |                           |                             |                            |
| 01 51 80              | Temporary Fire Protection                  |                           |                             |                            |
| 01 52 10              | Construction Aids and Temporary Enclosures |                           |                             |                            |
| 01 52 60              | Rubbish Container                          |                           |                             |                            |
| 01 53 10              | Fences (Temporary Security)                |                           |                             |                            |
| 01 53 30              | Barricades                                 |                           |                             |                            |
| 01 55 00              | Access Roads and Parking Areas             |                           |                             |                            |
| 01 56 20              | Dust Control                               |                           |                             |                            |
| 01 57 60              | Project Signs                              |                           |                             |                            |
| 01 72 00              | Field Engineering                          |                           |                             |                            |

| <u>Section</u> | <u>Description</u>                             | <u>Cost \$\$\$</u> | <u>Subcontractor</u> | <u>Manufacturer</u> |
|----------------|--|--------------------|----------------------|---------------------|
| 02 41 16       | Structure Demolition                           |                    |                      |                     |
| 02 41 19       | Selective Structure Demolition                 |                    |                      |                     |
| 03 30 00       | Cast-In-Place Concrete                         |                    |                      |                     |
| 03 60 00       | Post Installed Anchors                         |                    |                      |                     |
| 04 20 00       | Unit Masonry                                   |                    |                      |                     |
| 05 31 00       | Steel Decking                                  |                    |                      |                     |
| 06 10 00       | Rough Carpentry                                |                    |                      |                     |
| 06 16 00       | Sheathing                                      |                    |                      |                     |
| 07 21 00       | Thermal Insulation                             |                    |                      |                     |
| 07 25 00       | Weather Barriers                               |                    |                      |                     |
| 07 27 15       | Nonbituminous Self-Adhering Sheet Air Barriers |                    |                      |                     |
| 07 84 13       | Penetration Firestopping                       |                    |                      |                     |
| 07 84 43       | Joint Firestopping                             |                    |                      |                     |
| 07 92 00       | Joint Sealants                                 |                    |                      |                     |
| 08 11 13       | Hollow Metal Doors And Frames                  |                    |                      |                     |
| 08 14 16       | Flush Wood Doors                               |                    |                      |                     |
| 08 31 13       | Access Doors And Frames                        |                    |                      |                     |
| 08 71 00       | Door Hardware                                  |                    |                      |                     |
| 08 80 00       | Glazing  |                    |                      |                     |
| 09 30 00       | Tiling   |                    |                      |                     |
| 09 65 00       | Resilient Flooring                             |                    |                      |                     |
| 09 65 13       | Resilient Base And Accessories                 |                    |                      |                     |
| 09 68 13       | Tile Carpeting                                 |                    |                      |                     |

| <u>Section</u> | <u>Description</u>                          | <u>Cost \$\$\$</u> | <u>Subcontractor</u> | <u>Manufacturer</u> |
|----------------|---|--------------------|----------------------|---------------------|
| 09 84 53       | Sound Barrier Mullion Trim Caps             |                    |                      |                     |
| 09 91 13       | Exterior Painting                           |                    |                      |                     |
| 09 91 23       | Interior Painting                           |                    |                      |                     |
| 12 32 16       | Manufactured Plastic-Laminate-Clad Casework |                    |                      |                     |
| 12 36 23.13    | Plastic-Laminate-Clad Countertops           |                    |                      |                     |

|                 |       |
|-----------------|-------|
| Name of Bidder: | Date: |
| Address:        |       |
| City/State/Zip: |       |
| Telephone:      |       |
| By:             |       |

**BID CATEGORY NO.02 – DRYWALL and ACOUSTICAL CEILING**

NAME OF BIDDER \_\_\_\_\_

The undersigned hereby submits the following Subcontractors and Products List which becomes a part of the undersigned Contract proposal. Subcontractor purchased material, equipment, and labor shall be under the direct management and control of the Prime Contractor. If a dual listing of manufacturers and subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice. State the XBE Designation.

**CIVIL AND ARCHITECTURAL WORK**

| <b><u>Section</u></b> | <b><u>Description</u></b>       | <b><u>Cost \$\$\$</u></b> | <b><u>Subcontractor</u></b> | <b><u>Manufacturer</u></b> |
|-----------------------|---------------------------------|---------------------------|-----------------------------|----------------------------|
| 01 21 00              | Allowances                      |                           |                             |                            |
| 01 72 00              | Field Engineering               |                           |                             |                            |
| 07 84 13              | Penetration<br>Firestopping     |                           |                             |                            |
| 07 84 43              | Joint Firestopping              |                           |                             |                            |
| 07 92 00              | Joint Sealants                  |                           |                             |                            |
| 09 22 16              | Non-Structural Metal<br>Framing |                           |                             |                            |
| 09 24 00              | Cement Plastering               |                           |                             |                            |
| 09 29 00              | Gypsum Board                    |                           |                             |                            |
| 09 51 13              | Acoustical Panel<br>Ceilings    |                           |                             |                            |

|                 |       |
|-----------------|-------|
| Name of Bidder: | Date: |
| Address:        |       |
| City/State/Zip: |       |
| Telephone:      |       |
| By:             |       |

## 1.04 MECHANICAL WORK SUBCONTRACTORS AND PRODUCTS LIST

BID CATEGORY NO.03 - MECHANICAL

NAME OF BIDDER \_\_\_\_\_

The undersigned hereby submits the following Subcontractors and Products List which becomes a part of the undersigned Contract proposal. Subcontractor purchased material, equipment, and labor shall be under the direct management and control of the Prime Contractor. If dual listing of manufacturers or subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice.

### MECHANICAL WORK

| <u>Section</u> | <u>Description</u>  | <u>Cost \$\$\$</u> | <u>Subcontractor</u> | <u>Manufacturer</u> |
|----------------|---|--------------------|----------------------|---------------------|
| 01 21 00       | Allowances  |                    |                      |                     |
| 01 51 30       | Temporary Heating,<br>Ventilation and<br>Cooling          |                    |                      |                     |
| 01 51 50       | Temporary Water   |                    |                      |                     |
| 01 72 00       | Field Engineering   |                    |                      |                     |
| 01 91 13       | General<br>Commissioning<br>Requirements -<br>Fundamental |                    |                      |                     |
| 02 41 16       | Structure Demolition                                      |                    |                      |                     |
| 02 41 19       | Selective Structure<br>Demolition                         |                    |                      |                     |
| 07 84 13       | Penetration<br>Firestopping                               |                    |                      |                     |
| 07 84 43       | Joint Firestopping  |                    |                      |                     |
| 07 92 00       | Joint Sealants  |                    |                      |                     |
| 22 05 00       | Common Work<br>Results For Plumbing                       |                    |                      |                     |
| 22 05 16       | Expansion Fittings<br>And Loops For<br>Plumbing Piping    |                    |                      |                     |

| <u>Section</u> | <u>Description</u>                                     | <u>Cost \$\$\$</u> | <u>Subcontractor</u> | <u>Manufacturer</u> |
|----------------|--|--------------------|----------------------|---------------------|
| 22 05 19       | Meters And Gages For Plumbing Piping                   |                    |                      |                     |
| 22 05 23       | General Duty Valves For Plumbing Piping                |                    |                      |                     |
| 22 05 29       | Hangers And Supports For Plumbing Piping And Equipment |                    |                      |                     |
| 22 05 53       | Identification For Plumbing Piping And Equipment       |                    |                      |                     |
| 22 07 00       | Plumbing Insulation                                    |                    |                      |                     |
| 22 11 16       | Domestic Water Piping                                  |                    |                      |                     |
| 22 11 19       | Domestic Water Piping Specialties                      |                    |                      |                     |
| 22 13 16       | Sanitary Waste And Vent Piping                         |                    |                      |                     |
| 22 13 19       | Sanitary Waste Piping Specialties                      |                    |                      |                     |
| 22 40 00       | Plumbing Fixtures                                      |                    |                      |                     |
| 23 05 00       | Common Work Results For HVAC                           |                    |                      |                     |
| 23 05 13       | Common Motor Requirements For HVAC Equipment           |                    |                      |                     |
| 23 05 23       | General Duty Valves For H HVAC vac Piping              |                    |                      |                     |
| 23 05 29       | Hangers And Supports For HVAC Piping And Equipment     |                    |                      |                     |
| 23 05 53       | Identification For HVAC Piping And Equipment           |                    |                      |                     |

| <u>Section</u> | <u>Description</u>                         | <u>Cost \$\$\$</u> | <u>Subcontractor</u> | <u>Manufacturer</u> |
|----------------|--|--------------------|----------------------|---------------------|
| 23 05 93       | Testing, Adjusting, And Balancing For HVAC |                    |                      |                     |
| 23 07 00       | HVAC Insulation                            |                    |                      |                     |
| 23 08 00       | Commissioning Of HVAC                      |                    |                      |                     |
| 23 09 00       | Instrumentation And Control For HVAC       |                    |                      |                     |
| 23 21 13       | Hydronic Piping                            |                    |                      |                     |
| 23 31 13       | Metal Ducts                                |                    |                      |                     |
| 23 33 00       | Air Duct Accessories                       |                    |                      |                     |
| 23 37 13       | Diffusers, Registers, And Grilles          |                    |                      |                     |
| 23 82 39       | Unit Heaters                               |                    |                      |                     |

Plumbing Fixtures:

Manufacturer:

a) \_\_\_\_\_

b) \_\_\_\_\_

c) \_\_\_\_\_

d) \_\_\_\_\_

e) \_\_\_\_\_

f) \_\_\_\_\_

g) \_\_\_\_\_

h) \_\_\_\_\_

i) \_\_\_\_\_

j) \_\_\_\_\_

k) \_\_\_\_\_

l) \_\_\_\_\_

|                 |       |
|-----------------|-------|
| Name of Bidder: | Date: |
| Address:        |       |
| City/State/Zip: |       |
| Telephone:      |       |
| By:             |       |

## 1.05 ELECTRICAL WORK SUBCONTRACTORS AND PRODUCTS LIST

BID CATEGORY NO.04 - ELECTRICAL

NAME OF BIDDER \_\_\_\_\_

The undersigned hereby submits the following Subcontractors and Products List which becomes a part of the undersigned Contract proposal. Subcontractor purchased material, equipment, and labor shall be under the direct management and control of the Prime Contractor. If dual listing of manufacturers or subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice.

### ELECTRICAL WORK

| <u>Section</u> | <u>Description</u>                                  | <u>Cost \$\$\$</u> | <u>Subcontractor</u> | <u>Manufacturer</u> |
|----------------|---|--------------------|----------------------|---------------------|
| 01 21 00       | Allowances  |                    |                      |                     |
| 01 51 10       | Temporary Electricity, Lighting and Warning Systems |                    |                      |                     |
| 01 72 00       | Field Engineering                                   |                    |                      |                     |
| 01 91 13       | General Commissioning Requirements - Fundamental    |                    |                      |                     |
| 02 41 16       | Structure Demolition                                |                    |                      |                     |
| 02 41 19       | Selective Structure Demolition                      |                    |                      |                     |
| 07 84 13       | Penetration Firestopping                            |                    |                      |                     |
| 07 84 43       | Joint Firestopping                                  |                    |                      |                     |
| 07 92 00       | Joint Sealants                                      |                    |                      |                     |
| 26 05 00       | Common Work Results For Electrical                  |                    |                      |                     |

| <u>Section</u> | <u>Description</u>   | <u>Cost \$\$\$</u> | <u>Subcontractor</u> | <u>Manufacturer</u> |
|----------------|--|--------------------|----------------------|---------------------|
| 26 05 19       | Low-Voltage Electrical Power Conductors And Cables           |                    |                      |                     |
| 26 05 26       | Grounding And Bonding For Electrical Systems                 |                    |                      |                     |
| 26 05 29       | Hangers And Supports For Electrical Systems                  |                    |                      |                     |
| 26 05 33       | Raceways And Boxes For Electrical Systems                    |                    |                      |                     |
| 26 05 44       | Sleeves And Sleeve Seals For Electrical Raceways And Cabling |                    |                      |                     |
| 26 05 53       | Identification For Electrical Systems                        |                    |                      |                     |
| 26 08 00       | Minimum Commissioning Of Electrical Systems                  |                    |                      |                     |
| 26 09 23       | Lighting Control Devices                                     |                    |                      |                     |
| 26 09 43       | Lighting Control System                                      |                    |                      |                     |
| 26 27 26       | Wiring Devices   |                    |                      |                     |
| 26 28 13       | Fuses  |                    |                      |                     |
| 26 29 13       | Enclosed Controllers   |                    |                      |                     |
| 26 29 23       | Variable Frequency Motor Controllers                         |                    |                      |                     |
| 26 51 00       | Interior Lighting  |                    |                      |                     |
| 27 05 00       | Common Work Results For Communications                       |                    |                      |                     |

| <u>Section</u> | <u>Description</u>                               | <u>Cost \$\$\$</u> | <u>Subcontractor</u> | <u>Manufacturer</u> |
|----------------|--|--------------------|----------------------|---------------------|
| 27 05 26       | Grounding And Bonding For Communications Systems |                    |                      |                     |
| 27 05 28       | Pathways For Communications Systems              |                    |                      |                     |
| 28 31 00       | Fire Detection And Alarm                         |                    |                      |                     |

|                 |       |
|-----------------|-------|
| Name of Bidder: | Date: |
| Address:        |       |
| City/State/Zip: |       |
| Telephone:      |       |
| By:             |       |

**BID CATEGORY NO.05 – ELEVATORS**

NAME OF BIDDER \_\_\_\_\_

The undersigned hereby submits the following Subcontractors and Products List which becomes a part of the undersigned Contract proposal. Subcontractor purchased material, equipment, and labor shall be under the direct management and control of the Prime Contractor. If a dual listing of manufacturers and subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice. State the XBE Designation.

**CIVIL AND ARCHITECTURAL WORK**

| <b><u>Section</u></b> | <b><u>Description</u></b>      | <b><u>Cost \$\$\$</u></b> | <b><u>Subcontractor</u></b> | <b><u>Manufacturer</u></b> |
|-----------------------|--------------------------------|---------------------------|-----------------------------|----------------------------|
| 01 21 00              | Allowances                     |                           |                             |                            |
| 01 72 00              | Field Engineering              |                           |                             |                            |
| 02 41 16              | Structure Demolition           |                           |                             |                            |
| 02 41 19              | Selective Structure Demolition |                           |                             |                            |
| 07 84 13              | Penetration Firestopping       |                           |                             |                            |
| 07 84 43              | Joint Firestopping             |                           |                             |                            |
| 07 92 00              | Joint Sealants                 |                           |                             |                            |
| 14 24 00              | Hydraulic Elevator             |                           |                             |                            |

|                 |       |
|-----------------|-------|
| Name of Bidder: | Date: |
| Address:        |       |
| City/State/Zip: |       |
| Telephone:      |       |
| By:             |       |

BID CATEGORY NO.06 – FIRE PROTECTION

NAME OF BIDDER \_\_\_\_\_

The undersigned hereby submits the following Subcontractors and Products List which becomes a part of the undersigned Contract proposal. Subcontractor purchased material, equipment, and labor shall be under the direct management and control of the Prime Contractor. If a dual listing of manufacturers and subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice. State the XBE Designation.

CIVIL AND ARCHITECTURAL WORK

| <u>Section</u> | <u>Description</u>                          | <u>Cost \$\$\$</u> | <u>Subcontractor</u> | <u>Manufacturer</u> |
|----------------|---|--------------------|----------------------|---------------------|
| 01 21 00       | Allowances                                  |                    |                      |                     |
| 07 84 13       | Penetration<br>Firestopping                 |                    |                      |                     |
| 07 84 43       | Joint Firestopping                          |                    |                      |                     |
| 07 92 00       | Joint Sealants                              |                    |                      |                     |
| 21 05 00       | Common Work Results<br>For Fire Suppression |                    |                      |                     |
| 21 10 00       | Water-Based Fire-<br>Suppression Systems    |                    |                      |                     |

|                 |       |
|-----------------|-------|
| Name of Bidder: | Date: |
| Address:        |       |
| City/State/Zip: |       |
| Telephone:      |       |
| By:             |       |

END OF SECTION 00 43 50

## **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 in to 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**

B. 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.

C. 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.

D. 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.

E. 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.

F. 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.

## **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.
  - 6. (List other items as may be applicable).

## **1.09 PERMITS, FEES, AND NOTICES**

- A. As the Construction Manager, The Skillman Corporation 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 the Contractors Work. Fees to relocate utilities on Owner's property shall be included in the bid of the Contractor doing the relocation.
  - 1. The Owner shall pay for the cost of the Building Permit.
  - 2. 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. Prime Contractors must furnish a letter to the Construction Manager, stating that Contractor shall not assign any of its employees, agents or other individuals to perform any services in the District's facilities or program sites if that individual:
  - 1. Is listed on the Michigan Sex Offender Registry, [www.mipsor.state.mi.us](http://www.mipsor.state.mi.us).
  - 2. Is listed on the Federal Sex Offender Registry [www.nsopw.gov](http://www.nsopw.gov).

3. Has not passed a 5-50 drug screen, testing negative for the following drugs:
  - a. Amphetamines
  - b. Methamphetamines
  - c. Cocaine
  - d. Codeine
  - e. Methadone
  - f. Morphine
  - g. Phencyclidine (PCP)
  - h. Marijuana
- D. ID Stickers 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. Stickers will be numbered and numbers assigned to each worker to be worn on their hardhat. It is the Contractor's responsibility to maintain a record of contractor's name assigned each number and provide to The Construction Manager upon request.
- E. Consistent with Michigan law, possession or consumption of drugs on school property will promptly be reported to the local police. Consumption of alcoholic beverages or tobacco or other noxious behavior on school owned property is strictly prohibited. Violators shall be promptly removed from the site. Smoking is not permitted on school property or within school buildings.

## **1.11 CUTTING AND PATCHING**

- A. Refer to Section 01 73 10 – 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 **(100 DAYS)** calendar days after receipt of bids.
  - 2. Construction shall be complete within **(193 DAYS)** 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 00S | Masonry Inspection Report   |
| 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 2 300 | 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 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 10 | Cutting and Patching   |
| Section | 01 77 00 | Contract Closeout      |

All Contractors shall provide their Superintendents with devices capable of communicating with the Construction Manager.

**Autodesk Build** has replaced **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 21 00 | Allowances  |
| Section | 01 51 10 | Temporary Electricity, Lighting and Warning Systems |
| Section | 01 51 30 | Temporary Heating, Ventilation and Cooling          |
| 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 30 | Barricades  |
| Section | 01 55 00 | Access Roads and Parking Areas                      |
| Section | 01 56 20 | Dust Control  |
| Section | 01 57 60 | Project Signs                                       |
| Section | 01 72 00 | Field Engineering                                   |
| Section | 01 91 13 | General Commissioning Requirements - Fundamental    |

### **3.03 BID CATEGORIES**

#### **A. BID CATEGORY NO. 01 -GENERAL TRADES**

General Requirements in Paragraph 3.02.B above.

|         |             |  |
|---------|-------------|--|
| Section | 01 21 00    | Allowances                                     |
| 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 30    | Barricades                                     |
| Section | 01 55 00    | Access Roads and Parking Areas                 |
| Section | 01 56 20    | Dust Control                                   |
| Section | 01 57 60    | Project Signs                                  |
| Section | 01 72 00    | Field Engineering                              |
| Section | 02 41 16    | Structure Demolition                           |
| Section | 02 41 19    | Selective Structure Demolition                 |
| Section | 03 30 00    | Cast-In-Place Concrete                         |
| Section | 03 60 00    | Post Installed Anchors                         |
| Section | 04 20 00    | Unit Masonry                                   |
| Section | 05 31 00    | Steel Decking                                  |
| Section | 06 10 00    | Rough Carpentry                                |
| Section | 06 16 00    | Sheathing                                      |
| Section | 07 21 00    | Thermal Insulation                             |
| Section | 07 25 00    | Weather Barriers                               |
| Section | 07 27 15    | Nonbituminous Self-Adhering Sheet Air Barriers |
| Section | 07 84 13    | Penetration Firestopping                       |
| Section | 07 84 43    | Joint Firestopping                             |
| Section | 07 92 00    | Joint Sealants                                 |
| Section | 08 11 13    | Hollow Metal Doors And Frames                  |
| Section | 08 14 16    | Flush Wood Doors                               |
| Section | 08 31 13    | Access Doors And Frames                        |
| Section | 08 71 00    | Door Hardware                                  |
| Section | 08 80 00    | Glazing  |
| Section | 09 30 00    | Tiling   |
| Section | 09 65 00    | Resilient Flooring                             |
| Section | 09 65 13    | Resilient Base And Accessories                 |
| Section | 09 68 13    | Tile Carpeting                                 |
| Section | 09 84 53    | Sound Barrier Mullion Trim Caps                |
| Section | 09 91 13    | Exterior Painting                              |
| Section | 09 91 23    | Interior Painting                              |
| Section | 12 32 16    | Manufactured Plastic-Laminate-Clad Casework    |
| Section | 12 36 23.13 | Plastic-Laminate-Clad Countertops              |

**B. BID CATEGORY NO. 02 - DRYWALL and ACOUSTICAL CEILING**

General Requirements in Paragraph 3.02.B above.

|         |          |                              |
|---------|----------|------------------------------|
| Section | 01 21 00 | Allowances                   |
| Section | 01 72 00 | Field Engineering            |
| Section | 07 84 13 | Penetration Firestopping     |
| Section | 07 84 43 | Joint Firestopping           |
| Section | 07 92 00 | Joint Sealants               |
| Section | 09 22 16 | Non-Structural Metal Framing |
| Section | 09 24 00 | Cement Plastering            |
| Section | 09 29 00 | Gypsum Board                 |
| Section | 09 51 13 | Acoustical Panel Ceilings    |

**C. BID CATEGORY NO. 03 - MECHANICAL**

General Requirements in Paragraph 3.02.B above.

|         |          |  |
|---------|----------|--|
| Section | 01 21 00 | Allowances   |
| Section | 01 51 30 | Temporary Heating, Ventilation and Cooling             |
| Section | 01 51 50 | Temporary Water  |
| Section | 01 72 00 | Field Engineering                                      |
| Section | 01 91 13 | General Commissioning Requirements - Fundamental       |
| Section | 02 41 16 | Structure Demolition                                   |
| Section | 02 41 19 | Selective Structure Demolition                         |
| Section | 07 84 13 | Penetration Firestopping                               |
| Section | 07 84 43 | Joint Firestopping                                     |
| Section | 07 92 00 | Joint Sealants   |
| Section | 22 05 00 | Common Work Results For Plumbing                       |
| Section | 22 05 16 | Expansion Fittings And Loops For Plumbing Piping       |
| Section | 22 05 19 | Meters And Gages For Plumbing Piping                   |
| Section | 22 05 23 | General Duty Valves For Plumbing Piping                |
| Section | 22 05 29 | Hangers And Supports For Plumbing Piping And Equipment |
| Section | 22 05 53 | Identification For Plumbing Piping And Equipment       |
| Section | 22 07 00 | Plumbing Insulation                                    |
| Section | 22 11 16 | Domestic Water Piping                                  |
| Section | 22 11 19 | Domestic Water Piping Specialties                      |
| Section | 22 13 16 | Sanitary Waste And Vent Piping                         |
| Section | 22 13 19 | Sanitary Waste Piping Specialties                      |
| Section | 22 40 00 | Plumbing Fixtures                                      |
| Section | 23 05 00 | Common Work Results For HVAC                           |
| Section | 23 05 13 | Common Motor Requirements For HVAC Equipment           |
| Section | 23 05 23 | General Duty Valves For HVAC vac Piping                |
| Section | 23 05 29 | Hangers And Supports For HVAC Piping And Equipment     |
| Section | 23 05 53 | Identification For HVAC Piping And Equipment           |
| Section | 23 05 93 | Testing, Adjusting, And Balancing For HVAC             |

|         |          |                                      |
|---------|----------|--------------------------------------|
| Section | 23 07 00 | HVAC Insulation                      |
| Section | 23 08 00 | Commissioning Of HVAC                |
| Section | 23 09 00 | Instrumentation And Control For HVAC |
| Section | 23 21 13 | Hydronic Piping                      |
| Section | 23 31 13 | Metal Ducts                          |
| Section | 23 33 00 | Air Duct Accessories                 |
| Section | 23 37 13 | Diffusers, Registers, And Grilles    |
| Section | 23 82 39 | Unit Heaters                         |

**D. BID CATEGORY NO. 04 - ELECTRICAL**

General Requirements in Paragraph 3.02.B above.

|         |          |  |
|---------|----------|--|
| Section | 01 21 00 | Allowances   |
| Section | 01 51 10 | Temporary Electricity, Lighting and Warning Systems          |
| Section | 01 72 00 | Field Engineering  |
| Section | 01 91 13 | General Commissioning Requirements - Fundamental             |
| Section | 02 41 16 | Structure Demolition   |
| Section | 02 41 19 | Selective Structure Demolition                               |
| Section | 07 84 13 | Penetration Firestopping                                     |
| Section | 07 84 43 | Joint Firestopping   |
| Section | 07 92 00 | Joint Sealants   |
| Section | 26 05 00 | Common Work Results For Electrical                           |
| 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 | Raceways And Boxes For Electrical Systems                    |
| Section | 26 05 44 | Sleeves And Sleeve Seals For Electrical Raceways And Cabling |
| Section | 26 05 53 | Identification For Electrical Systems                        |
| Section | 26 08 00 | Minimum Commissioning Of Electrical Systems                  |
| Section | 26 09 23 | Lighting Control Devices                                     |
| Section | 26 09 43 | Lighting Control System                                      |
| Section | 26 27 26 | Wiring Devices   |
| Section | 26 28 13 | Fuses  |
| Section | 26 29 13 | Enclosed Controllers   |
| Section | 26 29 23 | Variable Frequency Motor Controllers                         |
| Section | 26 51 00 | Interior Lighting  |
| 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 | 28 31 00 | Fire Detection And Alarm                                     |

**E. BID CATEGORY NO. 05 – ELEVATORS**

General Requirements in Paragraph 3.02.B above.

|         |          |                                |
|---------|----------|--------------------------------|
| Section | 01 21 00 | Allowances                     |
| Section | 01 72 00 | Field Engineering              |
| Section | 02 41 16 | Structure Demolition           |
| Section | 02 41 19 | Selective Structure Demolition |
| Section | 07 84 13 | Penetration Firestopping       |
| Section | 07 84 43 | Joint Firestopping             |
| Section | 07 92 00 | Joint Sealants                 |
| Section | 14 24 00 | Hydraulic Elevator             |

**F. BID CATEGORY NO. 06 – FIRE PROTECTION**

General Requirements in Paragraph 3.02.B above.

|         |          |  |
|---------|----------|--|
| Section | 01 21 00 | Allowances                               |
| Section | 07 84 13 | Penetration Firestopping                 |
| Section | 07 84 43 | Joint Firestopping                       |
| Section | 07 92 00 | Joint Sealants                           |
| Section | 21 05 00 | Common Work Results For Fire Suppression |
| Section | 21 10 00 | Water-Based Fire-Suppression Systems     |

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 - EXECUTION

### **3.01 PRODUCT ALLOWANCE**

A. Bid Category No. 01 General Trades shall include a \$20,000 Product Allowance for providing, installing, maintaining, and removing floor protection for ALL Trades for the life of the project.

### **3.02 CONTINGENCY ALLOWANCES**

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

|                     |                                 |          |
|---------------------|---------------------------------|----------|
| Bid Category No. 01 | General Trades                  | \$10,000 |
| Bid Category No. 02 | Drywall and Acoustical Ceilings | \$10,000 |
| Bid Category No. 03 | Mechanical                      | \$10,000 |
| Bid Category No. 04 | Electrical                      | \$10,000 |
| Bid Category No. 05 | Elevators                       | \$5,000  |
| Bid Category No. 06 | Fire Protection                 | \$5,000  |

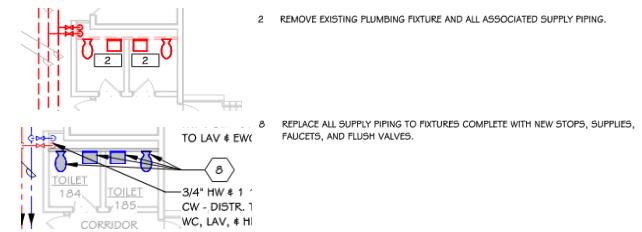
END OF SECTION 01 21 00

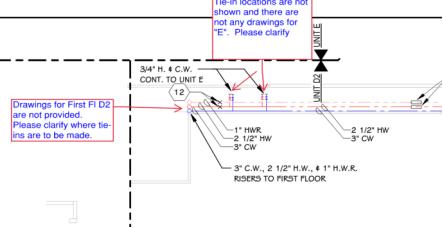
KPS K-Central HS - Secure Vestibule and Mechanical Upgrades - Pre-Bid RFI Log

Date - 1/26/2026



| RFI # | Company Submitting RFI | Date Received | RFI Description  | RFI Response   |
|-------|------------------------|---------------|--|--|
| 1     | Jergens                | 1/16/2026     | There is a note #8 on the plumbing drawings that mentions to replace all stops, supplies, faucets, and flush valves. Where note #8 is not present, what is anticipated as a tie-in location at the fixtures? Are all sink / lavs to have new stops and supplies? If so, are we to put 1070 mixing valves at all hand washing fixtures, per code? What about Lav Guard kits?  | TP: Note 8 addresses direct connection to fixtures. Bathroom groups with out note 8 do not require new valves. Connection shall be made to piping with in plumbing chase.  |
| 2     | Jergens                | 1/16/2026     | Where water lines are fed from floor to floor the entire portion of wall will need to be opened up floor to floor. Please advise.  | TP: Refer to architectural plans for wall openings   |
| 3     | Jergens                | 1/16/2026     | I know hole coring was brought up yesterday, it appears there are thousands of holes required for this project. If all holes are existing and of appropriate size to get the new lines installed that is great; however, if all holes need to be made bigger or are non-existent, then be aware that walls will need to be opened up large enough to get a coring machine in place to make the core. Additionally, if casework (example, all science casework and standard sink casework) is in the way of making such cores then the casework will need to be removed, as well. Should we figure all new holes in our bid while also assuming that the appropriate openings (walls and casework) will be made by other trades to accommodate the coring procedures? | TSC: The Mechanical Bid Category will be responsible for coring any new penetrations, if required. The General Trades Bid Category will be responsible for any wall demolition or casework removal/reinstallation.<br>TP: The intent is to reuse floor penetrations as much as possible. |
| 4     | Jergens                | 1/16/2026     | There is a lot of pipe in the bathroom chases that is not shown, but is noted to reconnect to the existing fixtures, these walls will need to opened up fully so there is complete access from at least one side of the chase to safely access the fixtures. I know most bathroom chases do not allow safe access to replace this amount of piping from one end to the other. Just because you can look inside one end of a bathroom chase does not mean you can safely get to the other end of the chase to replace the piping without creating additional openings. Please advise.   | TP: Where piping is not shown in the chases the piping is to remain. Connection to chase piping to remain shall be close to the new mains shown on plans. Piping with in these chases are newer copper materials.  |
| 5     | Ideal                  | 1/19/2026     | PD 101B: Has the following drawing and note to remove fixtures and all associated piping. Q. Can you please advise if we are to remove the fixtures and replace with new or are we to just replace pipe, stops, faucets and flush valves? And if we are to in fact replace with new, please issue a schedule that tells us manufacturers and model numbers we are to use.  | TP: Note 2 shall be revised as follows: "Remove plumbing fixtures and all associated supply piping. Fixtures shall be salvaged for reuse."   |
| 6     | Ideal                  | 1/19/2026     | P 101B: Has the following drawing and note that makes it seem as though we are only replacing the piping . Q. Can you please advise if we are to remove the fixtures and replace with new or are we to just replace pipe, stops, faucets and flush valves? And if we are to in fact replace with new, please issue a schedule that tells us manufacturers and model numbers we are to use.   | TP: The fixtures shall be taken down and stored for reuse.   |
| 7     | Jergens                | 1/19/2026     |  | TP: This will be revised by addendum.  |
| 8     | Jergens                | 1/19/2026     |  | TP: This will be revised by addendum.  |
| 9     | Jergens                | 1/19/2026     |  | TP: P101C will be added by addendum.   |



|    |                     |           |      |   |
|----|---------------------|-----------|------|---|
| 10 | Jergens             | 1/19/2026 | P100 |  <p>Drawings for First Fl D20 are not provided. Please clarify where tie ins are to be made.</p> <p>Tie: Tie in to existing piping with in the tunnel. Provide valves at connections to existing pipes.</p> |
| 11 | Earley & Associates | 1/21/2026 |      | <p>On page A424, it is calling for the section of new exterior over the tunnel to "Seal new concrete water tight with epoxy adhesive (see spec)". I do not see anything in the specs listed for this, maybe it will be addressed in an addendum? The only thing I know to do is to apply bentonite water stop in the new to old concrete joint and add waterproofing concrete additive to the mix. Please advise</p> <p>Use bentonite in the new to old joint and add waterproofing concrete additive to the concrete mix.</p> <p>L. Dingemans January 21, 2026</p>       |
| 12 | Hunter-Prell Co.    | 1/23/2026 |      | <p>Schedule indicates work to be completed April to August<br/>Should sub contractors add overtime to their bid?</p> <p>TSC: only tunnel work will start in April. Refer to the guideline schedule in addendum number one</p>   |
| 13 | Hunter-Prell Co.    | 1/23/2026 |      | <p>There are rooms that ceilings are only being partially removed. Should all sprinkler heads in these rooms be changed to match the new sprinkler heads?</p> <p>TP: Only replace sprinkler heads if required. The desire is for concealed heads. If a room with partial ceiling work has recessed heads then all shall be replaced.</p>  |
| 14 | Hunter-Prell Co.    | 1/23/2026 |      | <p>During pre-bid walk through we were unable to find a Fire Suppression riser for the 3 story remolded area. Is there as built plans available for Fire Suppression?</p> <p>See attached existing drawing for location.</p>  |
| 15 | Shouldice           | 1/26/2026 |      | <p>Conduits in tunnel to be relocated area currently in rigid, can these be replaced with EMT. (not really sure why they are in rigid?)</p> <p>TP: The conduits being rigid are probably rigid because our spec calls for rigid in damp or wet locations. We would want the relocated conduits to also be rigid.</p>  |
| 16 | Shouldice           | 1/26/2026 |      | <p>Is light fixture cleaning in the electrical scope of work. I see a lot of them have bugs in them during walk-through?</p> <p>TP: I was not anticipating cleaning of light fixtures as a part of base bid. That could be a good unit cost or add alternate for the owner to consider.</p>   |

|    |           |           |  |   |
|----|-----------|-----------|--|---|
| 17 | RW LaPine | 1/26/2026 | Will all existing flush valves on the water closets and urinals be replaced as part of this scope?<br>The drawings indicate new piping to each fixture, so I wanted to confirm whether new flush valves are to be provided or if the intent is to reconnect to the existing flush valves. Please advise. | TP: No, not all flush valves are being replaced. Only fixtures with keyed note 8. In the multi-stall restrooms, not all piping is being replaced. All of the piping in the wet wall chase is to remain and be connected to the new mains. |
|----|-----------|-----------|--|---|

## ADDENDUM NO. 2

|                          |  |
|--------------------------|--|
| DATE OF ISSUANCE:        | January 28, 2026   |
| PROJECT:                 | Kalamazoo Central High School Secure Vestibule & Mechanical Upgrades |
|                          | 2432 North Drake Road<br>Kalamazoo, MI 49006                         |
| OWNER:                   | Kalamazoo Public Schools   |
| ARCHITECT'S PROJECT NO.: | 23-623.50  |
| ORIGINAL BID ISSUE DATE: | January 5, 2026  |

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### SCOPE OF WORK

This Addendum includes changes to, or clarifications of, the original Bidding Documents and any previously issued addenda, and shall be included in the Bid. All of these Addendum items form a part of the Contract Documents. The Bidder shall acknowledge receipt of this Addendum in the appropriate space provided on the Bid Form. Failure to do so may result in disqualification of the Bid.

### DOCUMENTS INCLUDED IN THIS ADDENDUM

This Addendum includes **Three [3]** pages of text and the following documents:

- Specification Sections: **22 1333, and 223450**
- Drawings: **S 101F, S 301, PD 100, PD 101A, PD 101B, PD 102A, PD 102B, PD 103A, PD 103B, PD 301, P 100, P 101A, P 101B, P 101C, P 102A, P102B, P 103A, P 103B, P301, P 401, P 501, M 501, ED 101F, ED 102D2, ED 102F, E 100, E 101F, E 102D2, E 102F, and E 501**

### CHANGES TO SPECIFICATIONS

#### **ADD-2 Item No. S-1 - Add Domestic Water Heater Replacement**

Refer to Specification Section: 223450 Domestic Water Heaters

Add specification section.

#### **ADD-2 Item No. S-2 - Elevator Sump Pump**

Refer to Specification Section: 221333 Wastewater Sump Pumps

Add wastewater sump pump specification section.

## CHANGES TO DRAWINGS

### **ADD-2 Item No. D-1 - Plumbing Clarifications**

Refer to Sheet(s): PD 100, PD 101A, PD 101B, PD 102A, PD 102B, PD 103A, PD 103B, PD 301, P 100, P 101A, P 101B, P 101C, P 102A, P 102B, P 103A, P 103B, P 301

Add notation to clarify tunnel piping connections to existing branch piping.

Add notation to clarify salvage and reuse of plumbing fixtures.

Add drawing P 101C to show piping in exterior soffit from Area C to Area B.

Revise piping note for cold water to existing plumbing chase piping.

### **ADD-2 Item No. D-2 - Replace Domestic Water Heater and Tank**

Refer to Sheet(s): PD 301, P 301, P 401, M 501, ED 102D2, E 102D2, E 501

Add demolition of water heater and storage tank.

Add water heaters, storage tanks, and expansion tank.

Add integration of existing building management system to new water heaters.

Added demolition and new electrical work associated with removal and installation of water heaters and associated pumps.

### **ADD-2 Item No. D-3 - Elevator Sump Pump**

Refer to Sheet(s): S 101F, S 301, P 100, P 501, M 501, E 102F, E 501, S 101F, S 301

Add sump pump and piping for elevator.

Depress corner of slab for sump pump on foundation plan S 101F. Add detail 9 on S 301.

### **ADD-2 Item No. D-4 - Elevator power & Elevator controls**

Refer to Sheet(s): ED 101F, ED 102F, E 101F, E 102F, E 501

Remove, rework, and extend elevator power, elevator controls and sump pump receptacle.

Added new elevator lights, exhaust fan, sump pump, and sump pump control

Added new feeder schedule for elevator equipment. Existing elevator power and control circuits shown for reference only. Revised not 5 to indicate elevator power, elevator control, and elevator pit receptacle circuits are existing and to be reworked as required for new elevator in place of existing.

Added new keynote 6 and 7.

**ADD-2 Item No. D-5 - Tunnel Conduit Relocation Clarifications**

Refer to Sheet[s]: E 100

Added note that relocated conduit shall be rigid metal conduit.

Added fire alarm and receptacle conduits to be relocated.

**END OF ADDENDUM.**

**SECTION 22 1333 – WASTEWATER SUMP PUMPS****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. Section includes submersible wastewater sump pumps for elevator sumps.

**1.3 ACTION SUBMITTALS**

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.
- B. Wiring Diagrams: For power, signal, and control wiring.

**1.4 CLOSEOUT SUBMITTALS**

- A. Operation and Maintenance Data: For pumps and controls, to include in operation and maintenance manuals.

**1.5 QUALITY ASSURANCE**

- A. 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.
- B. UL Compliance: Comply with UL 778 for motor-operated water pumps.

**1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Retain shipping flange protective covers and protective coatings during storage.
- B. Protect bearings and couplings against damage.
- C. Comply with pump manufacturer's written rigging instructions for handling.

**1.7 COORDINATION**

- A. Coordinate sizes and locations of concrete bases with actual equipment provided.

## PART 2 - PRODUCTS

## 2.1 SUBMERSIBLE SUMP PUMPS

A. Submersible, Fixed-Position, Single-Seal Sump Pumps:

1. Manufacturers: Subject to compliance with requirements, provide products by the following:
  - a. Liberty Pumps.
2. Description: Factory-assembled and -tested sump-pump unit.
3. Pump Type: Submersible, end-suction, single-stage, close-coupled, overhung-impeller, centrifugal sump pump as defined in HI 1.1-1.2 and HI 1.3.
4. Pump Casing: Cast iron, with strainer inlet, legs that elevate pump to permit flow into impeller, and vertical discharge for piping connection.
5. Impeller: Statically and dynamically balanced, ASTM B 584, cast bronze, design for clear and gray wastewater handling, and keyed and secured to shaft.
6. Pump and Motor Shaft: Stainless steel, with factory-sealed, grease-lubricated ball bearings.
7. Seal: Mechanical.
8. Motor: Hermetically sealed, capacitor-start type; with built-in overload protection; lifting eye or lug; and three-conductor, waterproof power cable of length required and with grounding plug and cable-sealing assembly for connection at pump.
9. Simplex Controls:
  - a. Enclosure: NEMA 250, Type 1.
  - b. Disconnect: Fused disconnect switch with door interlock.
  - c. Starter: Motor starter with overload protection.
  - d. Selector Switch: Hand-Off-Auto.
  - e. Indicator Lights: Pump running and high water alarm lights.
  - f. Transformer: Control circuit transformer.
  - g. Alarm Bell: High water alarm bell with silence switch and contacts for remote alarm.
  - h. Floats/Probes:
    - 1) Pump on/off.
    - 2) High water alarm.
    - 3) High oil alarm.
10. Control-Interface Features:
  - a. Building Automation System Interface: Auxiliary contacts in pump controls for interface to building automation system and capable of providing the following:
    - 1) On-off status of pump.
    - 2) High water alarm status.

## 2.2 MOTORS

A. Comply with NEMA designation, temperature rating, service factor, enclosure type, and efficiency requirements for motors specified in Section 22 0513 "Common Motor Requirements for Plumbing Equipment."

1. Motor Sizes: Minimum size as indicated. If not indicated, large enough so driven load will not require motor to operate in service factor range above 1.0.
- B. Motors for submersible pumps shall be hermetically sealed.

### PART 3 - EXECUTION

#### 3.1 EARTHWORK

- A. Excavation and filling are specified in Section 31 2000 "Earth Moving."

#### 3.2 EXAMINATION

- A. Examine roughing-in for plumbing piping to verify actual locations of drainage piping connections before sump pump installation.

#### 3.3 INSTALLATION

- A. Pump Installation Standards: Comply with HI 1.4 for installation of sump pumps.

#### 3.4 CONNECTIONS

- A. Comply with requirements for piping specified in Section 22 1316 "Sanitary Waste and Vent Piping." Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Install piping adjacent to equipment to allow service and maintenance.

#### 3.5 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to test, inspect, and adjust components, assemblies, and equipment installations, including connections.
- B. Perform the following tests and inspections:
  1. Perform each visual and mechanical inspection.
  2. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.
  3. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
  4. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- C. Pumps and controls will be considered defective if they do not pass tests and inspections.
- D. Prepare test and inspection reports.

3.6 STARTUP SERVICE

- A. Perform startup service.
  - 1. Complete installation and startup checks according to manufacturer's written instructions.

3.7 ADJUSTING

- A. Adjust pumps to function smoothly, and lubricate as recommended by manufacturer.
- B. Adjust control set points.

3.8 DEMONSTRATION

- A. Train Owner's maintenance personnel to adjust, operate, and maintain controls and pumps.

**END OF SECTION 22 1333**

**SECTION 22 3450 - DOMESTIC WATER HEATERS****PART 1 - GENERAL****1.1 SUMMARY**

A. This Section includes the following:

1. Fuel-Fired Water Heaters:
  - a. Commercial, condensing gas water heaters.
  - b. Expansion tanks.
  - c. Storage tanks.
  - d. Water heater accessories.

**1.2 SUBMITTALS**

A. Product Data:

1. For each type and size of water heater indicated. Include rated capacities, operating characteristics, furnished specialties, and accessories.

B. Shop Drawings: Diagram power, signal, and control wiring.

**1.3 INFORMATIONAL SUBMITTALS**

- A. Source quality-control test reports.
- B. Field quality-control test reports.
- C. Warranty: Special warranty specified in this Section.

**1.4 CLOSEOUT SUBMITTALS**

A. Operation and maintenance data.

**1.5 QUALITY ASSURANCE**

- A. Source Limitations: Obtain same type of water heaters through one source from a single manufacturer.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- C. NSF Compliance as required by authorities having jurisdiction:
  1. Comply with NSF 14, "Plastics Piping Components and Related Materials," for plastic domestic water piping components.

2. Comply with NSF 61, "Drinking Water System Components - Health Effects; Sections 1 through 9."
3. Comply with NSF 372, "Drinking Water System Components – Lead Content"

## 1.6 COORDINATION

- A. Coordinate size and location of concrete bases with Architectural and Structural Drawings.

## 1.7 WARRANTY

- A. Special Warranty:

1. Manufacturer's standard form in which manufacturer agrees to repair or replace components of fuel-fired water heaters that fail in materials or workmanship within specified warranty period.
  - a. Failures include, but are not limited to, the following:
    - 1) Leaks.
  - b. Warranty Period(s): From date of Substantial Completion:
    - 1) Water Heater: Three years.

# PART 2 - PRODUCTS

## 2.1 COMMERCIAL, GAS WATER HEATERS

- A. Commercial, Condensing, Gas Water Heaters: Comply with ANSI Z21.10.3/CSA 4.3.

1. Manufacturers: Subject to compliance with requirements, provide Lochinvar or an engineer approved equivalent product.
  - a. Installing contractor shall bear all additional costs, including that of Architect/Engineer redesign and that of other trades, incurred as a result of installation of other than scheduled equipment.
2. Description: Packaged domestic water boiler with 10:1 modulation turndown, digital unit controller, circulating pump, sealed combustion, category IV venting, and ASME construction.
3. Storage-Tank Construction (Remote): Round vertical steel with 150-psig minimum working-pressure rating (ASME rated).
  - a. Tappings: Factory fabricated of materials compatible with tank. Attach tappings to tank before testing.
    - 1) NPS 2-1/2 and Larger: Flanged ends according to ASME B16.5 for steel and stainless-steel flanges, and according to ASME B16.24 for copper and copper-alloy flanges.
  - b. Lining: Glass complying with NSF 61 barrier materials for potable-water tank linings, including extending lining into and through tank fittings and outlets.
4. Factory-Installed, Heater Appurtenances:
  - a. Combination Temperature and Pressure Relief Valves: ANSI Z21.22/CSA 4.4. Include one or more relief valves with total relieving capacity at least as great as heat input, and include pressure setting less than water heater working-pressure rating. Select one relief valve with sensing element that extends into storage tank.

5. Burner: Premix design, constructed of high temperature stainless steel with woven metal fiber outer covering and variable speed blower.
6. Heat Exchanger: Natural gas direct fired stainless steel heat exchanger.
7. Safety Controls: Automatic, high-temperature-limit and low-water cutoff devices or systems.
8. Controls: Provide unit configured for BACnet integration. Unit controller shall include cascading control for multiple boilers.

## 2.2 EXPANSION TANKS

### A. Diaphragm-Type Expansion Tanks:

1. Description: Steel, pressure-rated tank constructed with welded joints and factory-installed, butyl-rubber diaphragm. Include air precharge to minimum system-operating pressure at tank.

#### a. Manufacturers:

- 1) AMTROL Inc.
- 2) Armstrong Pumps, Inc.
- 3) Bell and Gossett.
- 4) Wessels Co.

#### b. Construction:

- 1) Tappings: Factory-fabricated steel, welded to tank before testing and labeling. Include ASME B1.20.1 pipe thread.
- 2) Interior Finish: Comply with NSF 61 barrier materials for potable-water tank linings, including extending finish into and through tank fittings and outlets.
- 3) Air-Charging Valve: Factory installed.
- 4) Working-Pressure Rating: 150 psig(1035 kPa).

## 2.3 WATER HEATER ACCESSORIES

### A. Combustion Air and Vent Piping: Provide polypropylene vent and combustion air piping per manufacturers requirements.

## PART 3 - EXECUTION

### 3.1 WATER HEATER INSTALLATION

- A. Install commercial water heaters on concrete bases.
- B. Install water heaters level and plumb, according to layout drawings, original design, and referenced standards. Maintain manufacturer's recommended clearances. Arrange units so controls and devices needing service are accessible.
- C. Install gas water heaters according to NFPA 54.

- D. Install gas shutoff valves on gas supplies to gas water heaters without shutoff valves.
- E. Install gas pressure regulators on gas supplies to gas water heaters without gas pressure regulators if gas pressure regulators are required to reduce gas pressure at burner.
- F. Install combination temperature and pressure relief valves in top portion of storage tanks. Use relief valves with sensing elements that extend into tanks. Extend commercial-water-heater, relief-valve outlet, with drain piping same as domestic water piping in continuous downward pitch, and discharge by positive air gap onto closest floor drain.
- G. Install water heater drain piping as indirect waste to spill by positive air gap into open drains or over floor drains. Install hose-end drain valves at low points in water piping for water heaters that do not have tank drains. Refer to Division 22 Section "Domestic Water Piping Specialties" for hose-end drain valves.
- H. Install thermometer on outlet piping of water heaters. Refer to Division 22 Section "Meters and Gages for Plumbing Piping" for thermometers.
- I. Install piping-type heat traps on inlet and outlet piping of water heater storage tanks without integral or fitting-type heat traps.
- J. Fill water heaters with water.
- K. Charge diaphragm expansion tanks with air.

### 3.2 CONNECTIONS

- A. Piping installation requirements are specified in other Division 22 Sections. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Install piping adjacent to components to allow service and maintenance. Arrange piping for easy removal of components.
- C. Ground equipment according to Division 26 Section "Grounding and Bonding for Electrical Systems."
- D. Connect wiring according to Division 26 Section "Low-Voltage Electrical Power Conductors and Cables."
- E. Vent and Combustion-Air Connection, Condensing, Gas-Fired Water Heater: Connect plastic piping vent material to boiler connections and extend outdoors. Terminate vent outdoors with a cap and in an arrangement that will protect against entry of birds, insects, and dirt.
  - 1. Slope pipe vent back to water heater.

### 3.3 FIELD QUALITY CONTROL

- A. Perform the following field tests and inspections and prepare test reports:
  - 1. Leak Test: After installation, test for leaks. Repair leaks and retest until no leaks exist.
  - 2. Operational Test: After electrical circuitry has been energized, confirm proper operation.
  - 3. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

- B. Remove and replace system components that do not pass tests and inspections and retest as specified above.

**3.4 DEMONSTRATION**

- A. Train Owner's maintenance personnel to adjust, operate, and maintain water heaters. Refer to Division 01 Section "Demonstration and Training."

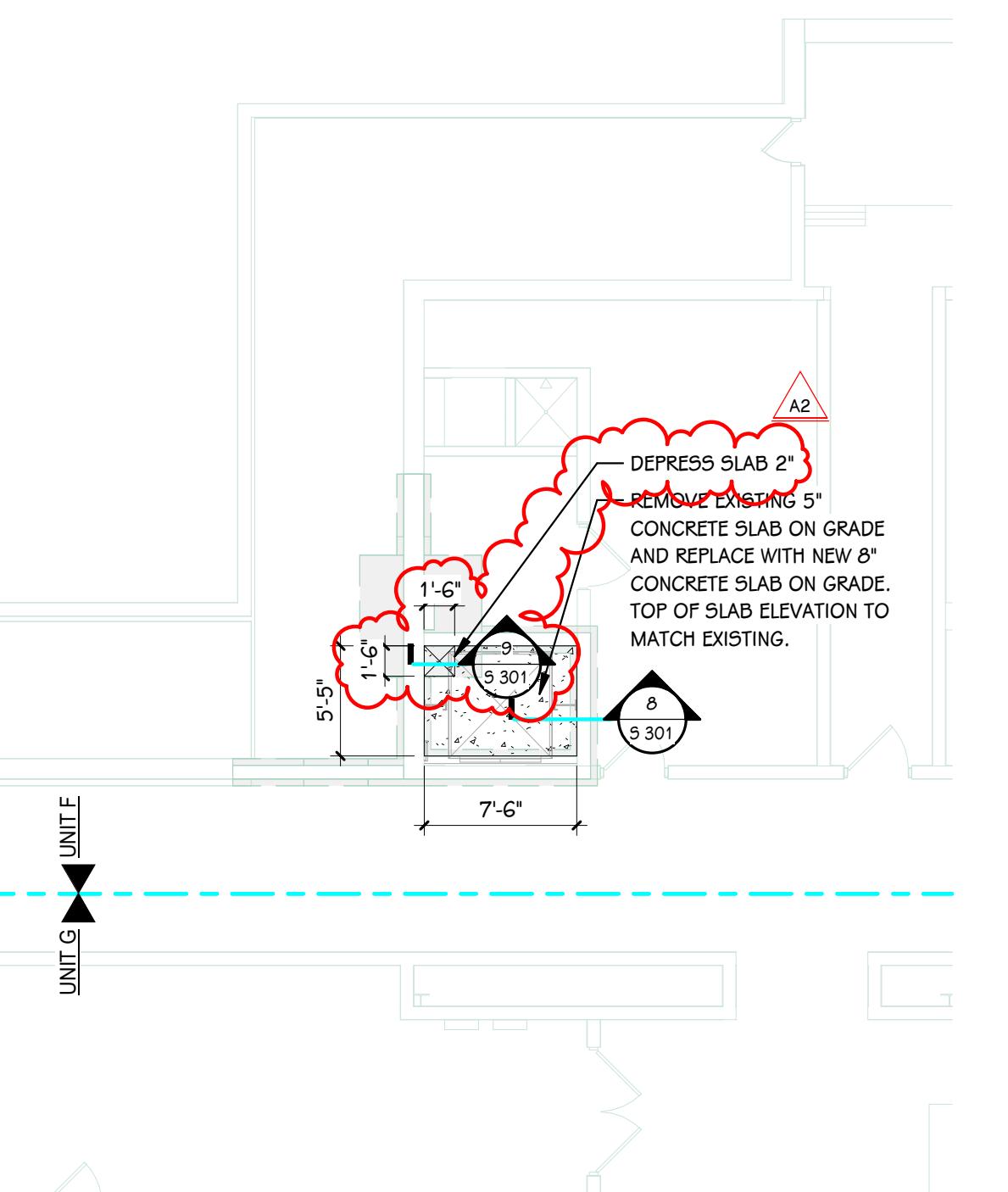
**END OF SECTION 22 3450**

DATE  
JANUARY 5, 2026

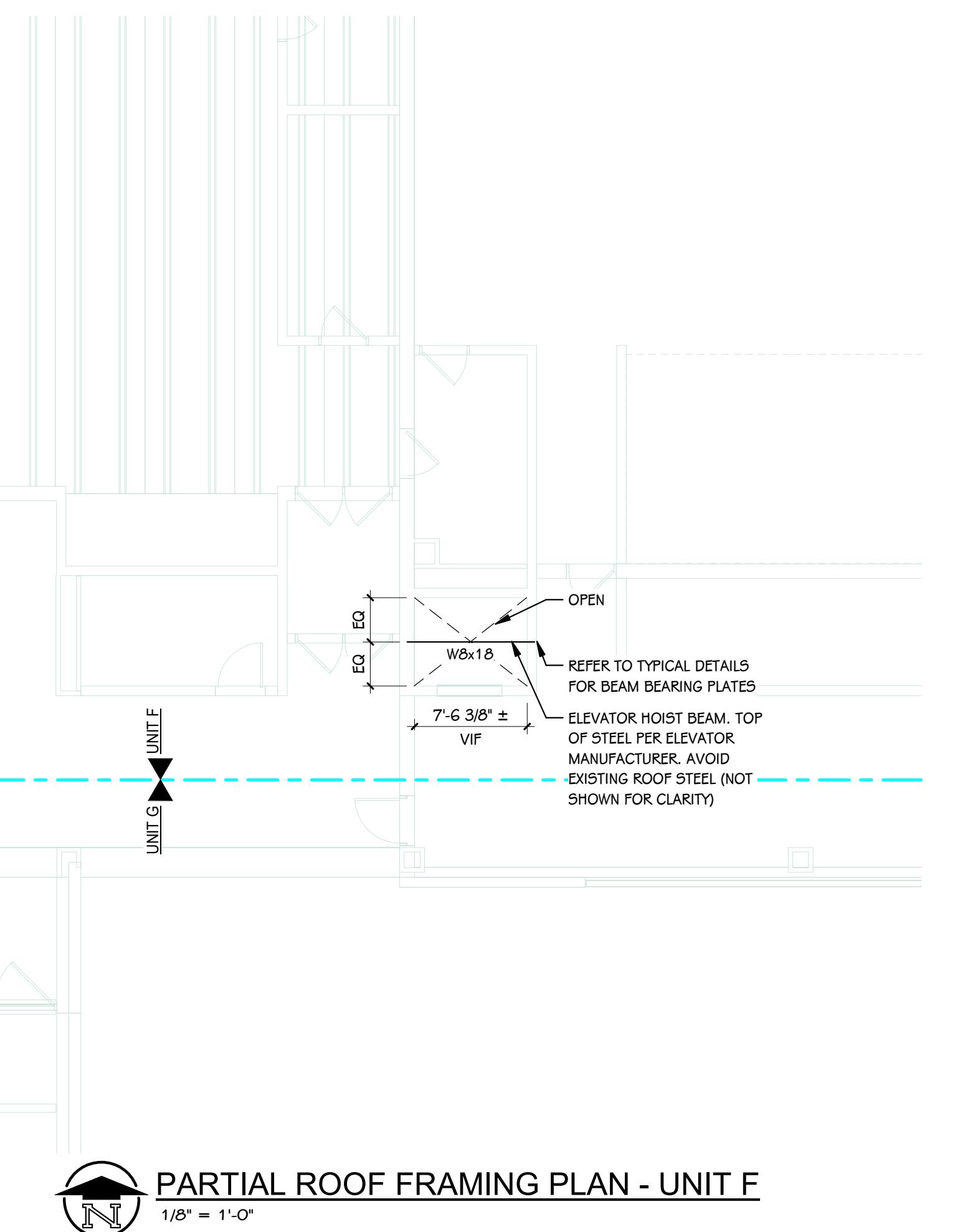
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S 101F  
23-623-05

|   |                     |
|---|---------------------|
| ADDENDUM #2   | Jan. 27, 2026       |
| ISSUED FOR  | DATE                |
| PROJECT TITLE<br>KALAMAZOO CENTRAL<br>HIGH SCHOOL<br>MECHANICAL<br>UPGRADES | Kalamazoo, Michigan |

|   |   |
|---|---|
| NOTES - STRUCTURAL - FOUNDATION AND FRAMING                                 |   |
| 1   | REFER TO PLAN FOR T5 ELEVATIONS.  |
| 2   | REINFORCED MASONRY DESIGNATED THUS: MWx. REFER TO TYPICAL DETAILS FOR MASONRY WALL CONSTRUCTION. MASONRY WALLS SHALL BE MW1, UNO.   |
| 3   | ALL MASONRY WALLS TO EXTEND TO UNDERSIDE OF DECK, UNO. REFER TO TYPICAL DETAILS.  |
| 4   | REFER TO ARCHITECTURAL DRAWINGS FOR INTERIOR WALL DIMENSIONS.   |
| 5   | ALL OPENINGS IN MASONRY WALLS WIDER THAN 8" REQUIRE LINTELS. FOR LINTELS NOT SHOWN ON PLANS REFER TO LINTEL SCHEDULE FOR SIZE, COORDINATE LOCATIONS AND OPENING WIDTHS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.  |
| 6   | FLOOR CONSTRUCTION, UNO: 4" SLAB ON GRADE WITH 6x6-W1.4xW1.4 WWF. REFER TO TYPICAL DETAILS FOR ADDITIONAL REQUIREMENTS.   |
| 7   | TOP OF SLAB ON GRADE ELEVATION = 100'-0", UNO.  |
| 8   | WHERE NO FOOTING IS SHOWN, PROVIDE THICKENED SLAB UNDER ALL INTERIOR NON-LOADBEARING CMU WALLS AND STAIR STRINGERS PER TYPICAL DETAIL. THESE ITEMS ARE NOT SHOWN ON THE STRUCTURAL FOUNDATION PLANS. COORDINATE LOCATION WITH THE ARCHITECTURAL DRAWINGS. THICKENED SLABS SUPPORTING NON-LOADBEARING CMU WALLS WILL NOT BE PERMITTED IN AREAS OF POLISHED CONCRETE SLABS - USE WF1.5 WITH TF = 99'-4" UNO IN THIS CASE. |
| 9   | NOT ALL EXISTING FRAMING AND FOUNDATIONS ARE SHOWN.   |
| KEYED NOTES - STRUCTURAL - FRAMING  |   |
| 1   | REFER TO TYPICAL DETAILS ON 5 301 AND 5 401 FOR CMU WALL, CMU LINTEL, AND THICKENED SLAB INFORMATION.   |
| 2   | REPLACE CORRODED METAL DECK, CONCRETE, AND EXPOSED REBAR IN TUNNEL LID.   |
| 3   | MECHANICAL OPENINGS NOT TO INTERRUPT VERTICAL REINFORCEMENT. INSTALL MASONRY LINTELS OVER ALL DUCT OPENINGS PER THE MASONRY LINTEL SCHEDULE.  |
| ADDENDUM #2   |   |
| ISSUED FOR  | DATE  |
| PROJECT TITLE<br>KALAMAZOO CENTRAL<br>HIGH SCHOOL<br>MECHANICAL<br>UPGRADES | Kalamazoo, Michigan   |

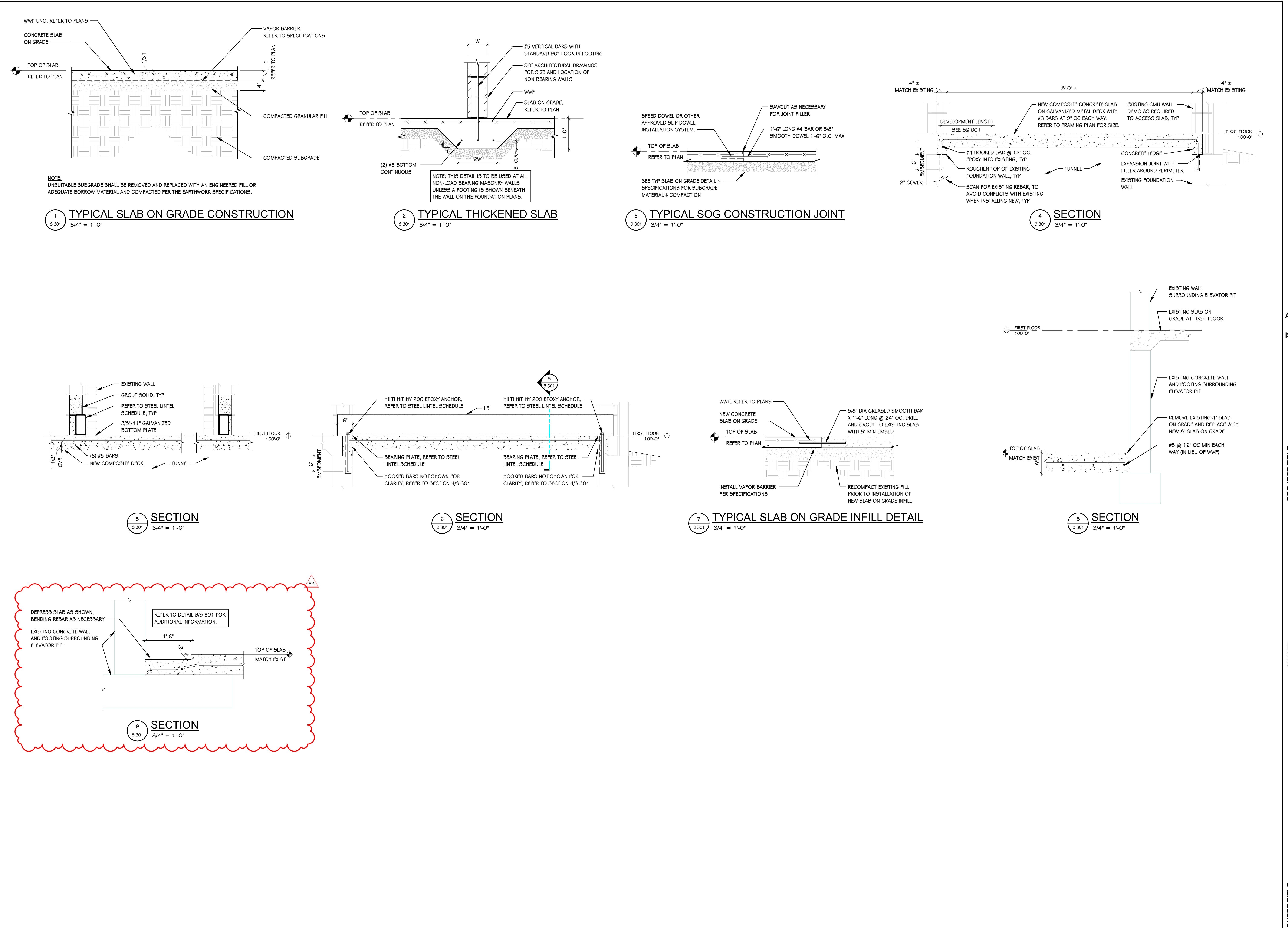


PARTIAL FOUNDATION PLAN - UNIT F  
1/8" = 1'-0"



PARTIAL ROOF FRAMING PLAN - UNIT F  
1/8" = 1'-0"

|   |                         |
|---|-------------------------|
| KALAMAZOO CENTRAL HIGH SCHOOL   |                         |
| UNIT E<br>UNIT D1<br>UNIT D2<br>UNIT C<br>UNIT B<br>AUD<br>UNIT A<br>UNIT F<br>UNIT G | DATE<br>JANUARY 5, 2026 |





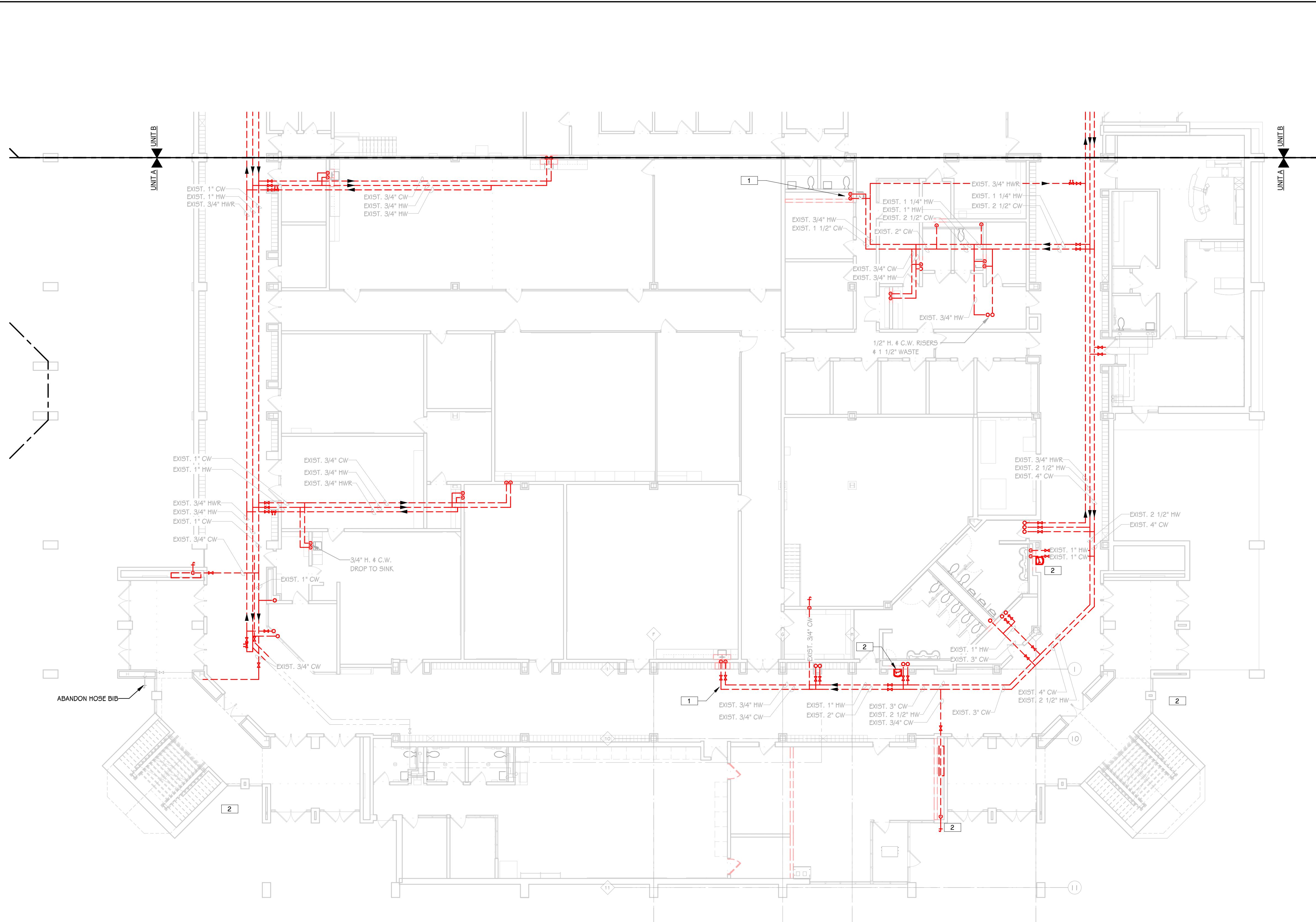
ADDENDUM #2 Jan. 27, 2026  
ISSUED FOR DATE  
PROJECT TITLE KALAMAZOO CENTRAL HIGH SCHOOL SECURE VEST. & MECHANICAL UPDATES  
OWNER KALAMAZOO PUBLIC SCHOOLS  
Kalamazoo, Michigan

DATE JANUARY 27, 2026

SHEET NUMBER PD 101A  
23-623.050

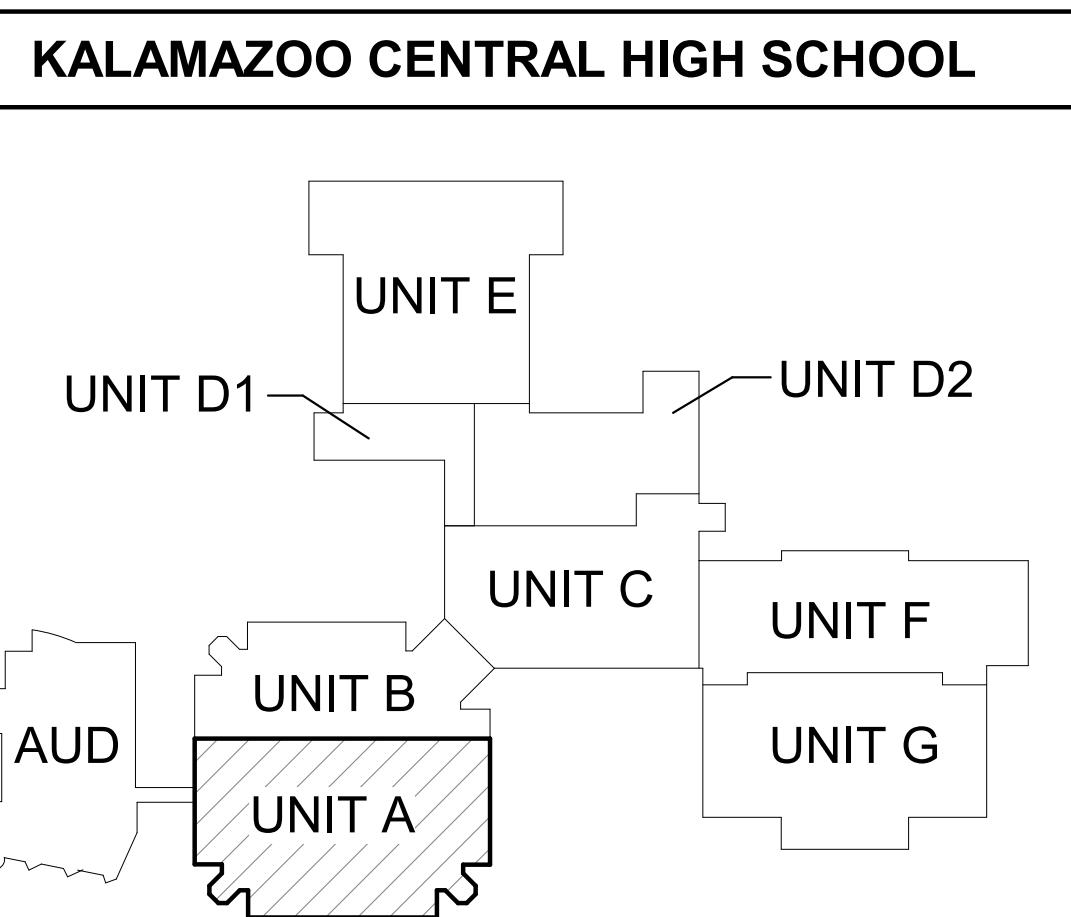
KEYED NOTE - PLUMBING - DEMOLITION

- 1 REMOVE EXISTING PIPING AS INDICATED. PREPARE FOR RECONNECTION AS REQUIRED FOR NEW WORK.
- 2 REMOVE EXISTING PLUMBING FIXTURE AND ALL ASSOCIATED SUPPLY PIPING. FIXTURES SHALL BE SALVAGED FOR REUSE.
- 3 REMOVE EXISTING PIPING AS INDICATED. CAP AND PREPARE EXISTING PIPING TO REMAIN FOR RECONNECTION.



FIRST FLOOR PLUMBING DEMOLITION PLAN - UNIT A

3/32" = 1'-0"



UNIT A

UNIT B

UNIT C

UNIT D1

UNIT D2

UNIT E

UNIT F

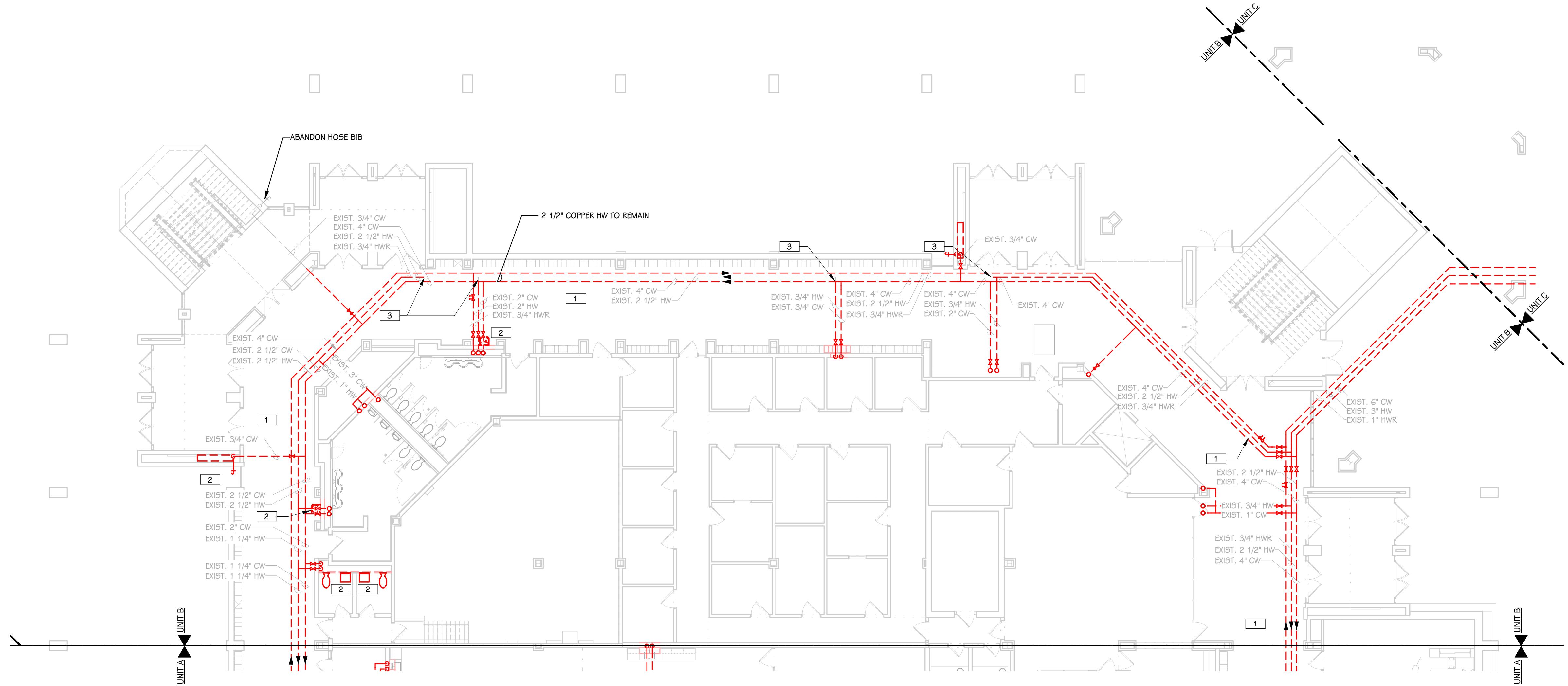
UNIT G

KALAMAZOO CENTRAL HIGH SCHOOL

## KEYED NOTE - PLUMBING - DEMOLITION

A2

- 1 REMOVE EXISTING PIPING AS INDICATED. PREPARE FOR RECONNECTION AS REQUIRED FOR NEW WORK.
- 2 REMOVE EXISTING PLUMBING FIXTURE AND ALL ASSOCIATED SUPPLY PIPING. FIXTURES SHALL BE SALVAGED FOR REUSE.
- 3 REMOVE EXISTING PIPING AS INDICATED. CAP AND PREPARE EXISTING PIPING TO REMAIN FOR RECONNECTION.



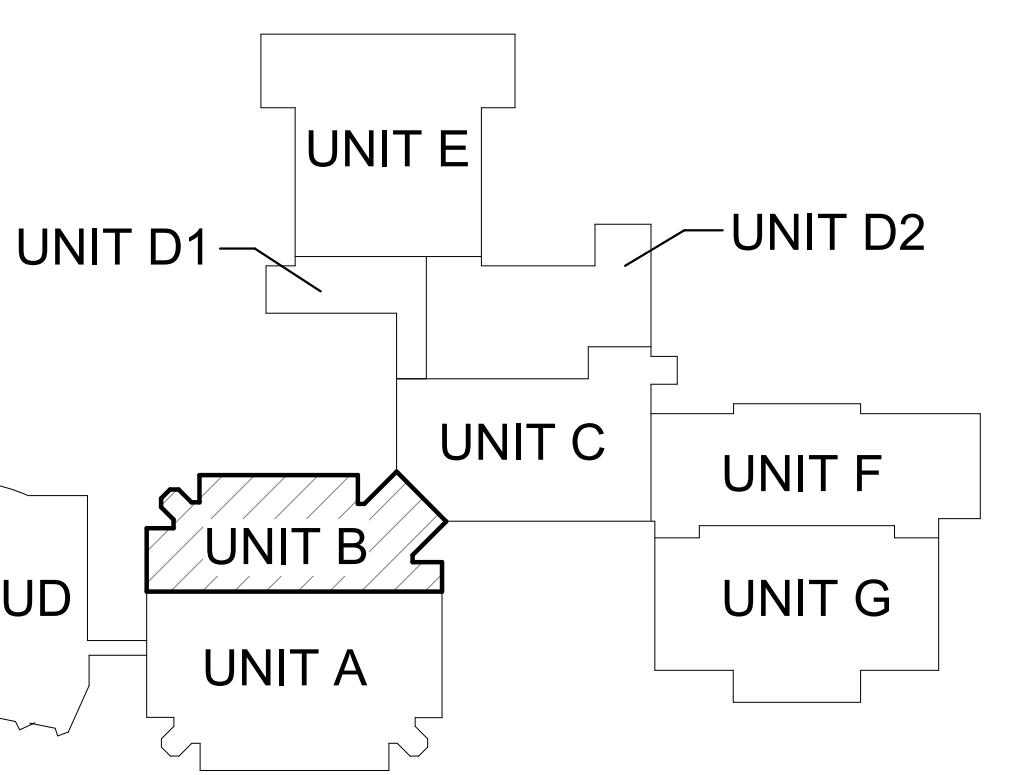


# FIRST FLOOR PLUMBING DEMOLITION PLAN - UNIT B

3/32" = 1'-0"

**THIS DRAWING SHEET IS INTENDED TO BE PLOTTED IN COLOR. IF THIS TEXT APPEARS IN BLACK AND WHITE, IT IS PLOTTED INCORRECTLY. DISCARD AND OBTAIN AN ACCURATE DRAWING**

KALAMAZOO CENTRAL HIGH SCHOOL



ADDENDUM #2 Jan. 27, 2010

ISSUED FOR \_\_\_\_\_ DA \_\_\_\_\_

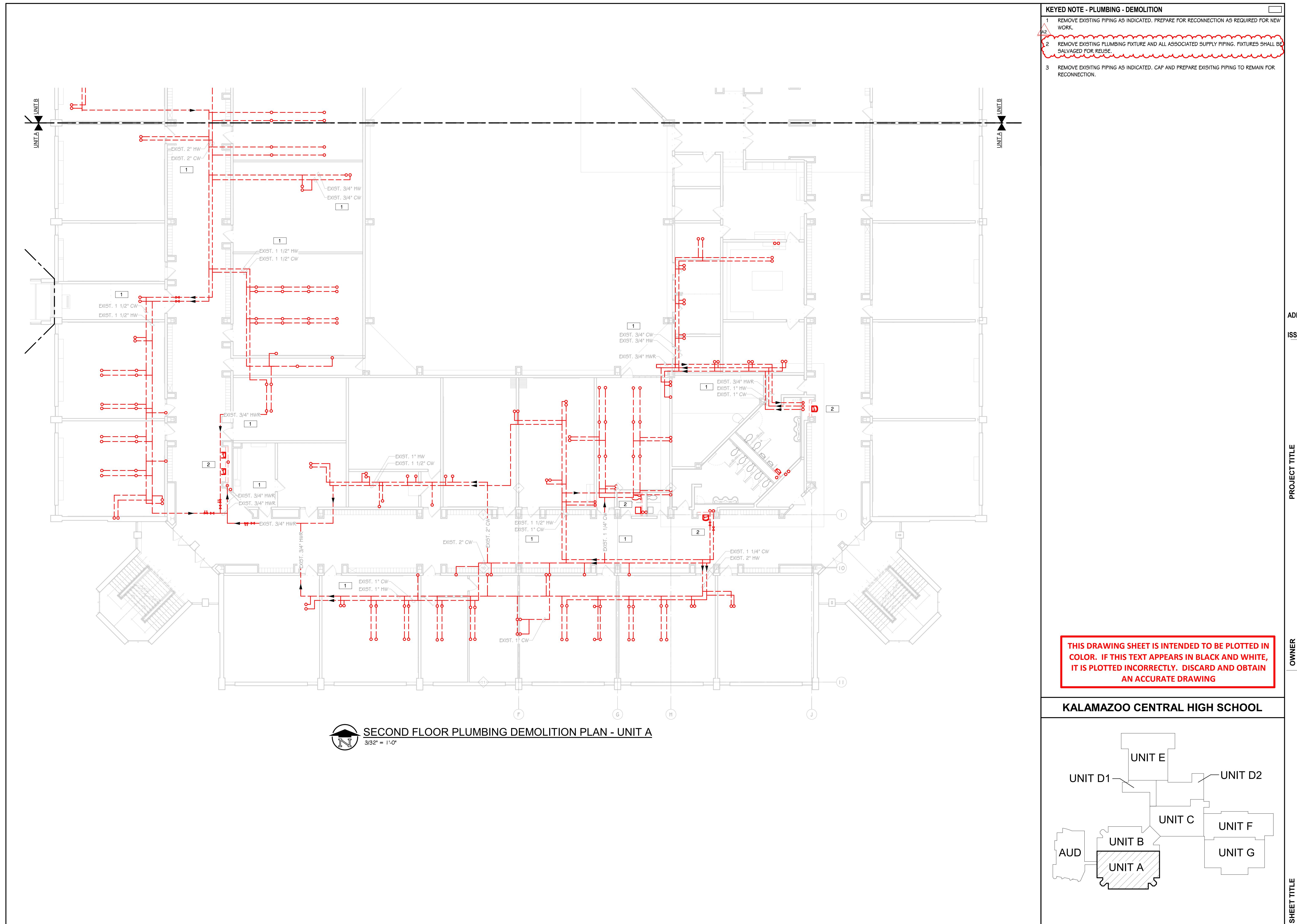
PROJECT TITLE  
**KALAMAZOO CENTRAL  
HIGH SCHOOL SECURE  
VEST. & MECHANICAL  
UPGRADES**

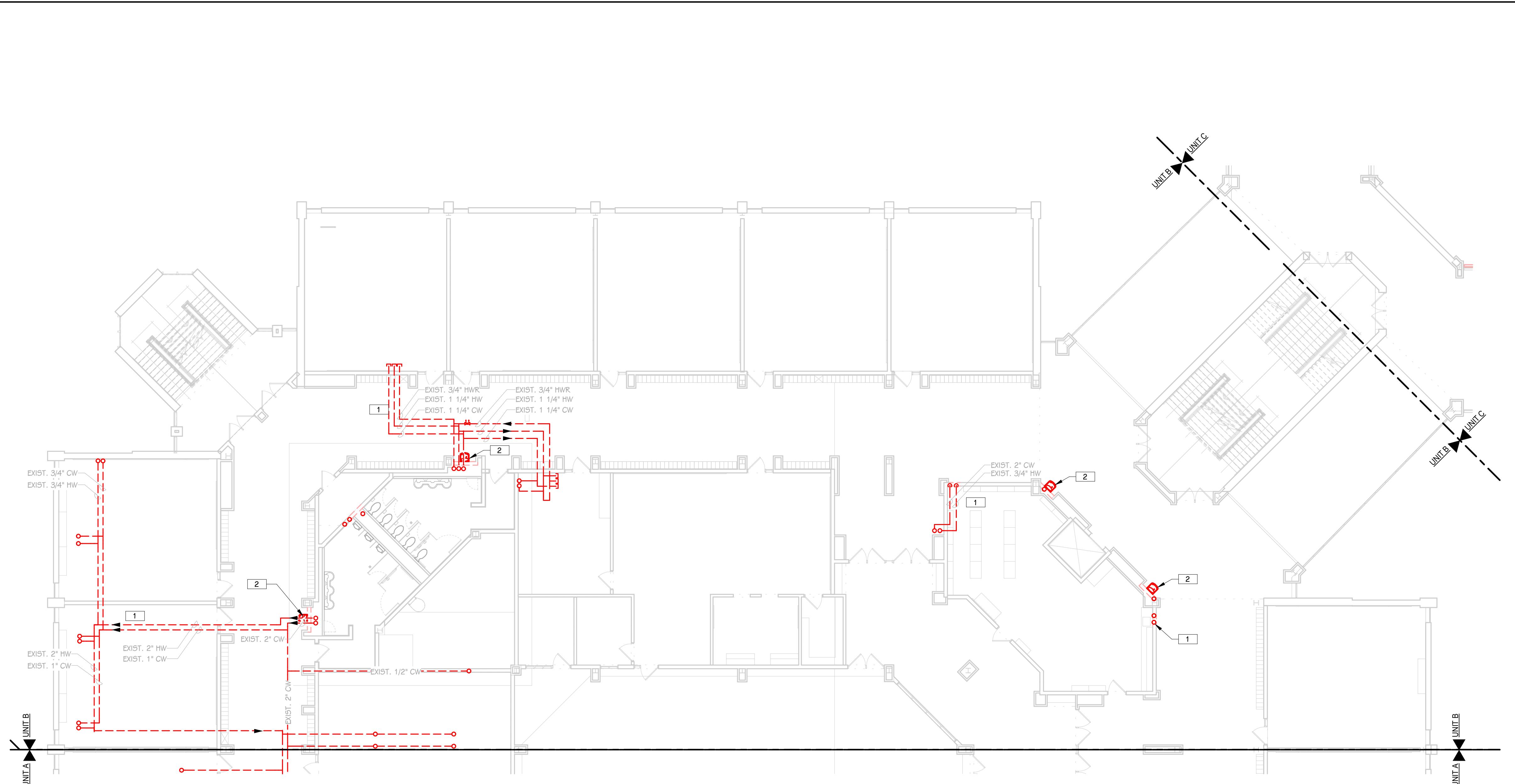
# OWNER KALAMAZOO PUBLIC SCHOOLS

# BRING DEMOLITION

**SHEET TITLE**  
**FIRST FLOOR**  
**PLAN - UNIT E**

**PD 101B**  
SHEET NUMBER  
22 622 050





SECOND FLOOR PLUMBING DEMOLITION PLAN - UNIT B

3/32" = 1'-0"

**KEYED NOTE - PLUMBING - DEMOLITION**

- 1 REMOVE EXISTING PIPING AS INDICATED. PREPARE FOR RECONNECTION AS REQUIRED FOR NEW WORK.
- 2 REMOVE EXISTING PLUMBING FIXTURE AND ALL ASSOCIATED SUPPLY PIPING. FIXTURES SHALL BE SALVAGED FOR REUSE.
- 3 REMOVE EXISTING PIPING AS INDICATED. CAP AND PREPARE EXISTING PIPING TO REMAIN FOR RECONNECTION.

ADDENDUM #2  
ISSUED FOR  
DATE

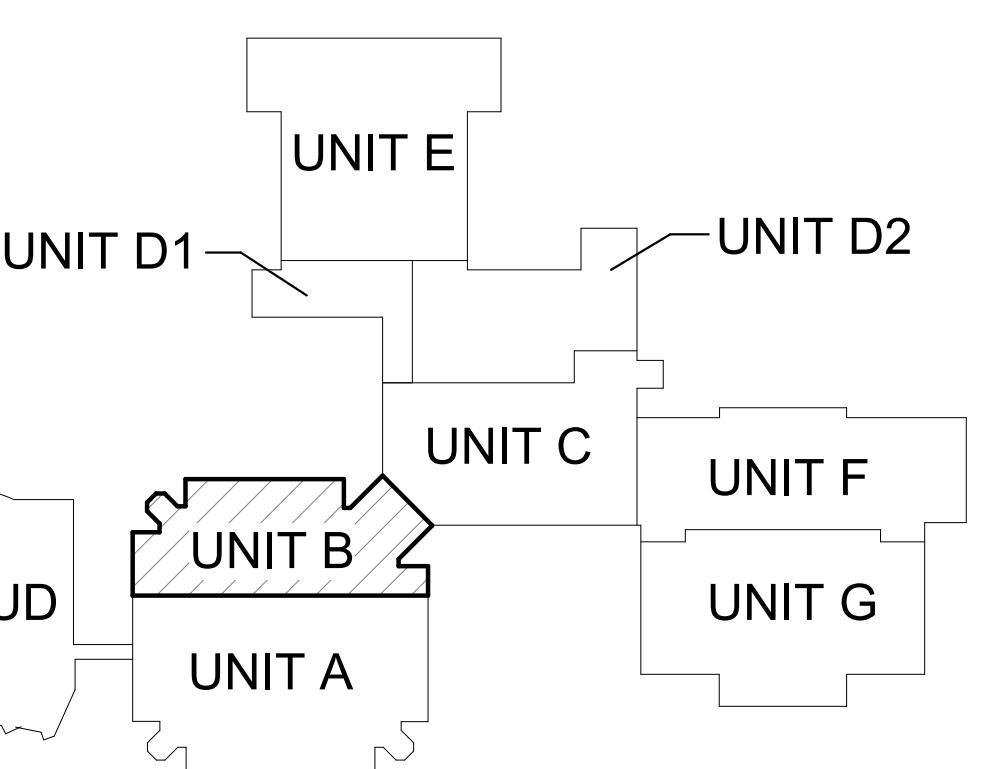
PROJECT TITLE  
KALAMAZOO CENTRAL  
HIGH SCHOOL SECURE  
VEST. & MECHANICAL  
UPGRADES

OWNER  
KALAMAZOO PUBLIC  
SCHOOLS

Kalamazoo, Michigan

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AN ACCURATE DRAWING

KALAMAZOO CENTRAL HIGH SCHOOL



DATE  
JANUARY 27, 2026

SHEET TITLE  
SECOND FLOOR PLUMBING  
DEMOLITION PLAN - UNIT B

SHEET NUMBER  
PD 102B

23-623.050

**ADDENDUM #2** **Ja**  
**ISSUED FOR**  

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**PROJECT TITLE**  
**KALAMAZOO CENTRAL**  
**HIGH SCHOOL SECURE**  
**VEST. & MECHANICAL**  
**UPGRADES**

OWNER  
KALAMAZOO PUBLIC  
SCHOOLS

## Kalamazoo, Michigan

## BING DEMOLITION

DATE JANUARY 27 2000

THIRD FL  
SHEET TITLE

SHEET NUMBER 100

## **KEYED NOTE - PLUMBING - DEMOLITION**

- 1 REMOVE EXISTING PIPING AS INDICATED. PREPARE FOR RECONNECTION AS REQUIRED FOR NEW WORK.
- 2 REMOVE EXISTING PLUMBING FIXTURE AND ALL ASSOCIATED SUPPLY PIPING. FIXTURES SHALL BE SALVAGED FOR REUSE.
- 3 REMOVE EXISITING PIPING AS INDICATED. CAP AND PREPARE EXISITNG PIPING TO REMAIN FOR RECONNECTION.

ADDF

Jan. 27, 2024

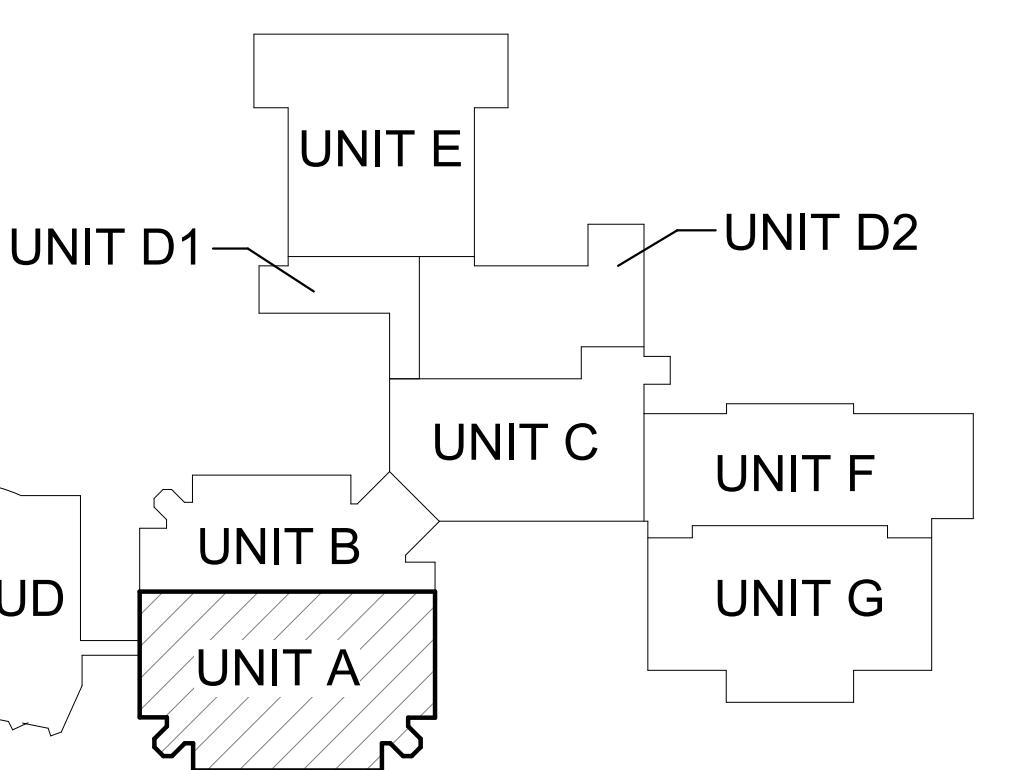
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KALAMAZOO CENTRAL HIGH SCHOOL



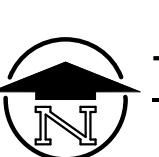
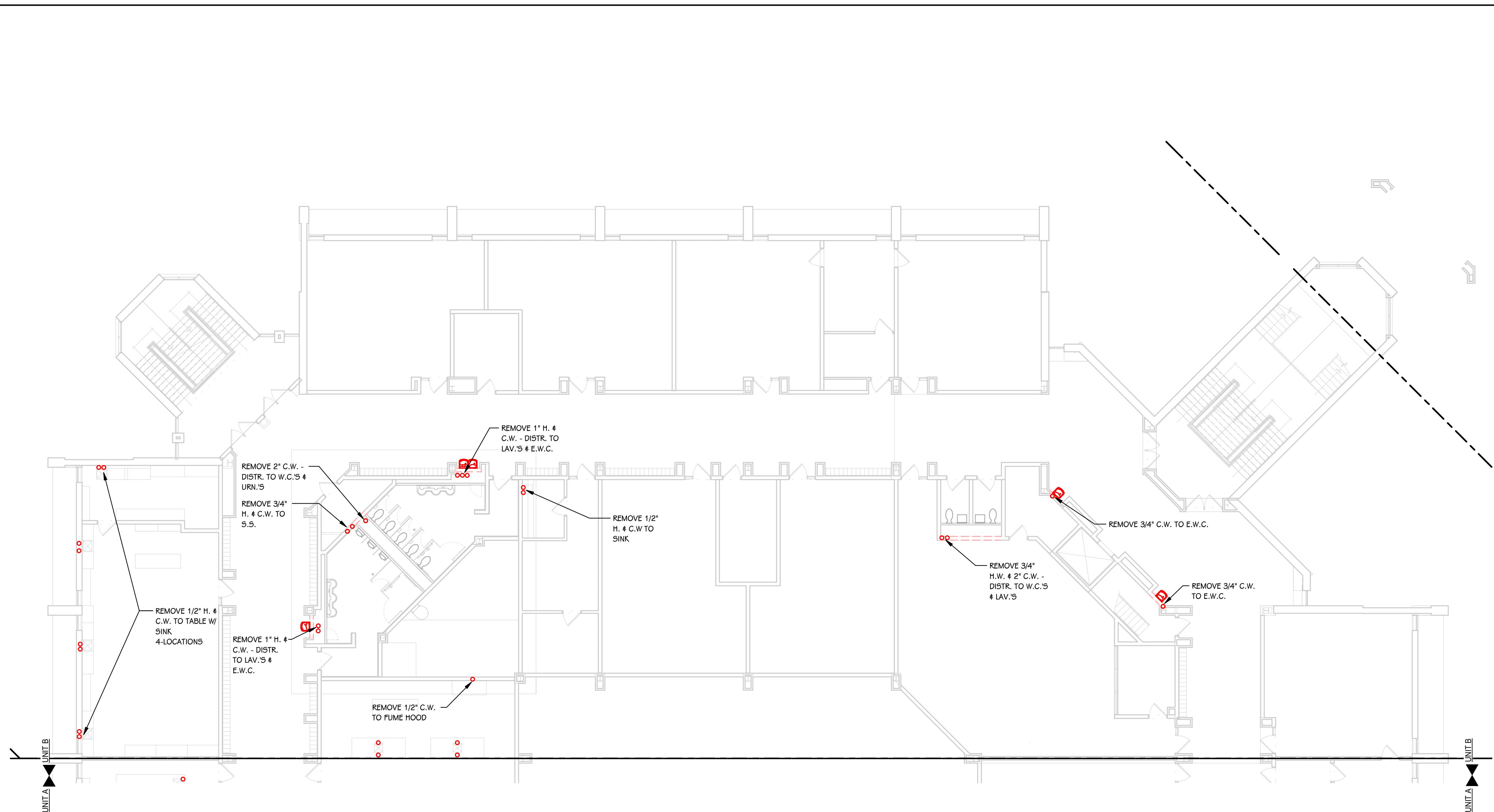
THIRD FLOOR PLUMBING DEMOLITION PLAN - UNIT A

$$32" = 1'-0"$$



SHEET TITLE  
THIRD EDITION

SHEET NUMBER 100



THIRD FLOOR PLUMBING DEMOLITION PLAN - UNIT B

3/32" = 1'-0"

KEYED NOTE - PLUMBING - DEMOLITION

- 1 REMOVE EXISTING PIPING AS INDICATED. PREPARE FOR RECONNECTION AS REQUIRED FOR NEW WORK.
- 2 REMOVE EXISTING PLUMBING FIXTURE AND ALL ASSOCIATED SUPPLY PIPING. FIXTURES SHALL BE SALVAGED FOR REUSE.
- 3 REMOVE EXISTING PIPING AS INDICATED. CAP AND PREPARE EXISTING PIPING TO REMAIN FOR RECONNECTION.

ADDENDUM #2  
ISSUED FOR  
DATE

PROJECT TITLE  
KALAMAZOO CENTRAL  
HIGH SCHOOL SECURE  
VEST. & MECHANICAL  
UPGRADES

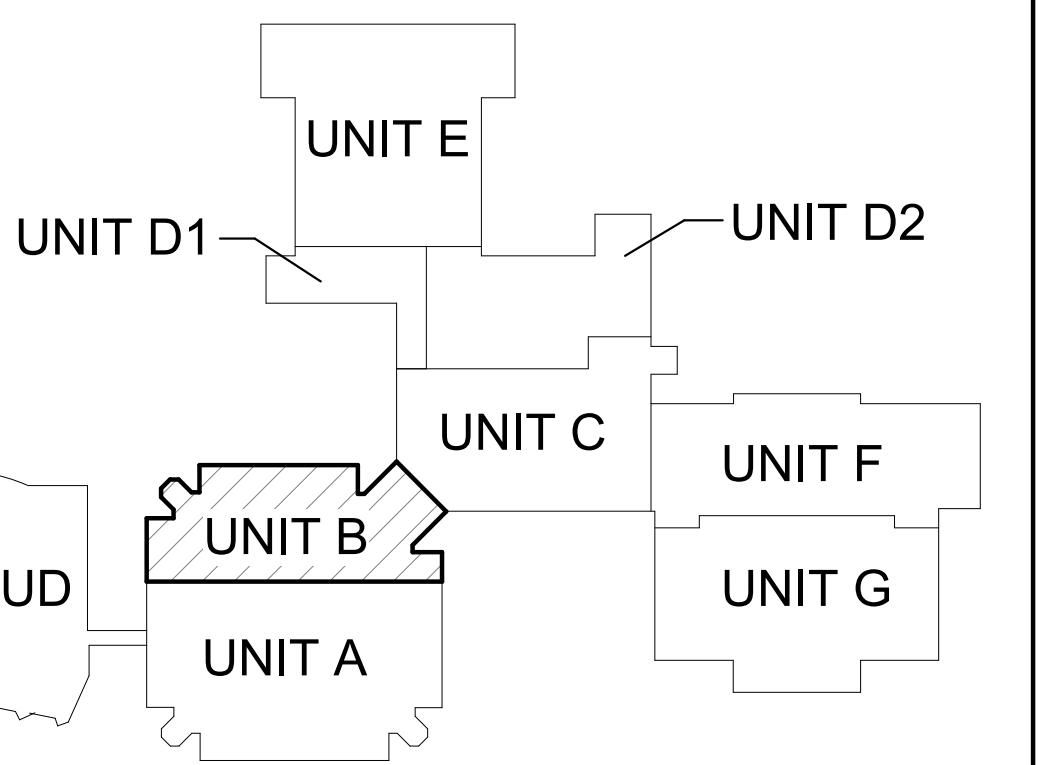
OWNER  
KALAMAZOO PUBLIC  
SCHOOLS

Kalamazoo, Michigan

DATE  
JANUARY 27, 2026

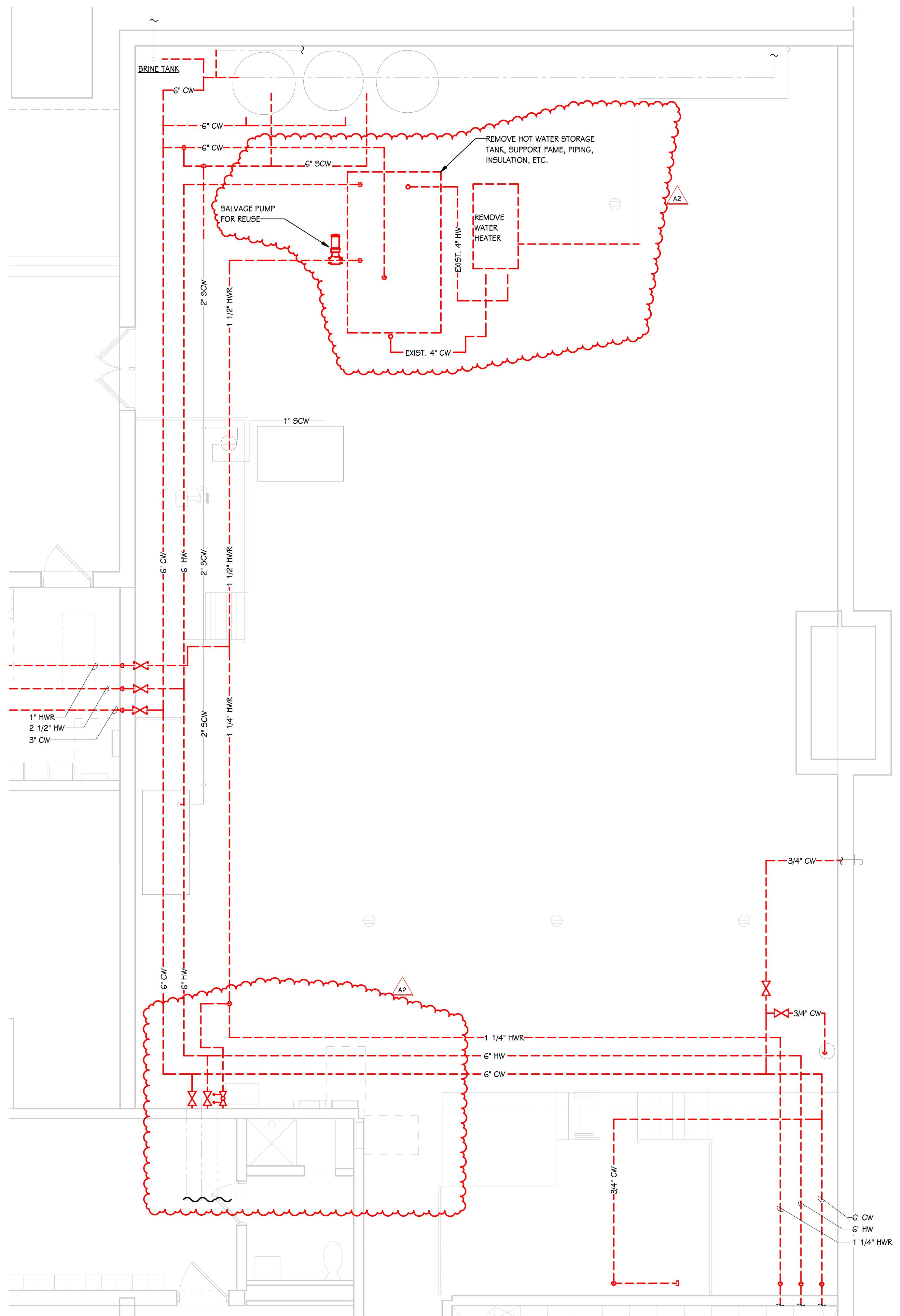
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AN ACCURATE DRAWING

KALAMAZOO CENTRAL HIGH SCHOOL

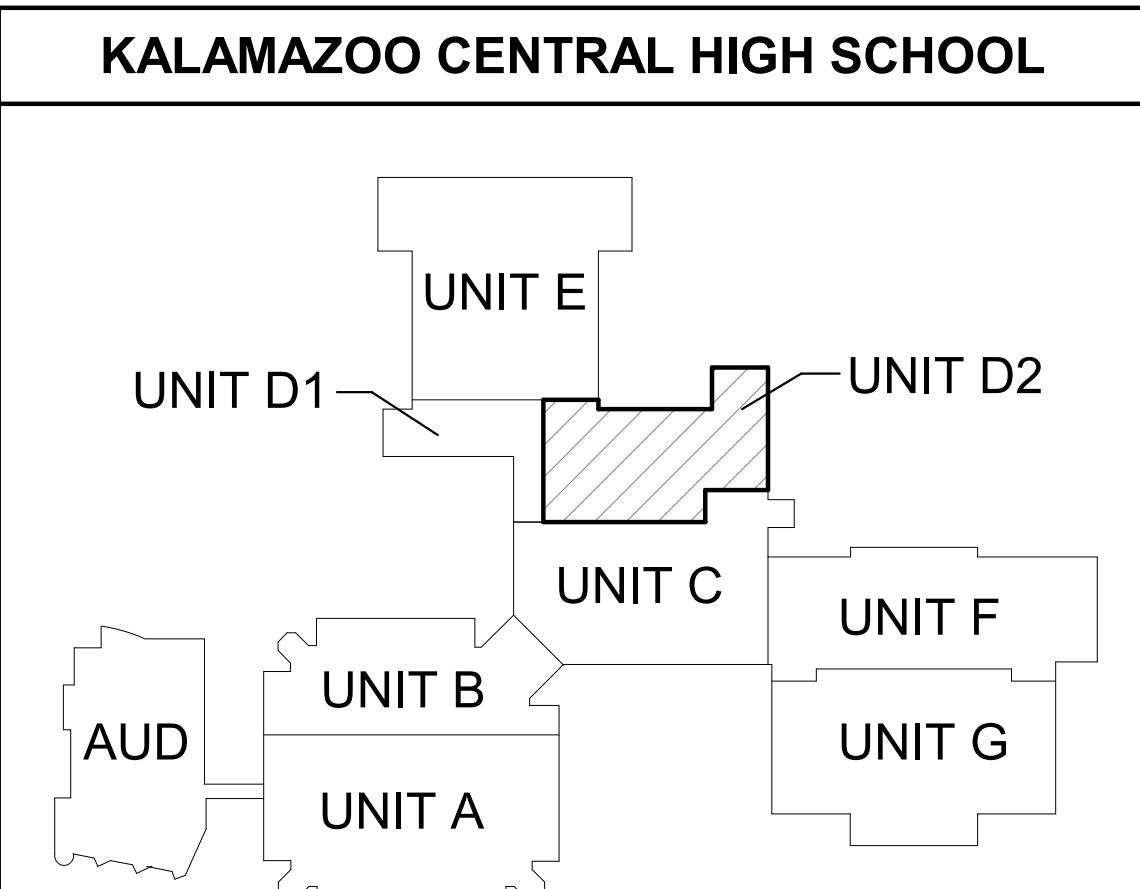


SHEET NUMBER  
PD 103B  
23-623.050

SHEET TITLE  
THIRD FLOOR PLUMBING DEMOLITION  
PLAN - UNIT B

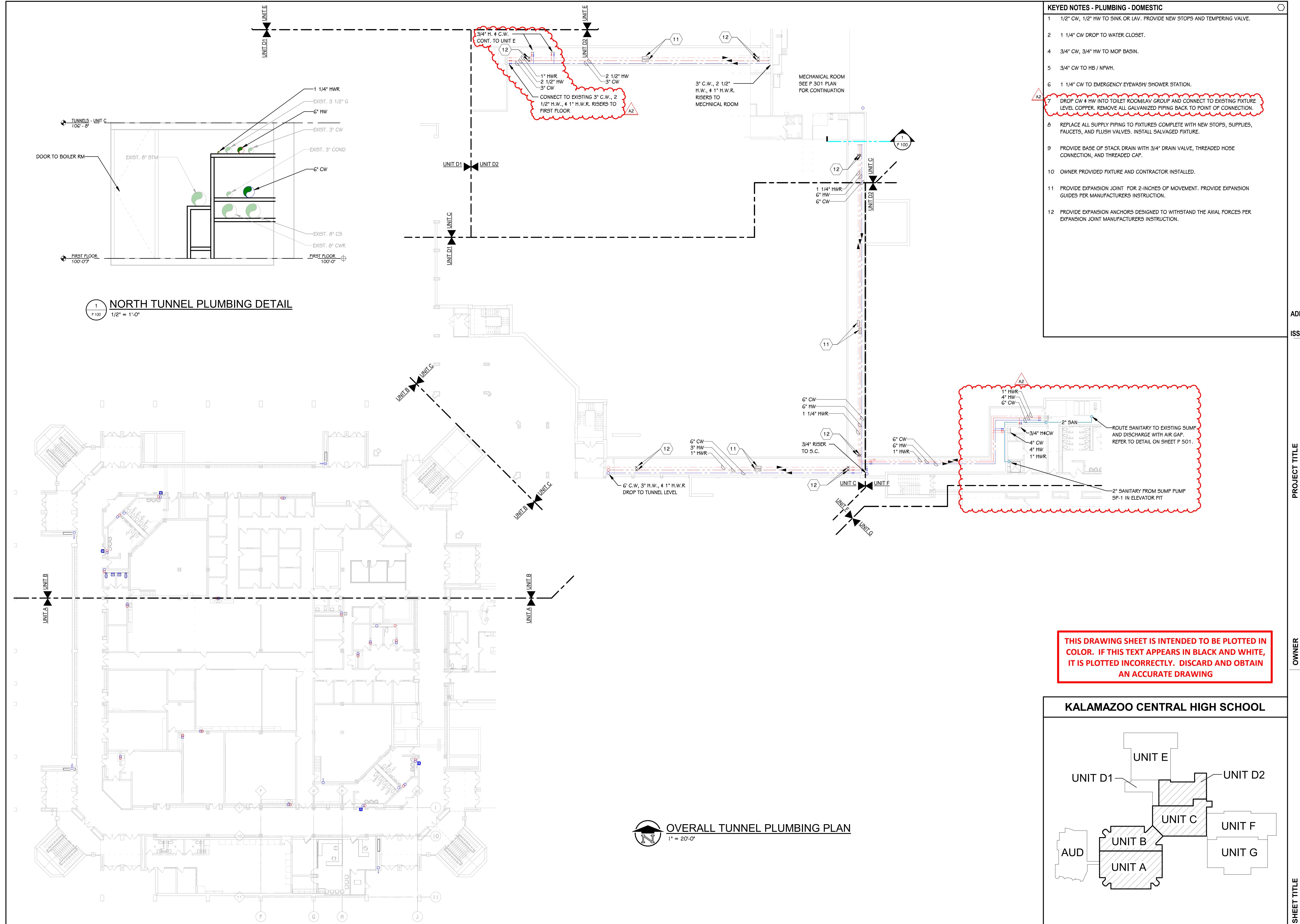


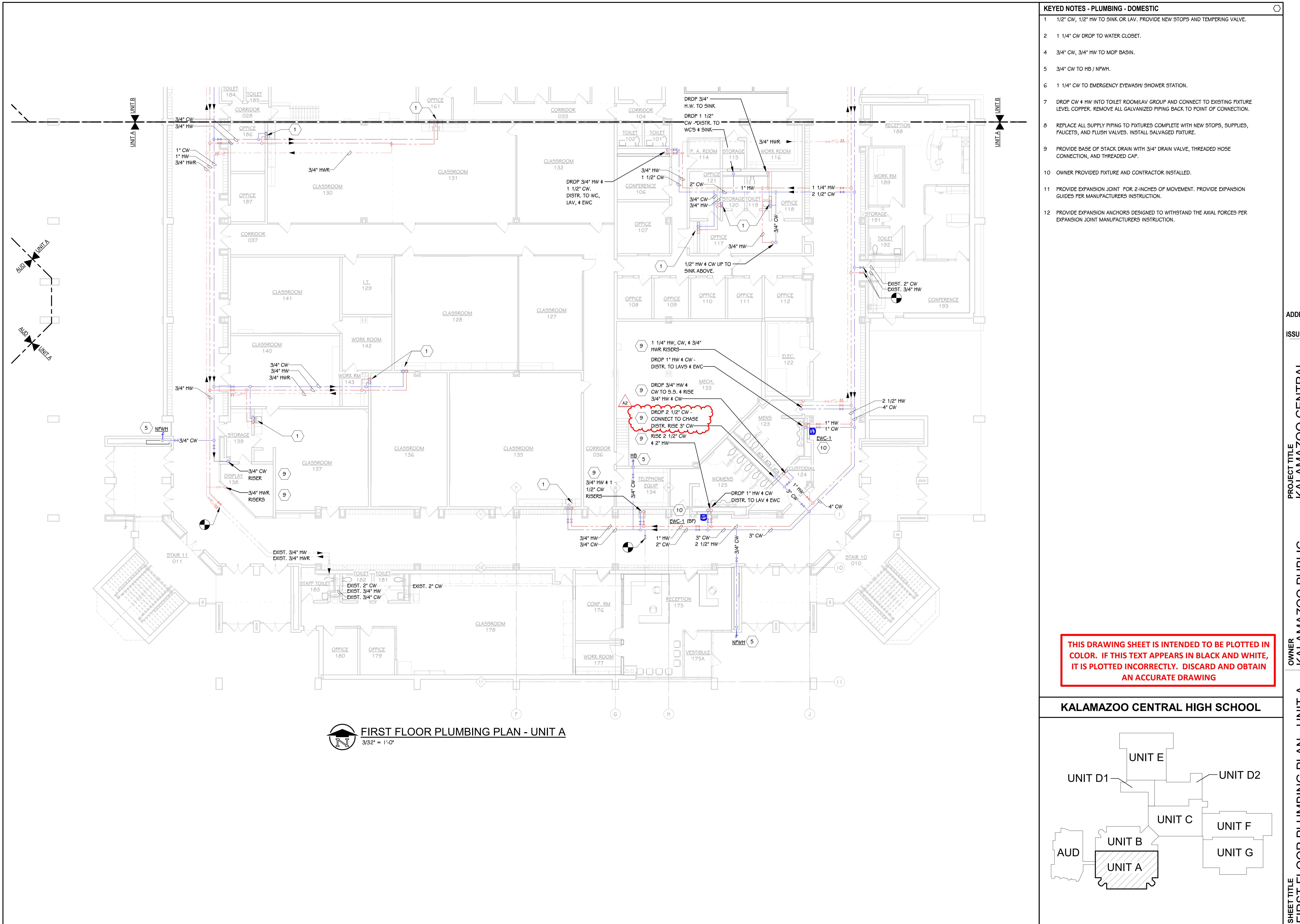
ENLARGED MECHANICAL ROOM PLUMBING DEMOLITION PLAN  
1/4" = 1'-0"

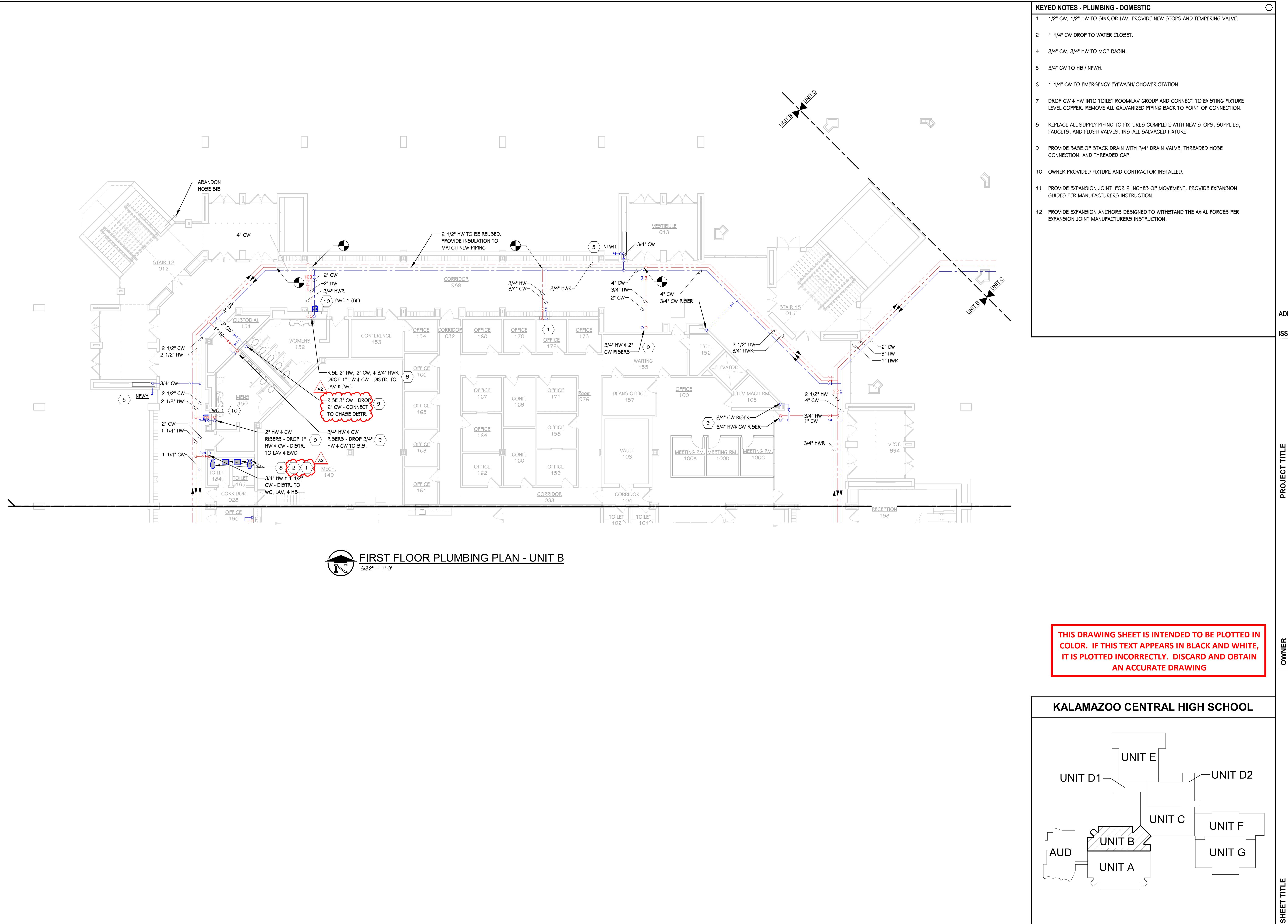


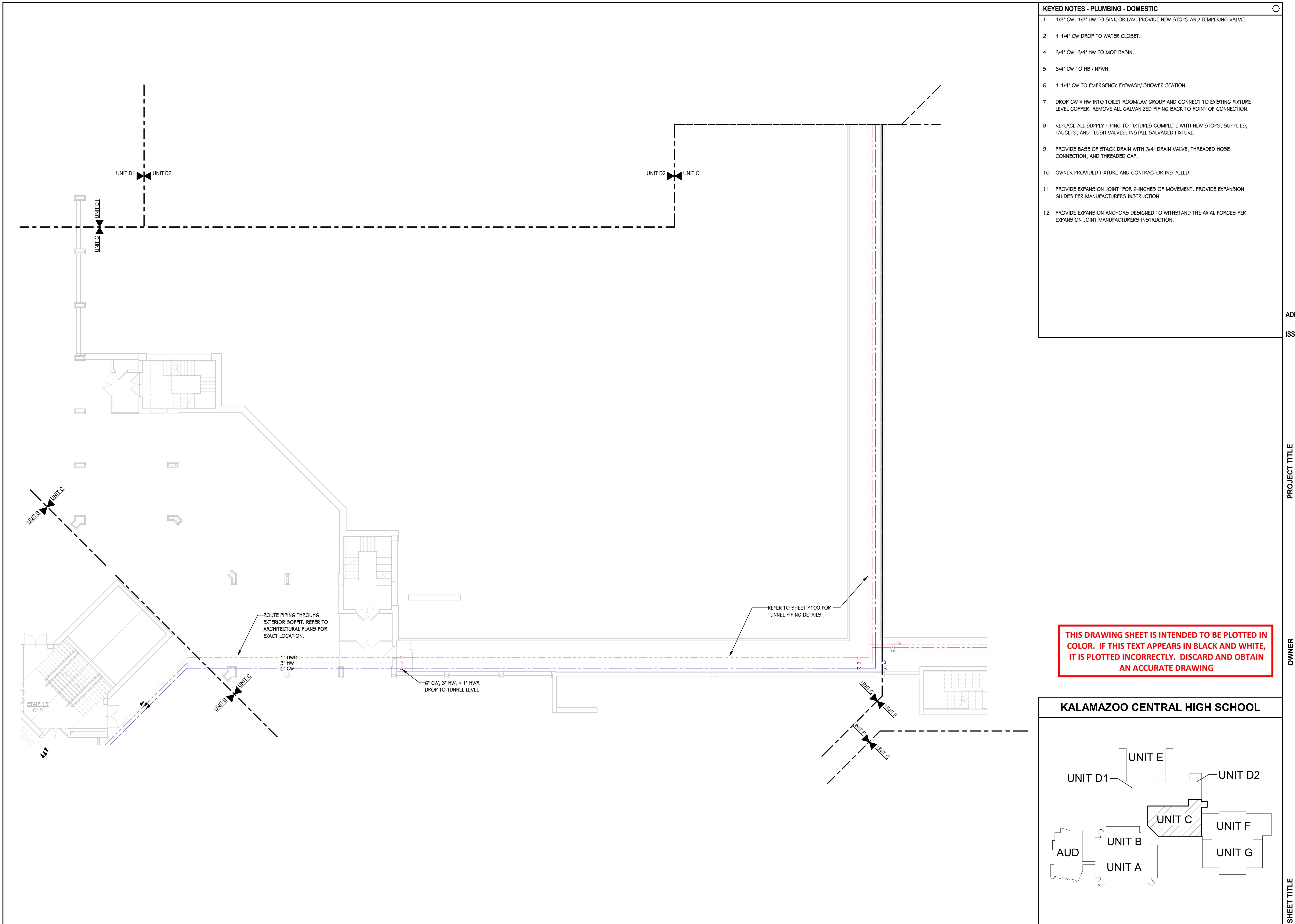
SHEET TITLE: ENLARGED PLUMBING DEMOLITION PLANS  
SHEET NUMBER: PD 301  
DATE: JANUARY 27, 2026  
23-623.050

ADDENDUM #2  
Jan. 27, 2026  
ISSUED FOR  
DATE  
PROJECT TITLE: KALAMAZOO CENTRAL HIGH SCHOOL SECURE VEST. & MECHANICAL UPDATES  
OWNER: KALAMAZOO PUBLIC SCHOOLS  
Kalamazoo, Michigan

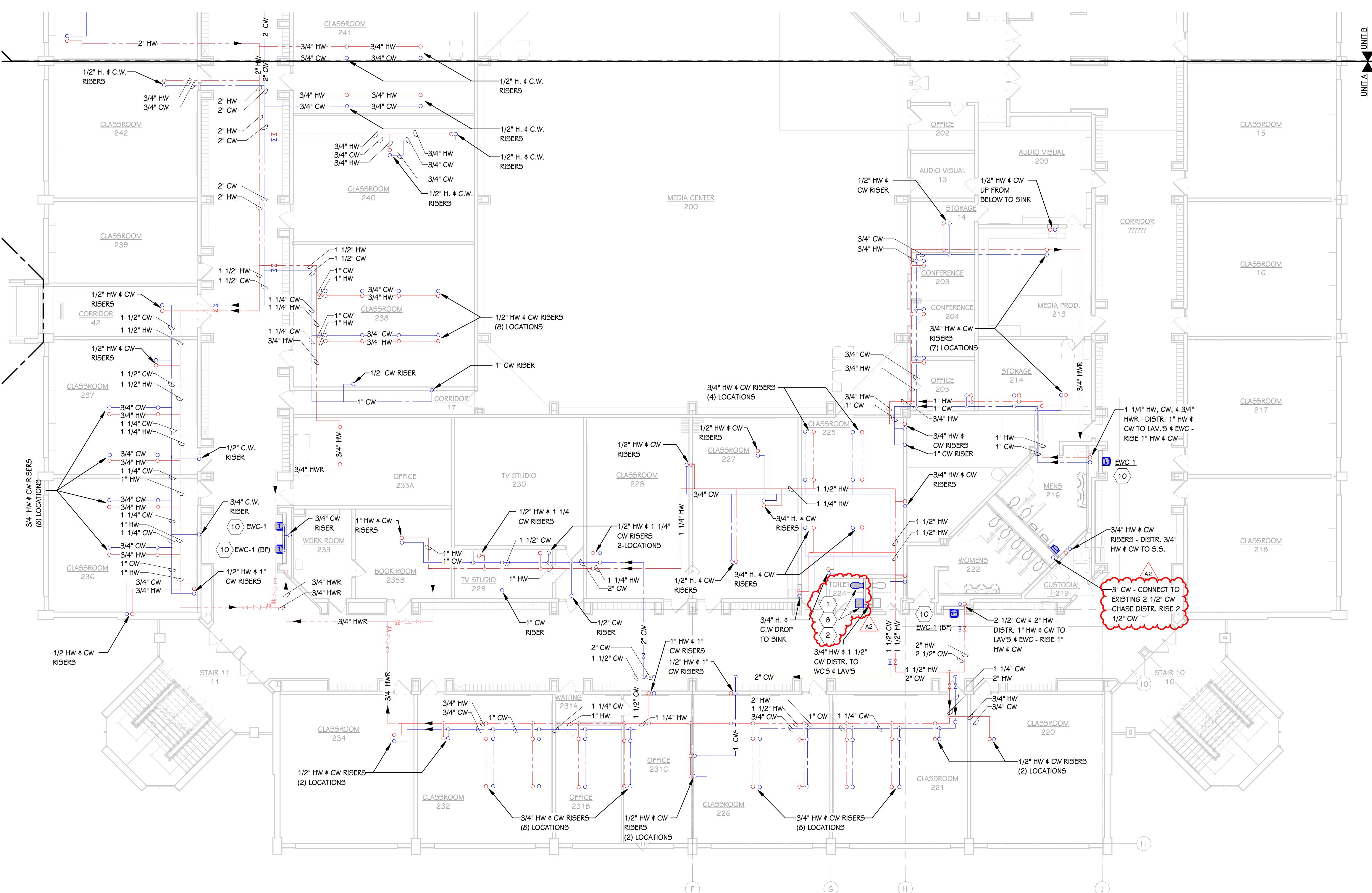








**SHEET NUMBER**  
**P 1010**  
22 622 050



| KEYED NOTES - PLUMBING - DOMESTIC |   |
|-----------------------------------|---|
| 1                                 | 1/2" CW, 1/2" HW TO SINK OR LAV. PROVIDE NEW STOPS AND TEMPERING VALVE.   |
| 2                                 | 1 1/4" CW DROP TO WATER CLOSET.   |
| 4                                 | 3/4" CW, 3/4" HW TO MOP BASIN.  |
| 5                                 | 3/4" CW TO HB / NFWH.   |
| 6                                 | 1 1/4" CW TO EMERGENCY EYEWASH/ SHOWER STATION.   |
| 7                                 | DROP CW & HW INTO TOILET ROOM/LAV GROUP AND CONNECT TO EXISTING FIXTURE LEVEL COPPER. REMOVE ALL GALVANIZED PIPING BACK TO POINT OF CONNECTION. |
| 8                                 | REPLACE ALL SUPPLY PIPING TO FIXTURES COMPLETE WITH NEW STOPS, SUPPLIES, FAUCETS, AND FLUSH VALVES. INSTALL SALVAGED FIXTURE.                   |
| 9                                 | PROVIDE BASE OF STACK DRAIN WITH 3/4" DRAIN VALVE, THREADED HOSE CONNECTION, AND THREADED CAP.  |
| 10                                | OWNER PROVIDED FIXTURE AND CONTRACTOR INSTALLED.  |
| 11                                | PROVIDE EXPANSION JOINT FOR 2-INCHES OF MOVEMENT. PROVIDE EXPANSION GUIDES PER MANUFACTURER'S INSTRUCTION.                                      |
| 12                                | PROVIDE EXPANSION ANCHORS DESIGNED TO WITHSTAND THE AXIAL FORCES PER EXPANSION JOINT MANUFACTURER'S INSTRUCTION.                                |

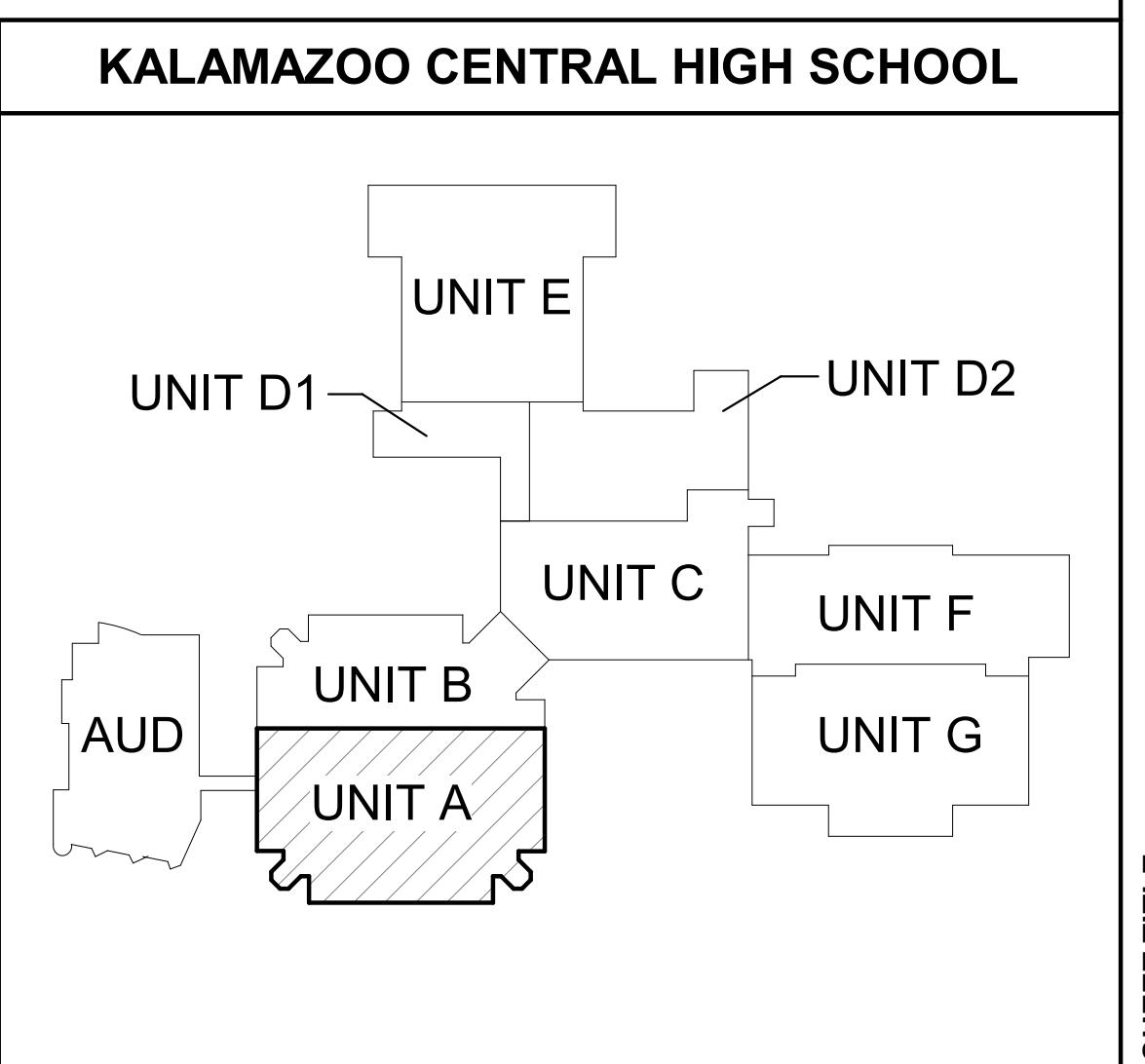
ADDENDUM #2  
Jan. 27, 2026  
ISSUED FOR  
DATE

PROJECT TITLE  
KALAMAZOO CENTRAL  
HIGH SCHOOL SECURE  
VEST & MECHANICAL  
UPGRADES

OWNER  
KALAMAZOO PUBLIC  
SCHOOLS

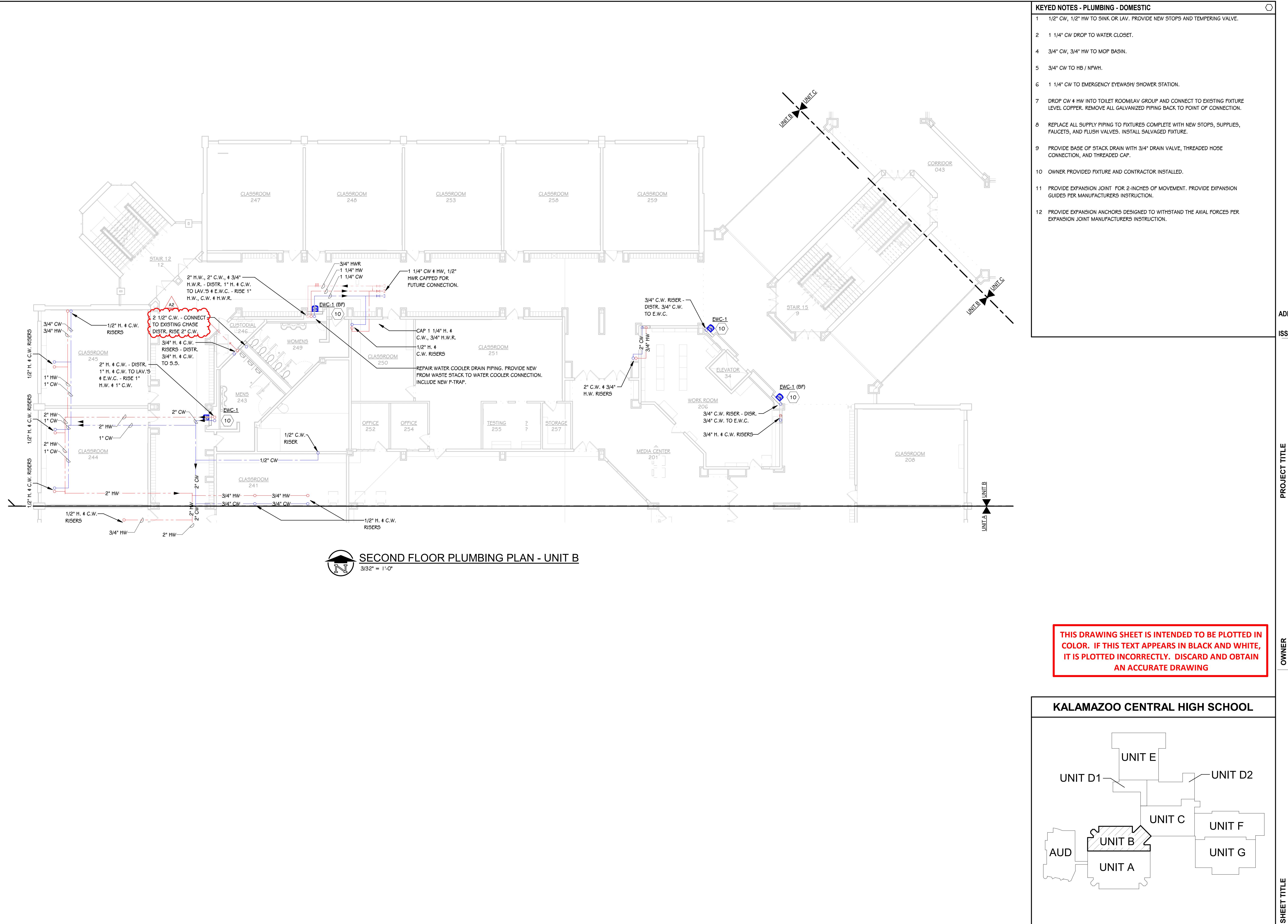
Kalamazoo, Michigan

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AN ACCURATE DRAWING



SHEET NUMBER  
P 102A  
A  
23-623.050

DATE  
JANUARY 27, 2026



ADDENDUM #2 Jan. 27, 2026  
ISSUED FOR DATE  
PROJECT TITLE KALAMAZOO CENTRAL HIGH SCHOOL SECURE VEST. & MECHANICAL UPDATES  
OWNER KALAMAZOO PUBLIC SCHOOLS  
Kalamazoo, Michigan

DATE JANUARY 27, 2026

SHEET NUMBER P 103A  
23-623.050

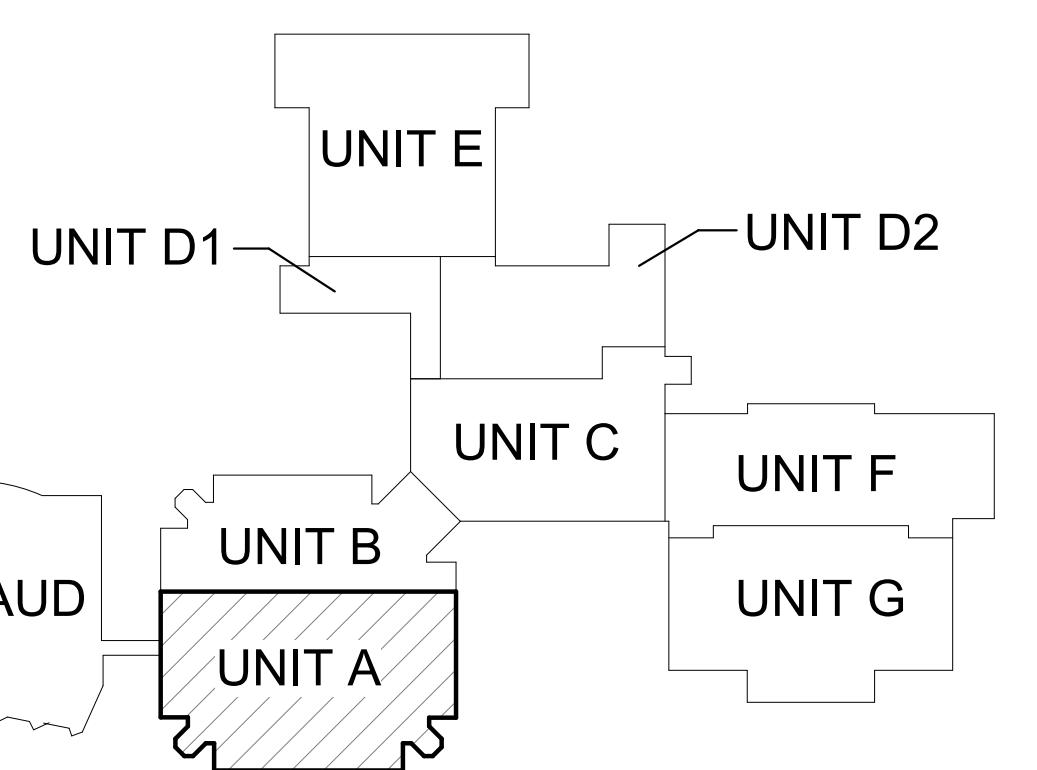
| KEYED NOTES - PLUMBING - DOMESTIC |   |
|-----------------------------------|---|
| 1                                 | 1/2" CW, 1/2" HW TO SINK OR LAV. PROVIDE NEW STOPS AND TEMPERING VALVE.   |
| 2                                 | 1 1/4" CW DROP TO WATER CLOSET.   |
| 4                                 | 3/4" CW, 3/4" HW TO MOP BASIN.  |
| 5                                 | 3/4" CW TO HB / NFWH.   |
| 6                                 | 1 1/4" CW TO EMERGENCY EYEWASH/ SHOWER STATION.   |
| 7                                 | DROP CW & HW INTO TOILET ROOM/LAV GROUP AND CONNECT TO EXISTING FIXTURE LEVEL COPPER. REMOVE ALL GALVANIZED PIPING BACK TO POINT OF CONNECTION. |
| 8                                 | REPLACE ALL SUPPLY PIPING TO FIXTURES COMPLETE WITH NEW STOPS, SUPPLIES, FAUCETS, AND FLUSH VALVES. INSTALL SALVAGED FIXTURE.                   |
| 9                                 | PROVIDE BASE OF STACK DRAIN WITH 3/4" DRAIN VALVE, THREADED HOSE CONNECTION, AND THREADED CAP.  |
| 10                                | OWNER PROVIDED FIXTURE AND CONTRACTOR INSTALLED.  |
| 11                                | PROVIDE EXPANSION JOINT FOR 2-INCHES OF MOVEMENT. PROVIDE EXPANSION GUIDES PER MANUFACTURERS INSTRUCTION.                                       |
| 12                                | PROVIDE EXPANSION ANCHORS DESIGNED TO WITHSTAND THE AXIAL FORCES PER EXPANSION JOINT MANUFACTURERS INSTRUCTION.                                 |

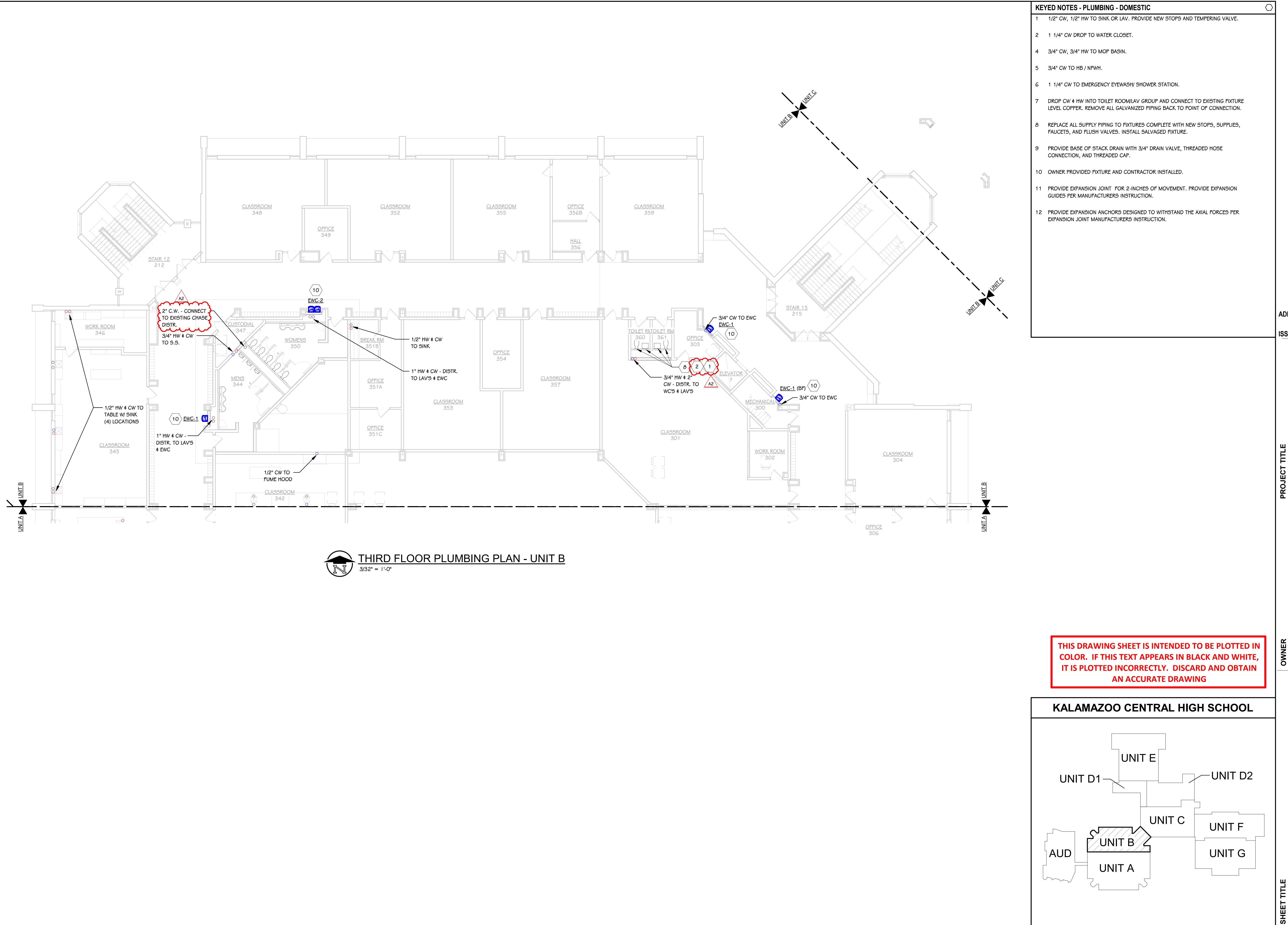


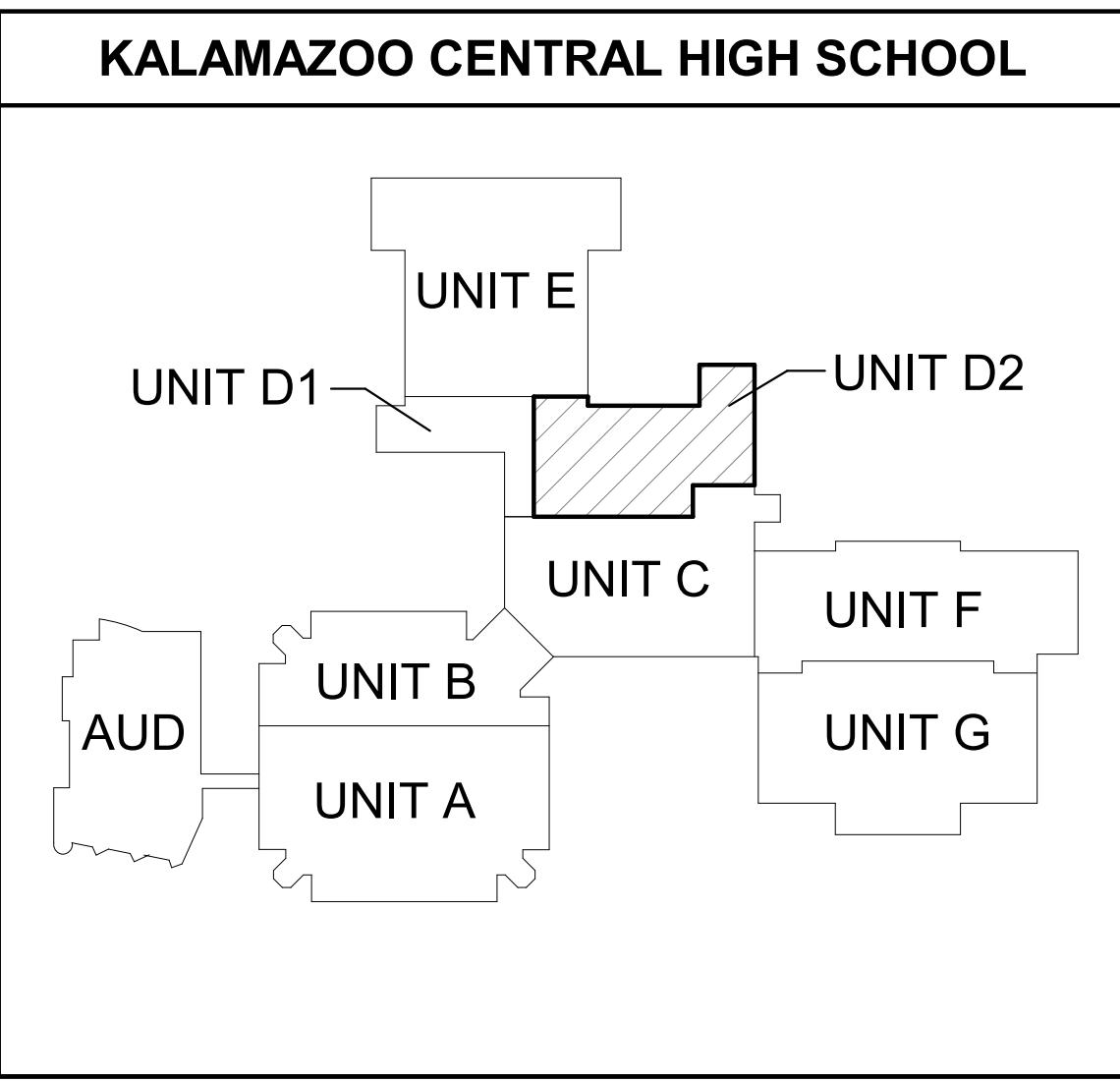
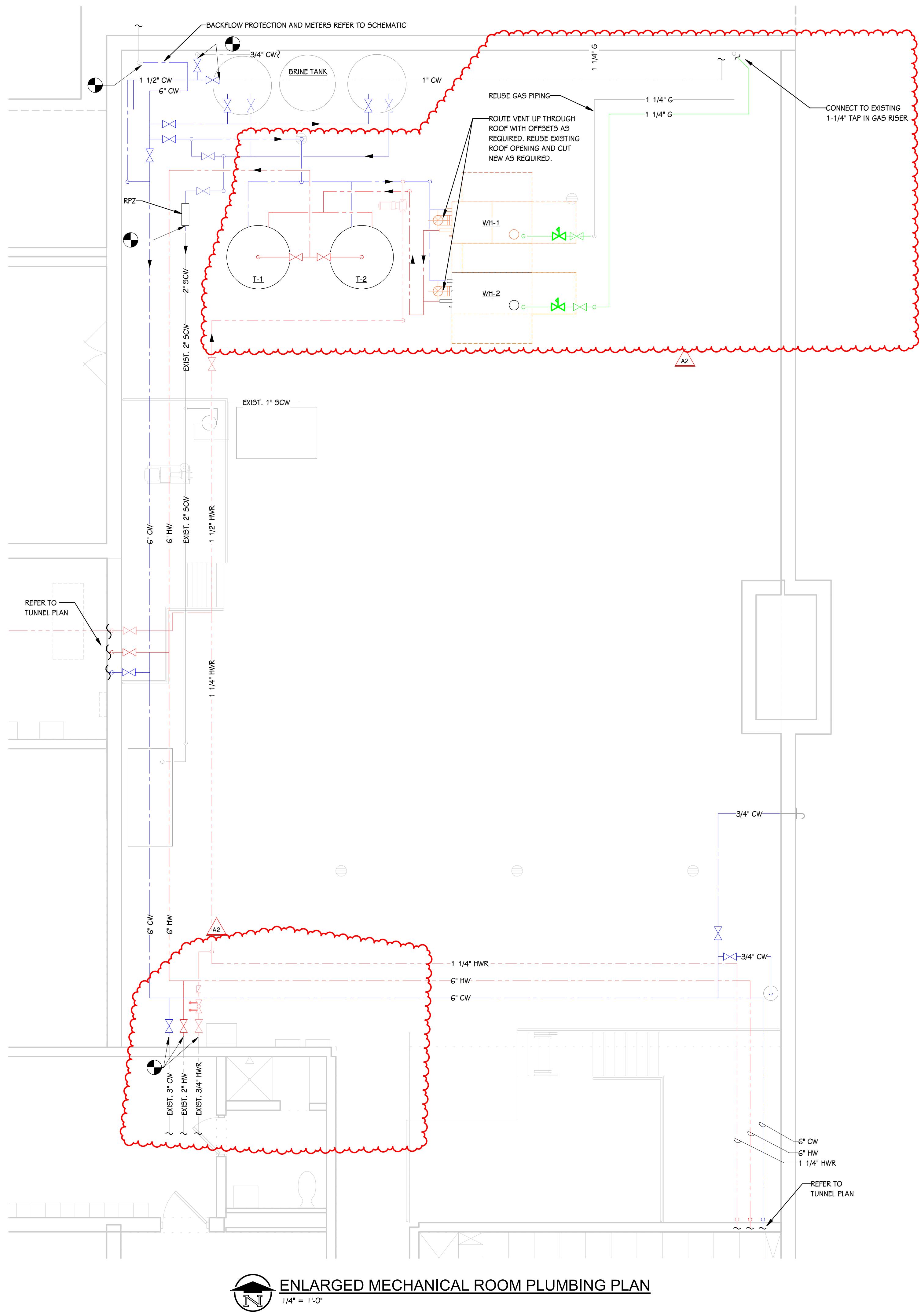
THIRD FLOOR PLUMBING PLAN - UNIT A  
3/32" = 1'-0"

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KALAMAZOO CENTRAL HIGH SCHOOL







**ENLARGED PLUMBING PLANS**

**SHEET NUMBER**  
**P 301**  
23-623.050

**ADDENDUM #2** **Jan. 27, 2024**  
**ISSUED FOR** **DATE**

**PROJECT TITLE**  
**KALAMAZOO CENTRAL  
HIGH SCHOOL SECURE  
VEST. & MECHANICAL  
UPGRADES**

**OWNER**  
**KALAMAZOO PUBLIC  
SCHOOLS**

Kalamazoo, Michigan

**DATE**  
**JANUARY 27, 2026**

DENDUM #2 Jan. 27, 20

Jan. 27, 2026

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DATE

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# KALAMAZOO CENTRAL HIGH SCHOOL SECURE VEST. & MECHANICAL UPGRADES

# KALAMAZOO PUBLIC SCHOOLS

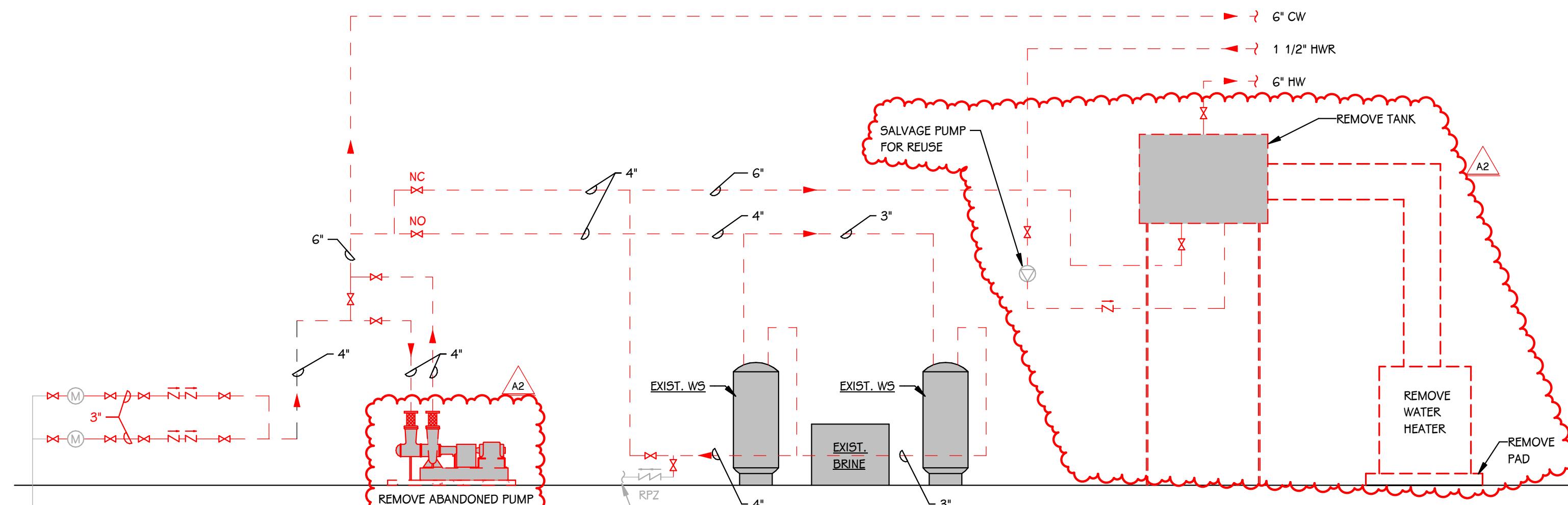
# Kalamazoo, Michigan

# PIPING SCHEMATIC

**DATE** **JANUARY 27, 2026**

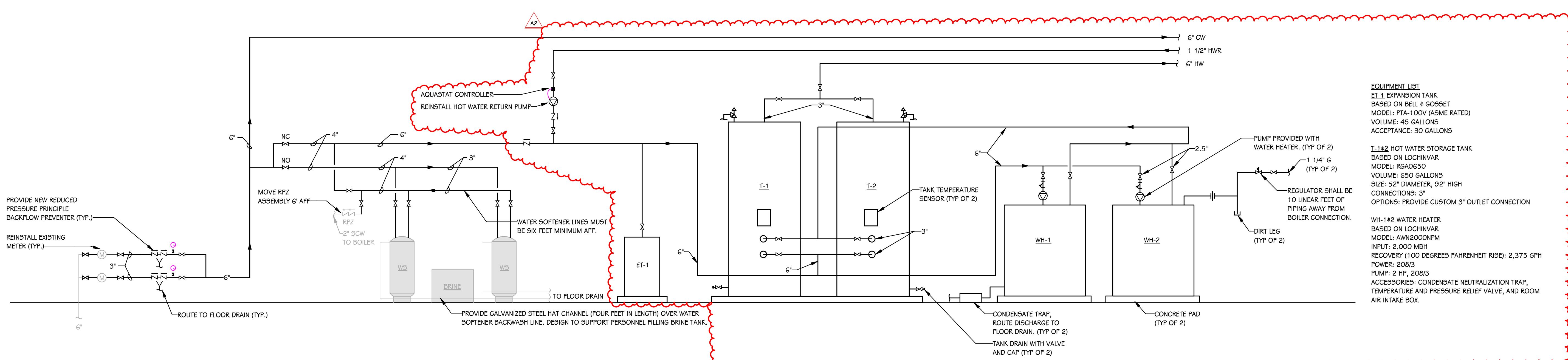
## DOMESTI

**SHEET NUMBER  
P 401  
23-623.050**



# DEMOLITION WATER SERVICE & DOMESTIC HOT WATER SCHEMATIC

DEM SCALE: N



# WATER SERVICE & DOMESTIC HOT WATER SCHEMATI

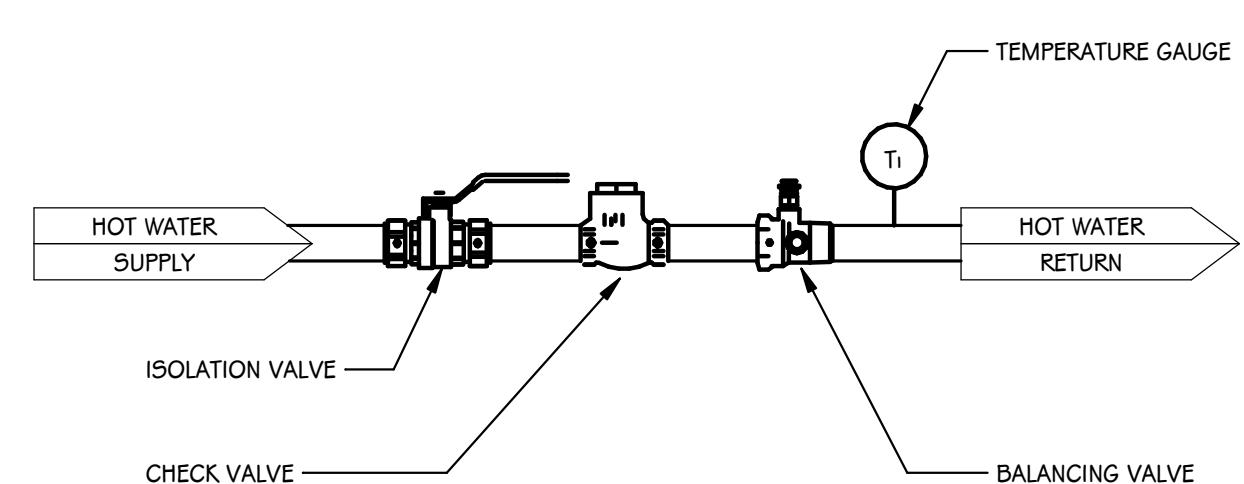
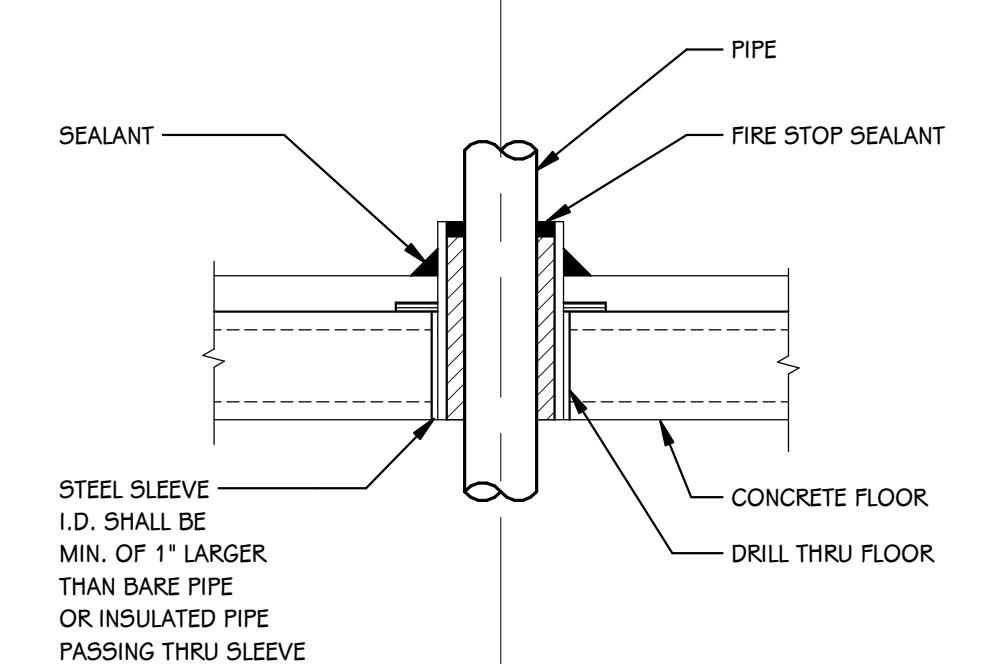
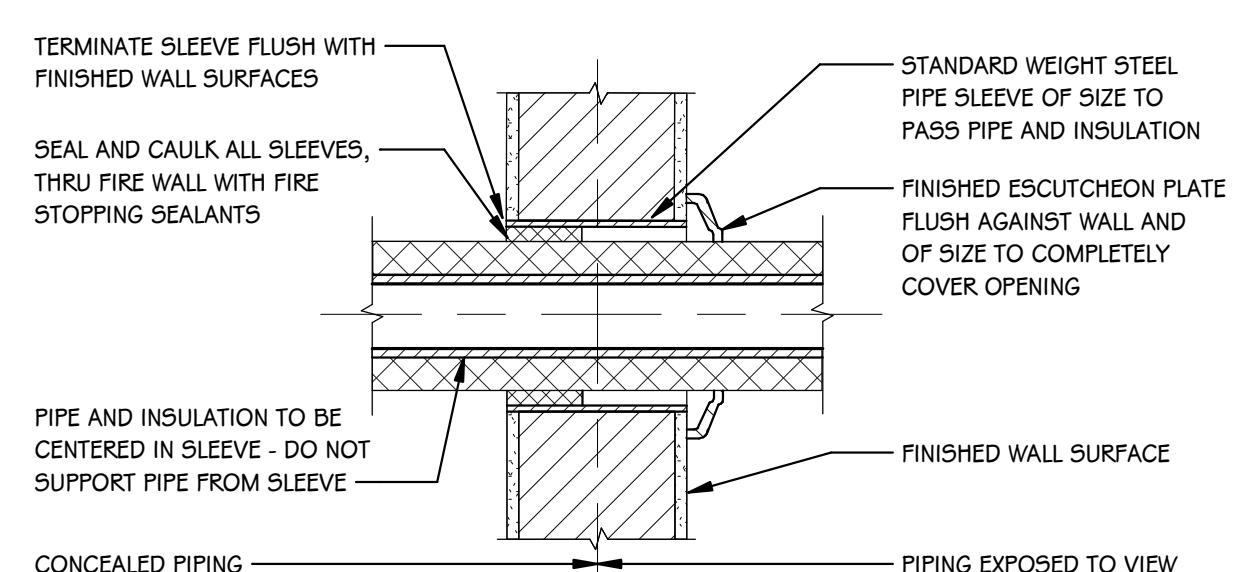
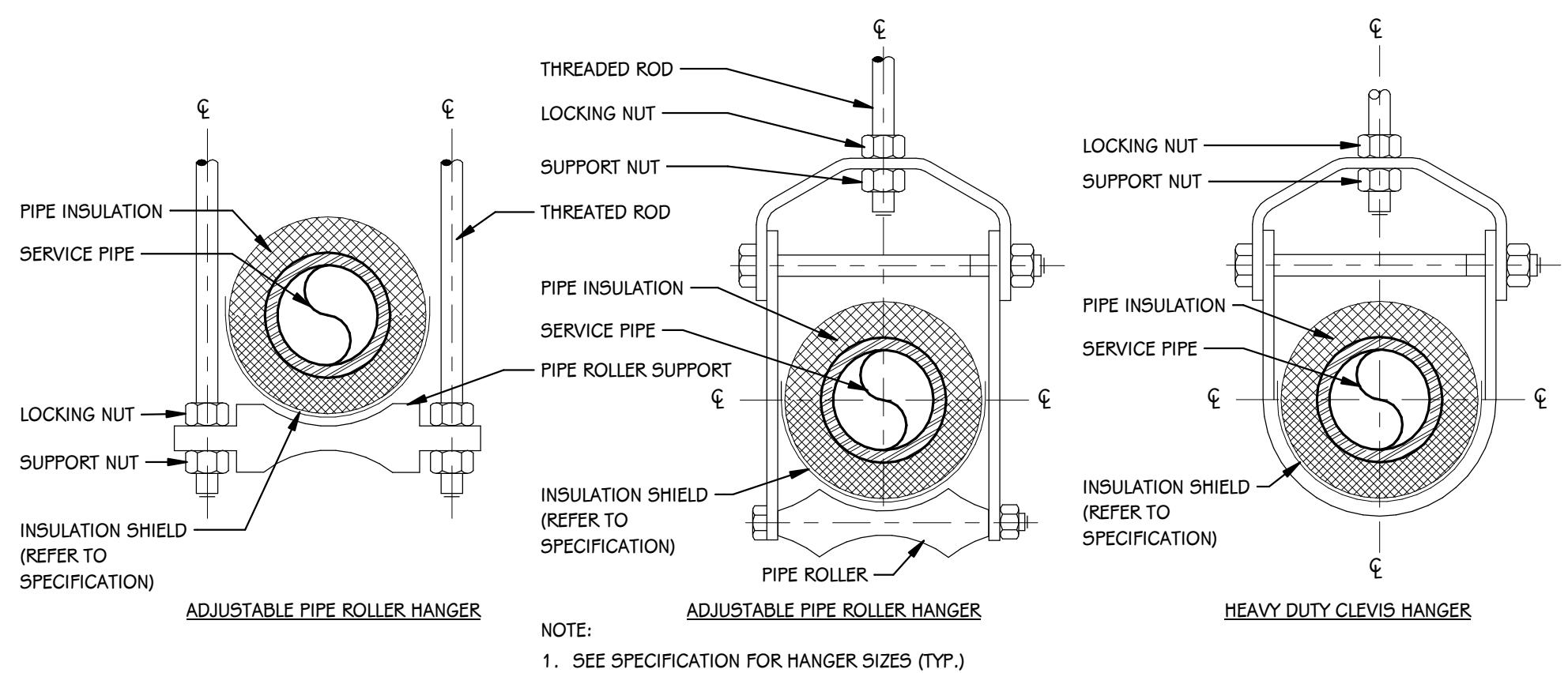
SCALE

PMENT LIST  
EXPANSION TANK  
D ON BELL & GOSSET  
EL: PTA-100V (ASME RATED)  
ME: 45 GALLONS  
TANCE: 50 GALLONS

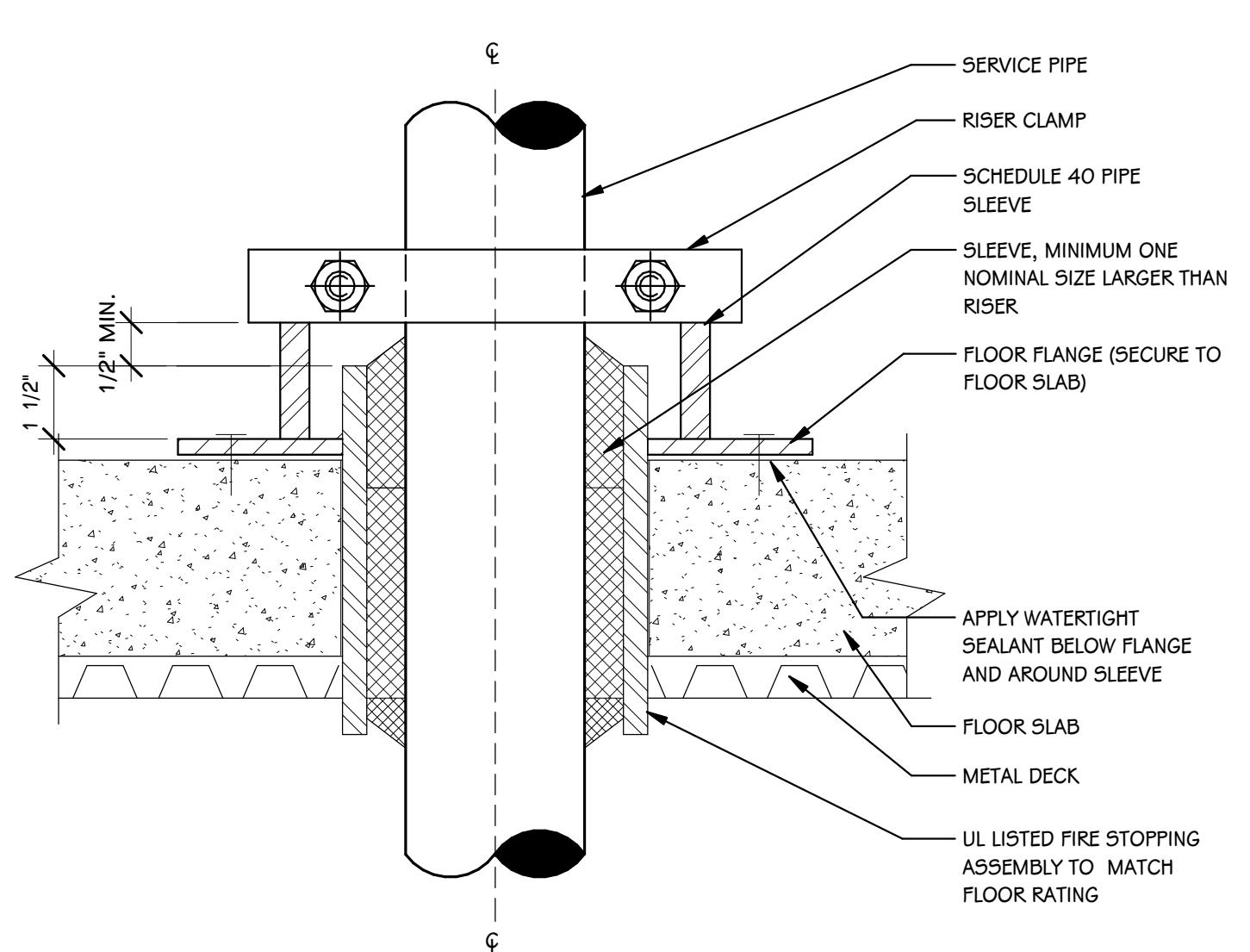
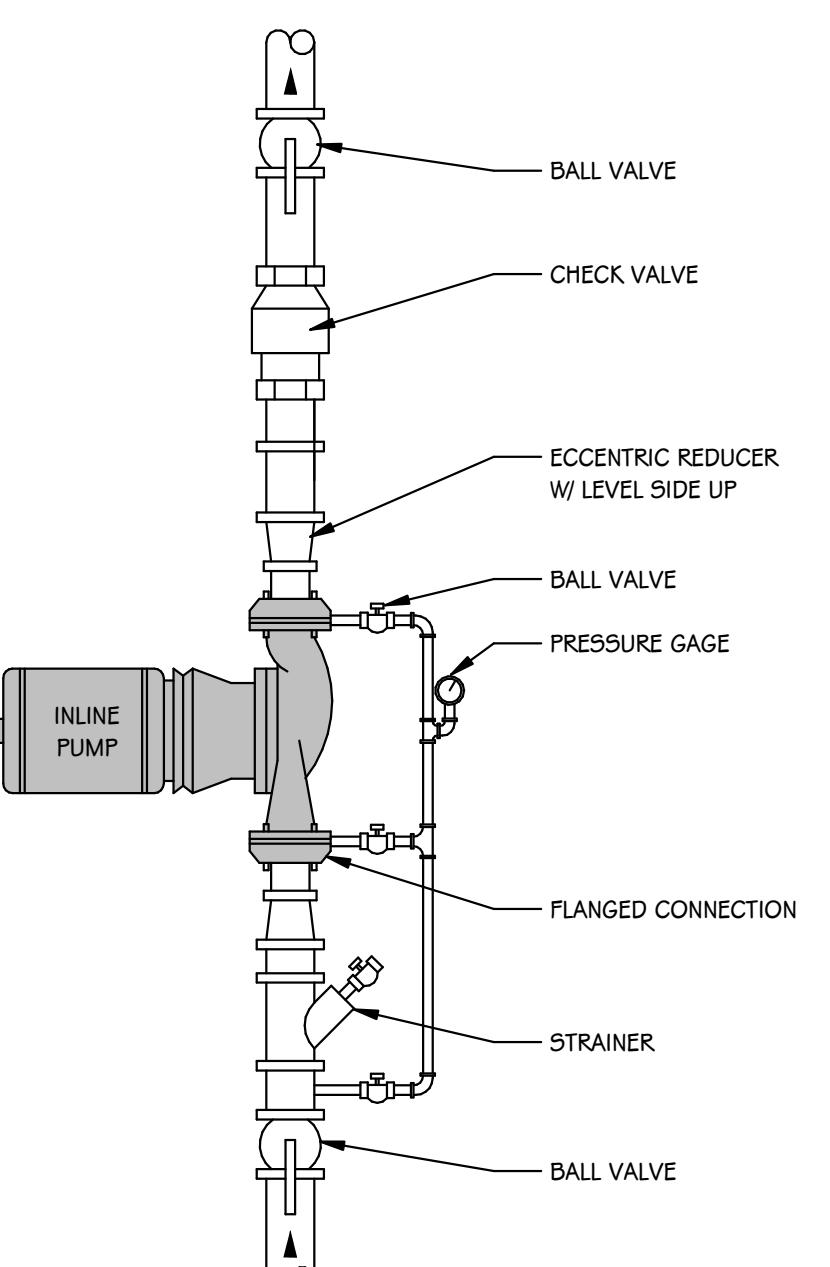
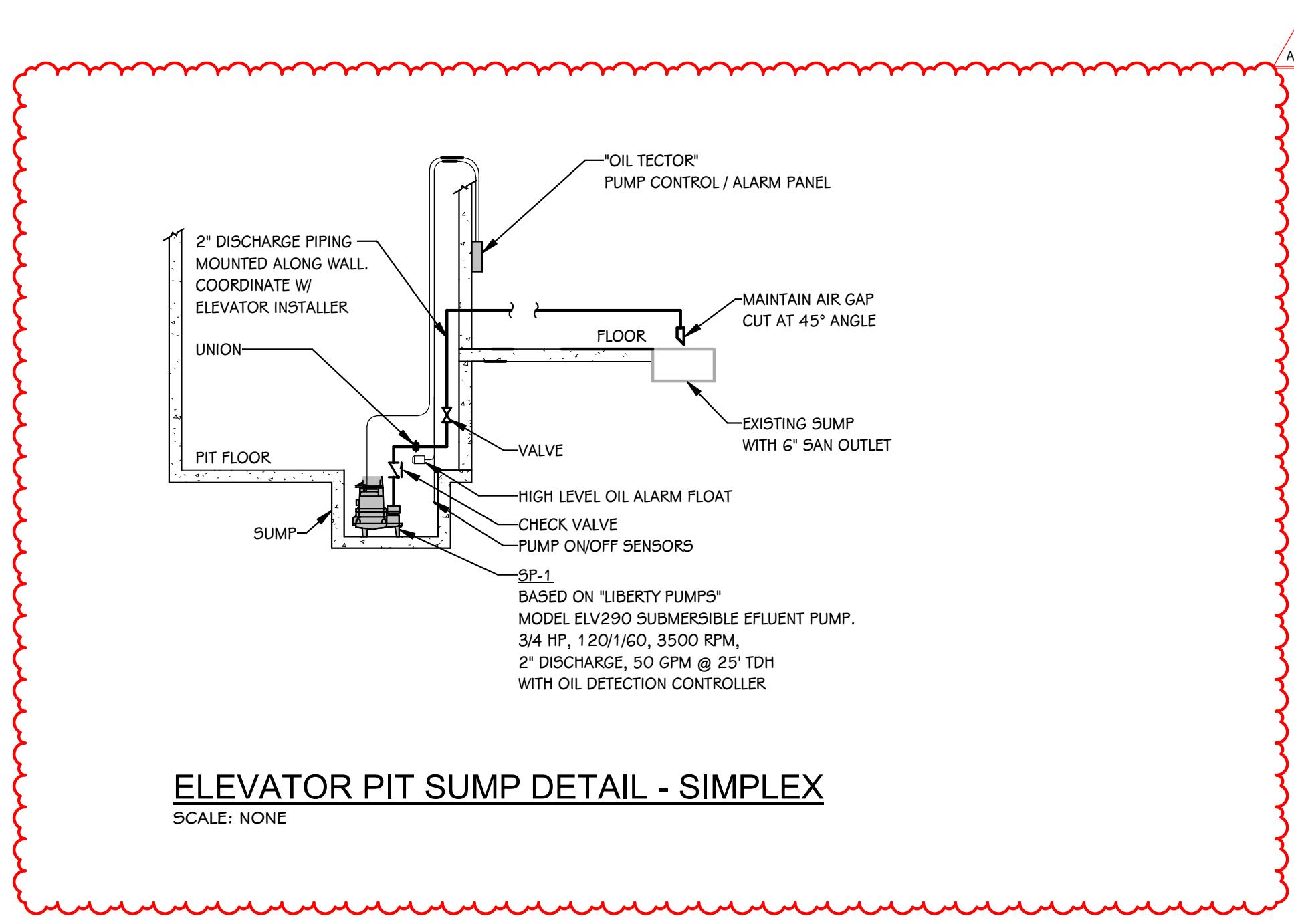
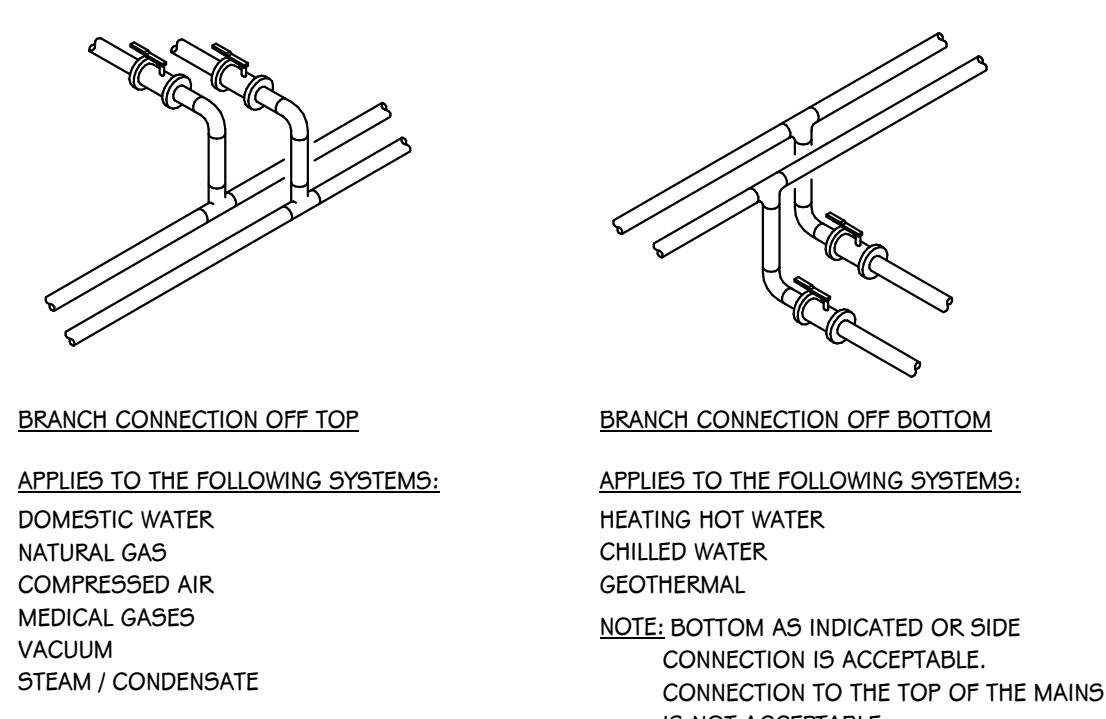
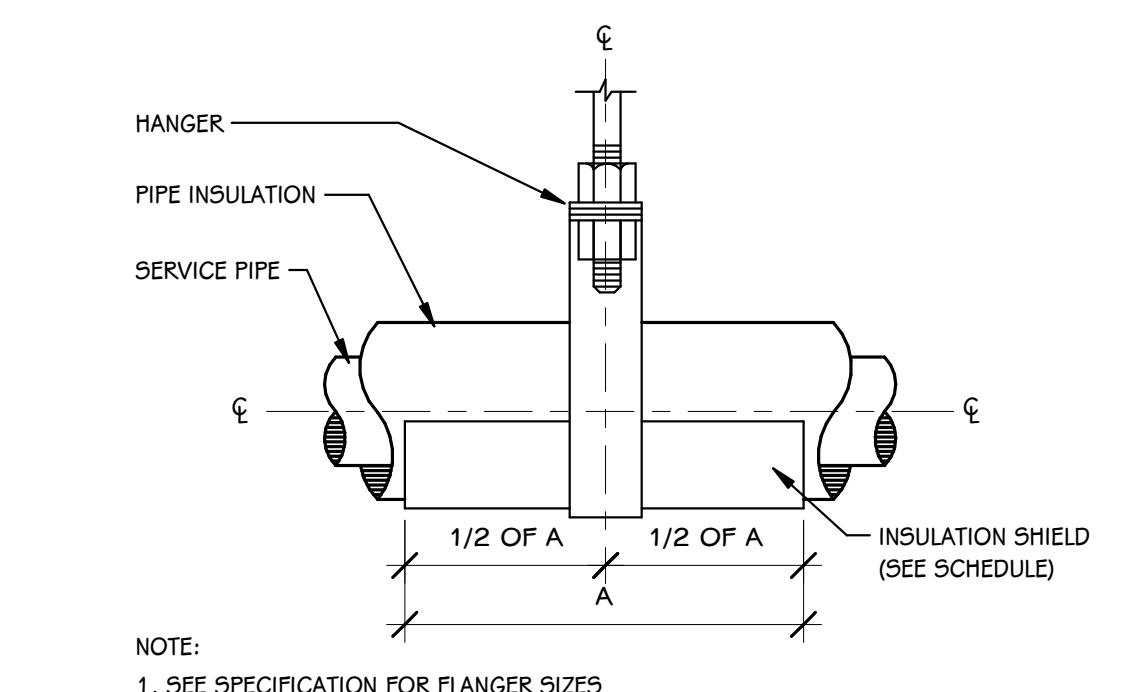
HOT WATER STORAGE TANK  
ON LOCHINVAR  
EL: RGA0650  
ME: 650 GALLONS  
52" DIAMETER, 92" HIGH  
ECTIONS: 3"  
ONS: PROVIDE CUSTOM 3" OUTLET CONNECTION

\$2 WATER HEATER  
D ON LOCHINVAR  
EL: AWN200ONPM  
: 2,000 MBH  
VERY (100 DEGREES FAHRENHEIT RISE): 2,375 GPH  
R: 208/3  
: 2 HP, 208/3  
SSORIES: CONDENSATE NEUTRALIZATION TRAP,  
ERATURE AND PRESSURE RELIEF VALVE, AND ROOM  
TAKES BOV

**DOMESTI**  
**SHEET NUMBER**  
**P 401**  
22 022 050



| INSULATION SHIELD SCHEDULE |               |                 |                  |
|----------------------------|---------------|-----------------|------------------|
| PIPE SIZE                  | DIMENSION "A" | GAUGE OF SHIELD | SHIELD THICKNESS |
| 1/2" TO 4"                 | 12"           | 16              | 0.0480           |
| 5" TO 6"                   | 18"           | 16              | 0.0600           |
| ABOVE 6"                   | 24"           | 14              | 0.0750           |





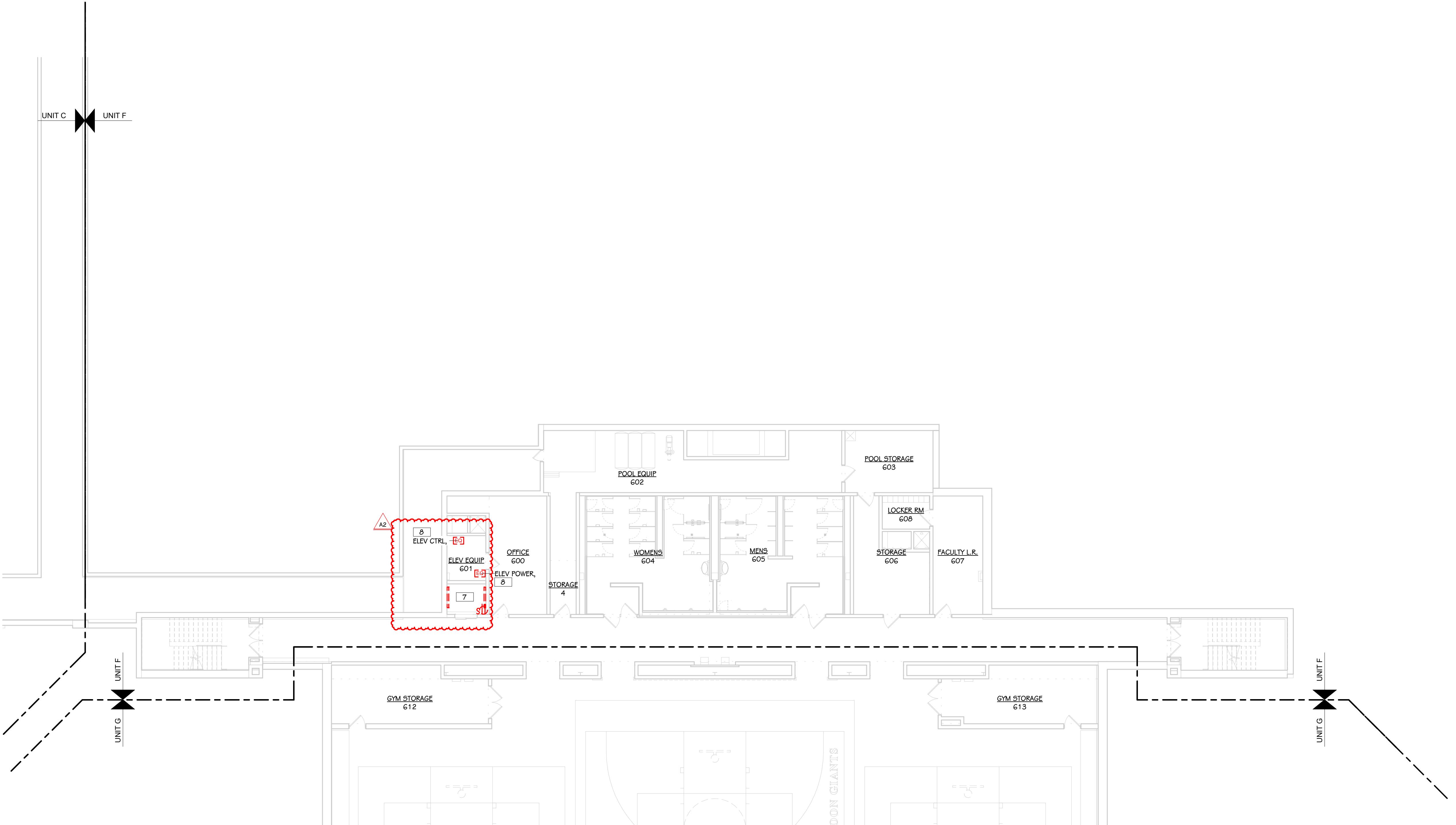
ADDENDUM #2 Jan. 27, 2026

ISSUED FOR DATE

PROJECT TITLE  
KALAMAZOO CENTRAL  
HIGH SCHOOL SECURE  
VEST. & MECHANICAL  
UPGRADES

OWNER  
KALAMAZOO PUBLIC  
SCHOOLS

Kalamazoo, Michigan



FIRST FLOOR ELECTRICAL DEMOLITION PLAN - UNIT F

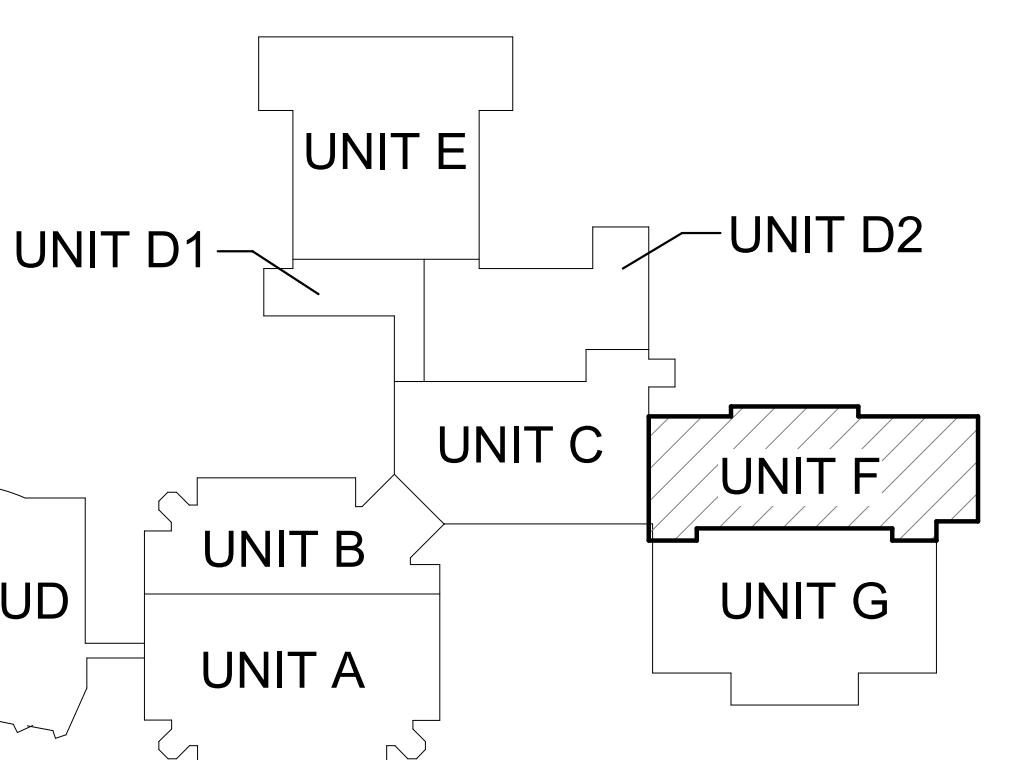
3/32" = 1'-0"

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KEYED NOTES - ELECTRICAL - DEMOLITION

- 1 TEMPORARILY SUPPORT EXISTING LIGHT FIXTURES, OCCUPANCY SENSORS, AND EXIT SIGNS TO REMAIN IN NEW CEILING IN PLACE OF EXISTING. REINSTALL DEVICES INTO NEW CEILING. REWORK AND EXTEND EXISTING CIRCUIT AS REQUIRED.
- 2 REMOVE THE ELECTRICAL CONNECTION TO MECHANICAL EQUIPMENT AND ALL ASSOCIATED WIRE AND CONDUIT BACK TO NEAREST JUNCTION BOX. RETAIN CIRCUIT FOR REUSE.
- 3 DISCONNECT RECEPTACLE AND RETAIN CIRCUIT FOR REUSE.
- 4 DISCONNECT AND RECONNECT POWER ASSOCIATED WITH TECHNOLOGY EQUIPMENT AS REQUIRED FOR MECHANICAL PROJECT. REINSTALL RECEPTACLES IN PATCHED WALL / CEILING AS REQUIRED. EXTEND AND REWORK EXISTING CIRCUIT AS REQUIRED.
- 5 REMOVE LIGHTING, EXIT SIGNS, BUG EYES, LIGHTING CIRCUITS, CONDUIT, AND WIRE BACK TO NEAREST ACTIVE JUNCTION BOXES. NEW FIXTURES SHALL BE CONNECTED TO EXISTING ROOM NORMAL AND EMERGENCY LIGHTING CIRCUITS.
- 6 REMOVE RECEPTACLES AND JUNCTION BOXES ALONG WITH ALL ASSOCIATED RACEWAY, ACCESSIBLE CONDUIT, AND WIRE BACK TO SOURCE.
- 7 REMOVE LIGHT FIXTURES, LIGHTING CIRCUIT, AND CONVENIENCE OUTLET BACK TO NEAREST ACTIVE JUNCTION BOX. RETAIN CIRCUITS FOR NEW FIXTURES AND OUTLET CONNECTED TO EXISTING CIRCUIT.
- 8 REMOVE ELEVATOR POWER AND CONTROL DISCONNECTS, RETAIN CIRCUITS FOR NEW DISCONNECTS IN NEW LOCATIONS.

KALAMAZOO CENTRAL HIGH SCHOOL

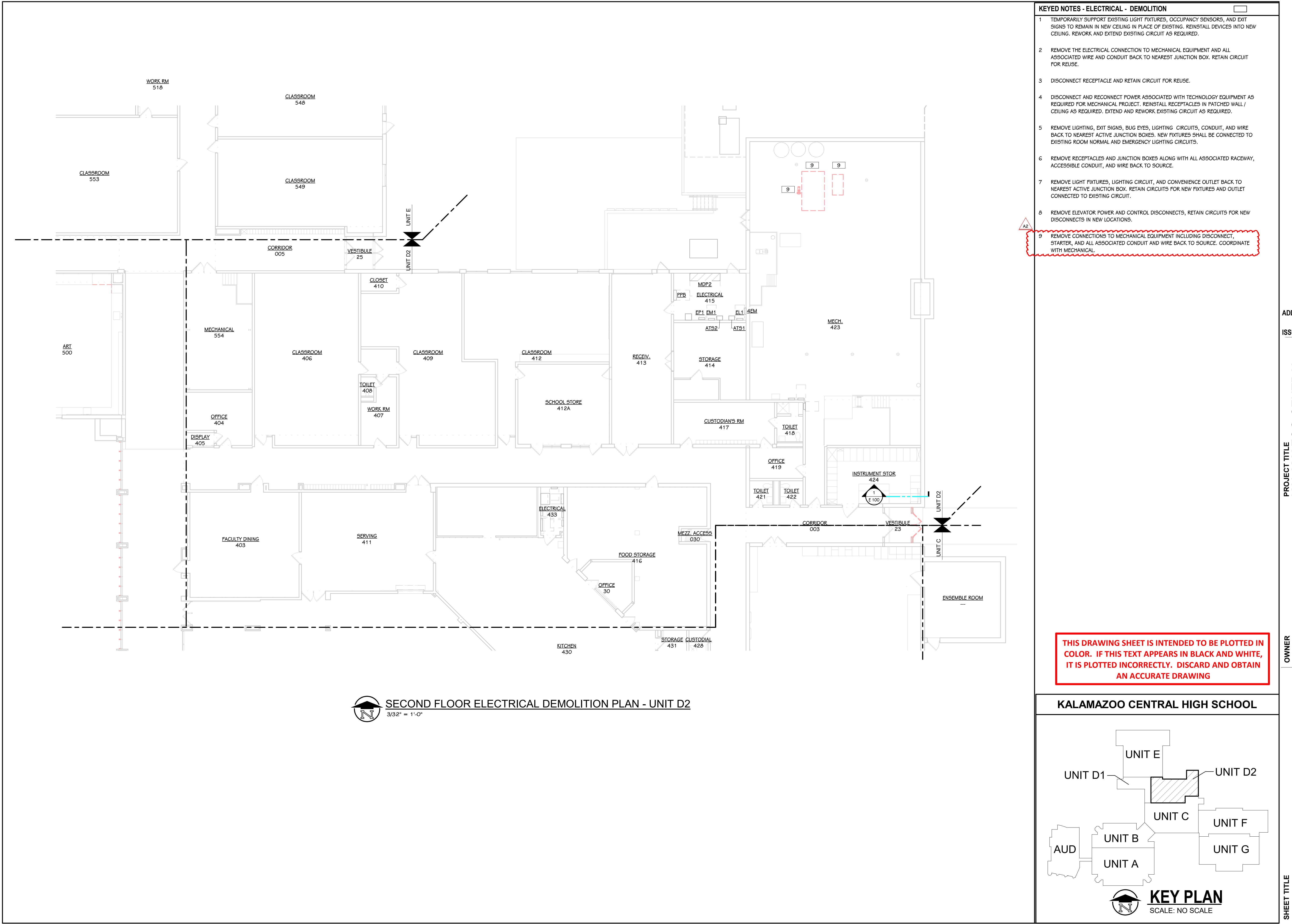


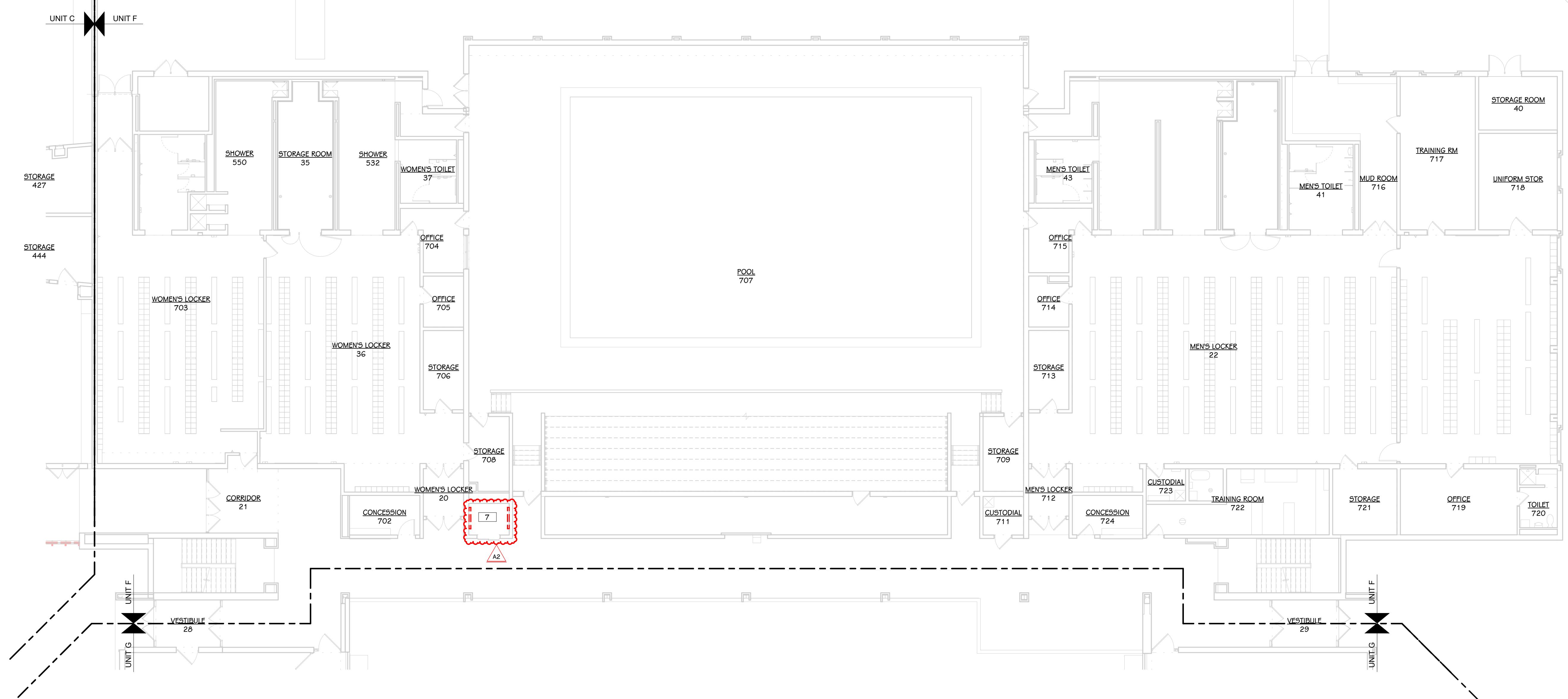
KEY PLAN  
SCALE: NO SCALE

SHEET TITLE  
FIRST FLOOR ELECTRICAL DEMOLITION  
PLAN - UNIT F

DATE  
JANUARY 5, 2026

SHEET NUMBER  
ED 101F  
23-623-05



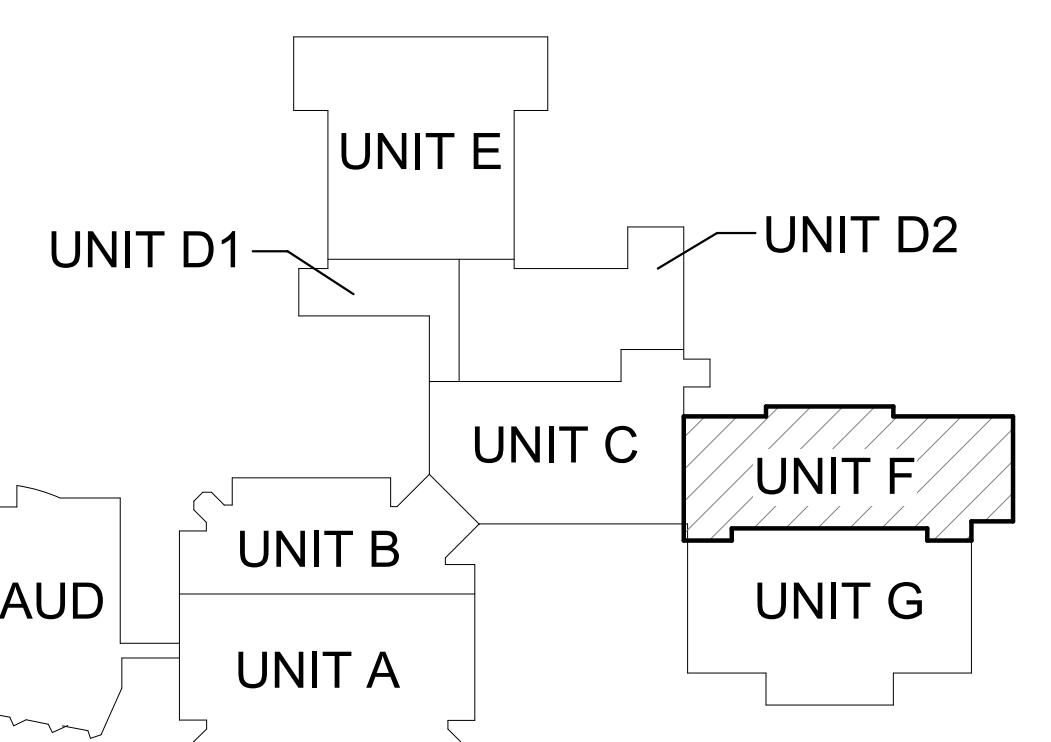


SECOND FLOOR ELECTRICAL DEMOLITION PLAN - UNIT F  
3/32" = 1'-0"

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| KEYED NOTES - ELECTRICAL - DEMOLITION |  |
|---------------------------------------|--|
| 1                                     | TEMPORARILY SUPPORT EXISTING LIGHT FIXTURES, OCCUPANCY SENSORS, AND EXIT SIGNS TO REMAIN IN NEW CEILING IN PLACE OF EXISTING. REINSTALL DEVICES INTO NEW CEILING. REWORK AND EXTEND EXISTING CIRCUIT AS REQUIRED.    |
| 2                                     | REMOVE THE ELECTRICAL CONNECTION TO MECHANICAL EQUIPMENT AND ALL ASSOCIATED WIRE AND CONDUIT BACK TO NEAREST JUNCTION BOX. RETAIN CIRCUIT FOR REUSE.   |
| 3                                     | DISCONNECT RECEPTACLE AND RETAIN CIRCUIT FOR REUSE.  |
| 4                                     | DISCONNECT AND RECONNECT POWER ASSOCIATED WITH TECHNOLOGY EQUIPMENT AS REQUIRED FOR MECHANICAL PROJECT. REINSTALL RECEPTACLES IN PATCHED WALL / CEILING AS REQUIRED. EXTEND AND REWORK EXISTING CIRCUIT AS REQUIRED. |
| 5                                     | REMOVE LIGHTING, EXIT SIGNS, BUG EYES, LIGHTING CIRCUITS, CONDUIT, AND WIRE BACK TO NEAREST ACTIVE JUNCTION BOXES. NEW FIXTURES SHALL BE CONNECTED TO EXISTING ROOM NORMAL AND EMERGENCY LIGHTING CIRCUITS.          |
| 6                                     | REMOVE RECEPTACLES AND JUNCTION BOXES ALONG WITH ALL ASSOCIATED RACEWAY, ACCESSIBLE CONDUIT, AND WIRE BACK TO SOURCE.  |
| 7                                     | REMOVE LIGHT FIXTURES, LIGHTING CIRCUIT, AND CONVENIENCE OUTLET BACK TO NEAREST ACTIVE JUNCTION BOX. RETAIN CIRCUITS FOR NEW FIXTURES AND OUTLET CONNECTED TO EXISTING CIRCUIT.                                      |
| 8                                     | REMOVE ELEVATOR POWER AND CONTROL DISCONNECTS, RETAIN CIRCUITS FOR NEW DISCONNECTS IN NEW LOCATIONS.   |

## KALAMAZOO CENTRAL HIGH SCHOOL



KEY PLAN  
SCALE: NO SCALE

SHEET NUMBER  
ED 102F  
23-623.05

SHEET TITLE  
SECOND FLOOR ELECTRICAL  
DEMOLITION PLAN - UNIT F  
DATE JANUARY 5, 2026

ADDENDUM #2  
ISSUED FOR  
DATE

PROJECT TITLE  
KALAMAZOO CENTRAL  
HIGH SCHOOL SECURE  
VEST. & MECHANICAL  
UPGRADES

OWNER  
KALAMAZOO PUBLIC  
SCHOOLS

Kalamazoo, Michigan

PROJECT TITLE  
KALAMAZOO CENTRAL  
HIGH SCHOOL SECURE  
VEST. & MECHANICAL  
UPGRADES

OWNER  
KALAMAZOO PUBLIC  
SCHOOLS

Kalamazoo, Michigan

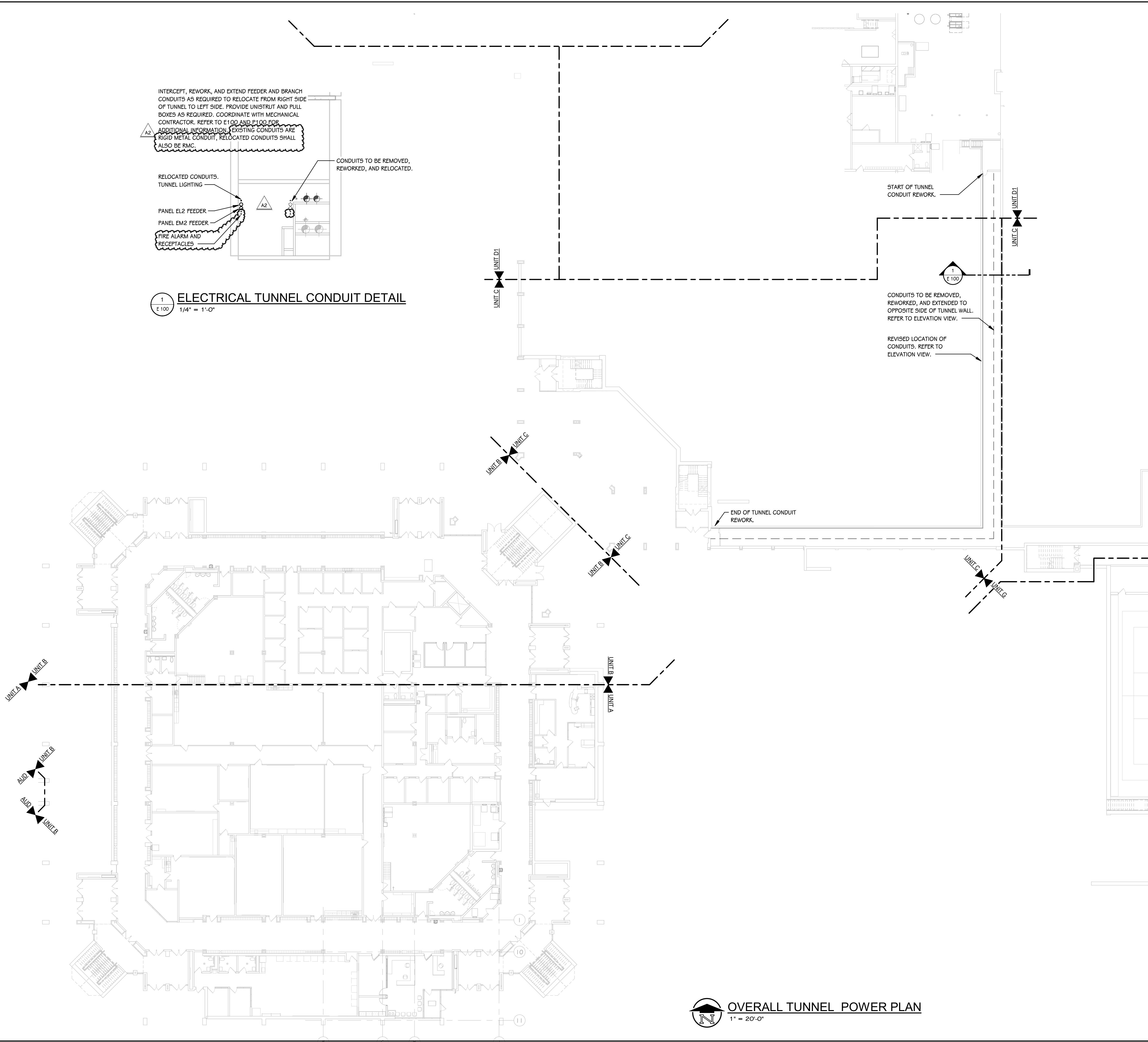
DATE  
JANUARY 5, 2026

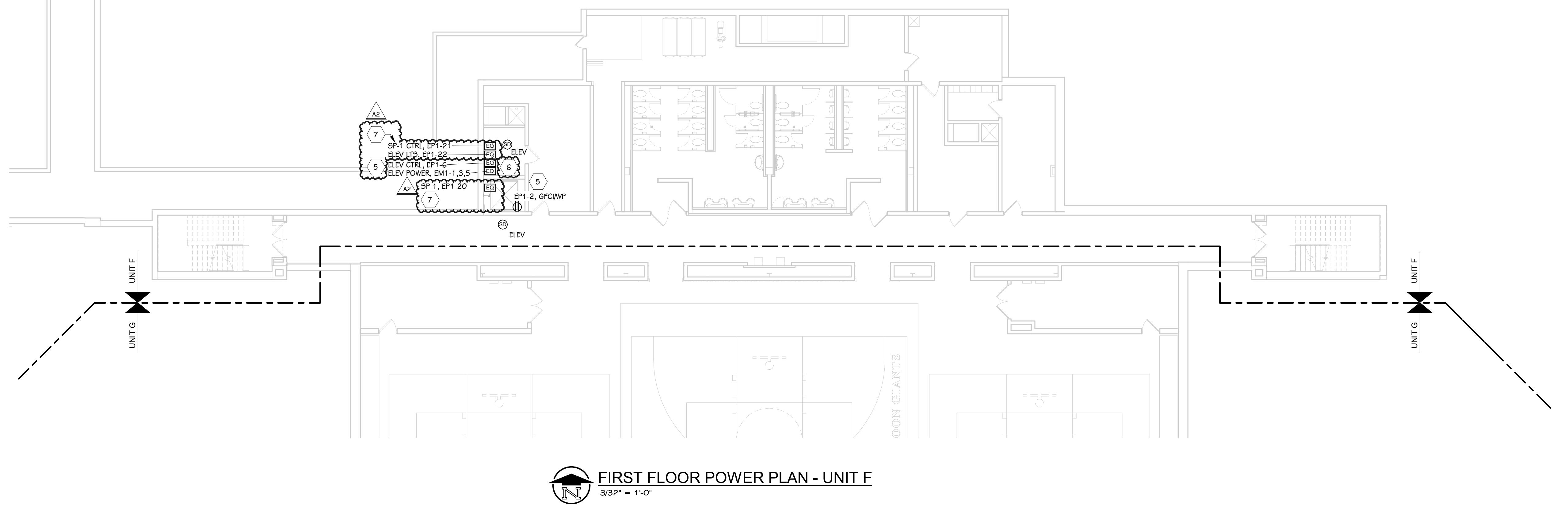
SHEET NUMBER  
E 100  
23-623-05

KEYED NOTES - ELECTRICAL - POWER

- 1 RECEPTACLES FED FROM LOAD SIDE OF GFCI RECEPTACLE. CIRCUIT NEW RECEPTACLES TO EXISTING CIRCUIT.
- 2 CONNECT TO EXISTING CIRCUIT REMAINING FROM DEMOLITION. EXTEND AND REWORK AS REQUIRED.
- 3 SCAN SLAB WITH GROUND PENETRATING RADAR (GPR) AND 5AW CUT / FLOOR CORE PRIOR TO INSTALLATION. COORDINATE FINAL LOCATION WITH DIMENSIONED FURNITURE PLANS PRIOR TO 5AW CUTTING FLOOR OR INSTALLING FLOOR BOX.
- 4 DISCONNECT AND RECONNECT POWER ASSOCIATED WITH TECHNOLOGY EQUIPMENT AS REQUIRED FOR MECHANICAL PROJECT. REINSTALL RECEPTACLES IN PATCHED WALL / CEILING AS REQUIRED. EXTEND AND REWORK EXISTING CIRCUIT AS REQUIRED.
- 5 EXTEND EXISTING ELEVATOR POWER, ELEVATOR CONTROL, AND PIT RECEPTACLE CIRCUITS REMAINING FROM DEMOLITION TO NEW DEVICES IN NEW LOCATIONS. EXTEND AND REWORK AS REQUIRED. CIRCUIT NUMBERS SHOWN ARE BASED ON EXISTING DRAWINGS AND NEED TO BE FIELD VERIFIED.
- 6 CONNECT ELEVATOR TO FIRE ALARM SYSTEM AND TELEPHONE SYSTEM WITH DEDICATED PHONE LINE. ALL DISCONNECTS SHALL HAVE AUX CONTACTS. COORDINATE FUSE SIZE FOR ELEVATOR POWER CIRCUIT WITH SHOP DRAWINGS. COORDINATE ALL ADDITIONAL INSTALLATION REQUIREMENTS WITH ELEVATOR CONTRACTOR.
- 7 PROVIDE GFCI BREAKER IN EXISTING PANELBOARD FOR CIRCUIT INDICATED.

ADDENDUM #2  
Jan. 27, 2026  
ISSUED FOR  
DATE





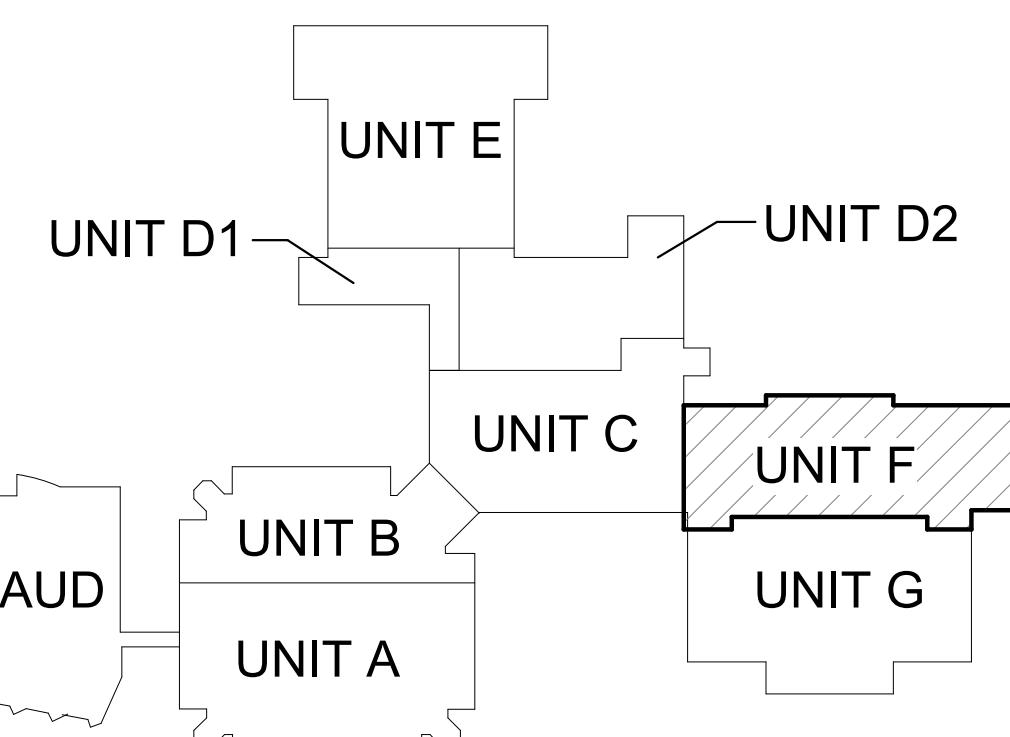
FIRST FLOOR POWER PLAN - UNIT F

3/32" = 1'-0"

**KEYED NOTES - ELECTRICAL - POWER**

- 1 RECEPTACLES FED FROM LOAD SIDE OF GFCI RECEPTACLE. CIRCUIT NEW RECEPTACLES TO EXISTING CIRCUIT.
- 2 CONNECT TO EXISTING CIRCUIT REMAINING FROM DEMOLITION. EXTEND AND REWORK AS REQUIRED.
- 3 SCAN SLAB WITH GROUND PENETRATING RADAR (GPR) AND SAW CUT / FLOOR CORE PRIOR TO INSTALLATION. COORDINATE FINAL LOCATION WITH DIMENSIONED FURNITURE PLANS PRIOR TO SAW CUTTING FLOOR OR INSTALLING FLOOR BOX.
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- 7 PROVIDE GFCI BREAKER IN EXISTING PANELBOARD FOR CIRCUIT INDICATED.

**KALAMAZOO CENTRAL HIGH SCHOOL**



**KEY PLAN**

SCALE: NO SCALE

**E 101F**

**SHEET NUMBER**

**FIRST FLOOR POWER PLAN - UNIT F**

**DATE**

**JANUARY 5, 2026**

**ADDENDUM #2**

**Jan. 27, 2026**

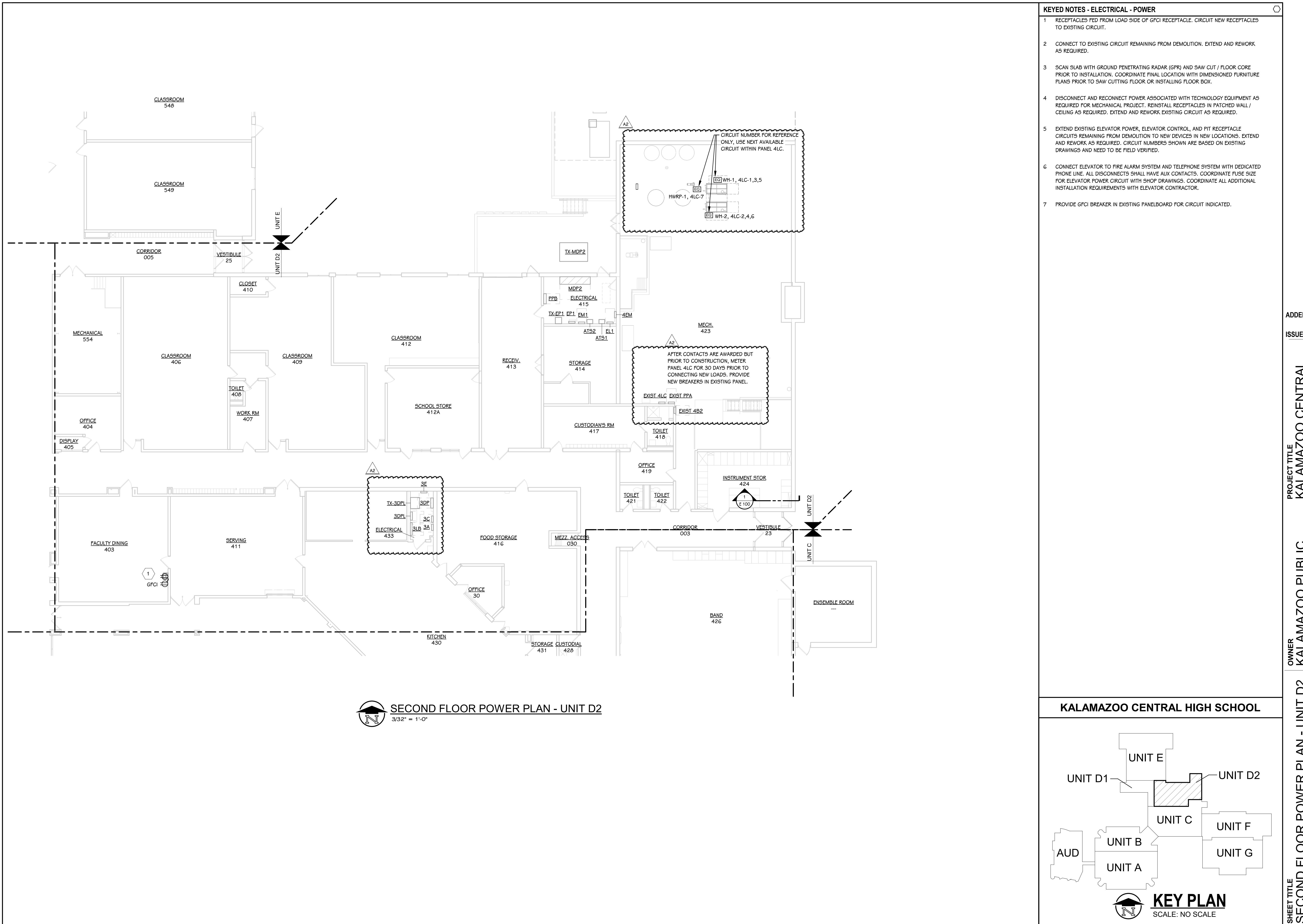
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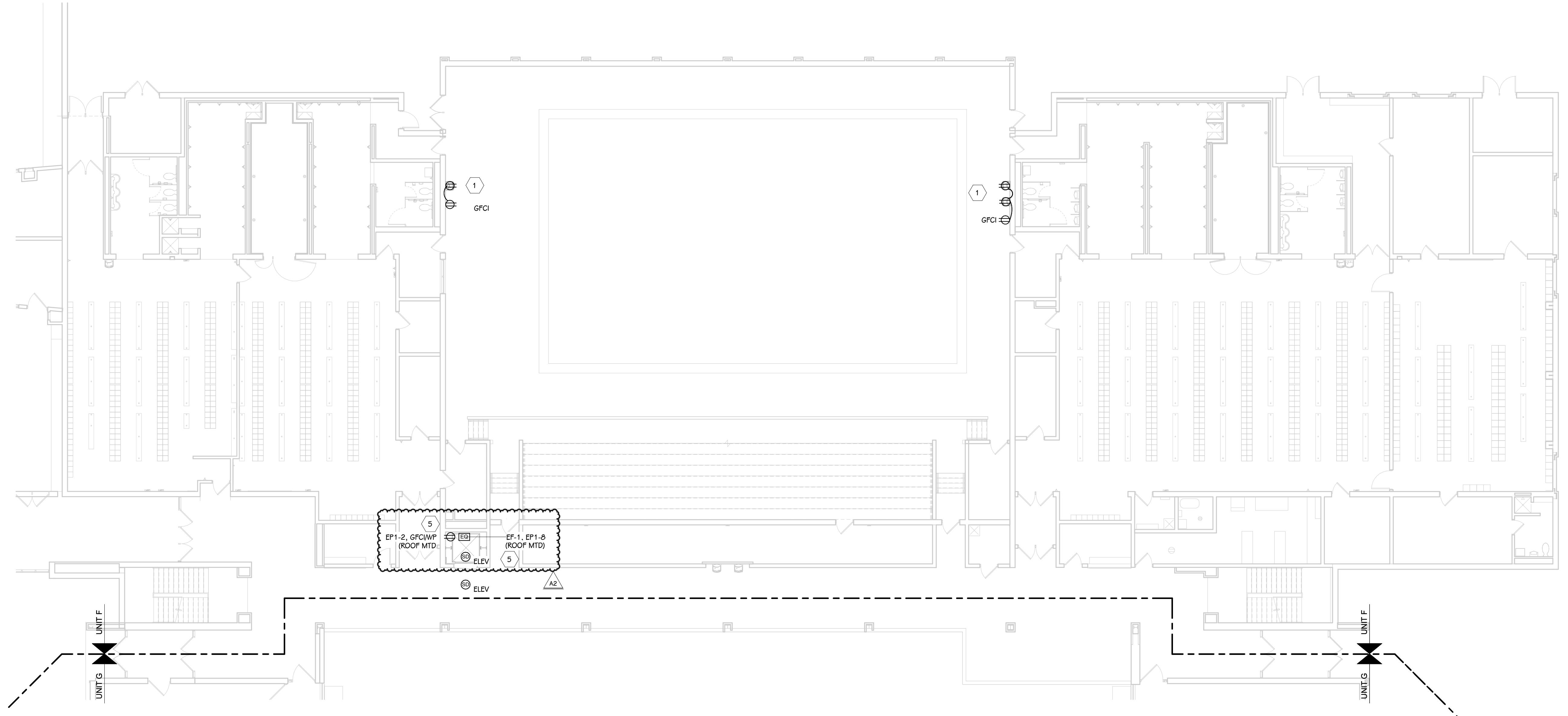
**DATE**

**PROJECT TITLE**  
**KALAMAZOO CENTRAL**  
**HIGH SCHOOL SECURE**  
**VEST. & MECHANICAL**  
**UPGRADES**

**OWNER**  
**KALAMAZOO PUBLIC**  
**SCHOOLS**

**Kalamazoo, Michigan**





SECOND FLOOR POWER PLAN - UNIT F  
3/32" = 1'-0"

**KEYED NOTES - ELECTRICAL - POWER**

1 RECEPTACLES FED FROM LOAD SIDE OF GFCI RECEPTACLE. CIRCUIT NEW RECEPTACLES TO EXISTING CIRCUIT.

2 CONNECT TO EXISTING CIRCUIT REMAINING FROM DEMOLITION. EXTEND AND REWORK AS REQUIRED.

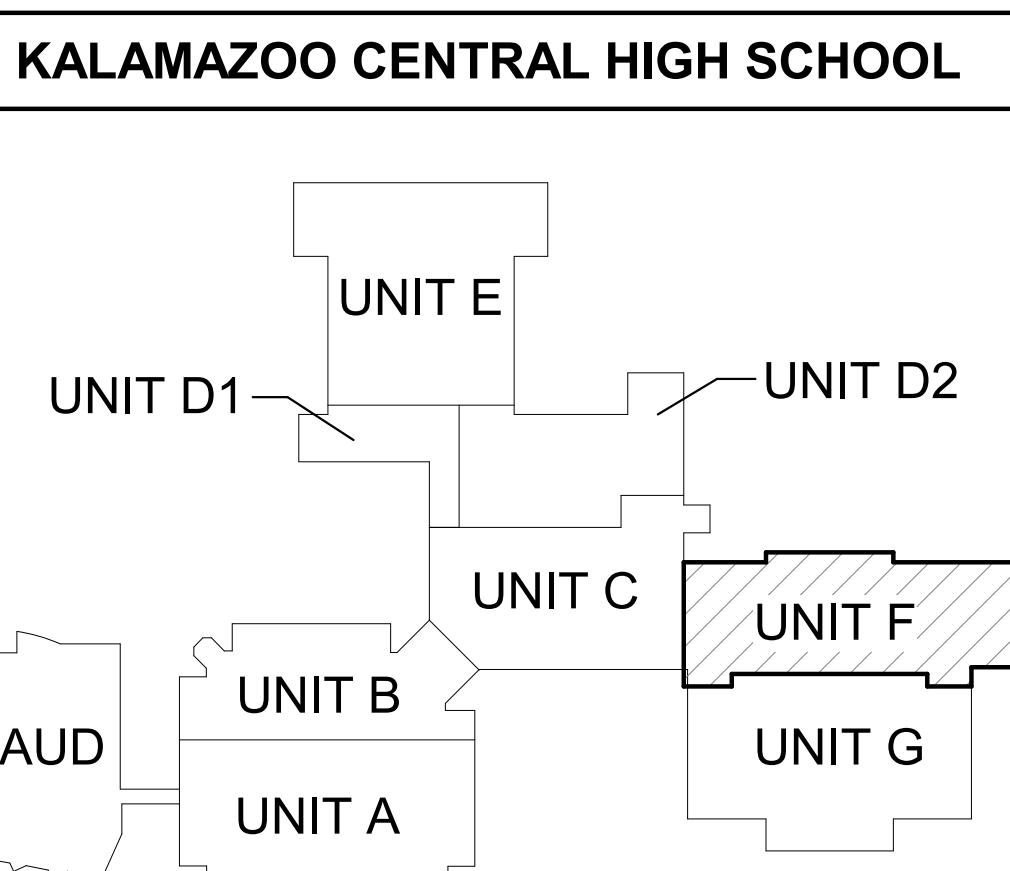
3 SCAN SLAB WITH GROUND PENETRATING RADAR (GPR) AND SAW CUT / FLOOR CORE PRIOR TO INSTALLATION. COORDINATE FINAL LOCATION WITH DIMENSIONED FURNITURE PLANS PRIOR TO SAW CUTTING FLOOR OR INSTALLING FLOOR BOX.

4 DISCONNECT AND RECONNECT POWER ASSOCIATED WITH TECHNOLOGY EQUIPMENT AS REQUIRED FOR MECHANICAL PROJECT, REINSTALL RECEPTACLES IN PATCHED WALL / CEILING AS REQUIRED. EXTEND AND REWORK EXISTING CIRCUIT AS REQUIRED.

5 EXTEND EXISTING ELEVATOR POWER, ELEVATOR CONTROL, AND PIT RECEPTACLE CIRCUITS REMAINING FROM DEMOLITION TO NEW DEVICES IN NEW LOCATIONS. EXTEND AND REWORK AS REQUIRED. CIRCUIT NUMBERS SHOWN ARE BASED ON EXISTING DRAWINGS AND NEED TO BE FIELD VERIFIED.

6 CONNECT ELEVATOR TO FIRE ALARM SYSTEM AND TELEPHONE SYSTEM WITH DEDICATED PHONE LINE. ALL DISCONNECTS SHALL HAVE AUX CONTACTS. COORDINATE FUSE SIZE FOR ELEVATOR POWER CIRCUIT WITH SHOP DRAWINGS. COORDINATE ALL ADDITIONAL INSTALLATION REQUIREMENTS WITH ELEVATOR CONTRACTOR.

7 PROVIDE GFCI BREAKER IN EXISTING PANELBOARD FOR CIRCUIT INDICATED.



**KEY PLAN**  
SCALE: NO SCALE

**SECOND FLOOR POWER PLAN - UNIT F**

DATE JANUARY 5, 2026

ADDENDUM #2

Jan. 27, 2026

ISSUED FOR

DATE

PROJECT TITLE  
KALAMAZOO CENTRAL  
HIGH SCHOOL SECURE  
VEST. & MECHANICAL  
UPGRADES

OWNER  
KALAMAZOO PUBLIC  
SCHOOLS

Kalamazoo, Michigan

**E 102F**

23-623.05

PROJECT TITLE: KALAMAZOO CENTRAL HIGH SCHOOL SECURE WEST & MECHANICAL UPDATES

OWNER: KALAMAZOO PUBLIC SCHOOLS

Kalamazoo, Michigan

DATE: JANUARY 5, 2026

SHEET NUMBER: E 501  
23-623-05

| PANELBOARD "EP1" LOAD SCHEDULE   |                |                   |                  |                                     |  |                                    |          |                           |                                       |    |
|--|----------------|-------------------|------------------|-------------------------------------|--|------------------------------------|----------|---------------------------|---------------------------------------|----|
| PANEL: EP1   |                | MOUNTING: SURFACE |                  | VOLTAGE: 208/120V, 3PH, 4W          |  | FED FROM: TX-EP1                   |          |                           |                                       |    |
| LOCATION: ELECTRICAL 415 / ELEC - SECOND...  |                | AMPS: 150 A MB    |                  | A.I.C. VALUE: ERROR CALCULATING SSC |  | (PROVIDE 25% HIGHER A.I.C. RATING) |          |                           |                                       |    |
| ADDED ACCESSORIES: FEED-THRU LUGS... No  |                |                   |                  |                                     |  |                                    |          |                           |                                       |    |
| CIRCUIT DESCRIPTION  | TRIP (A)       | POLES             | A (VA)           | B (VA)                              | C (VA)   | POLES                              | TRIP (A) | CIRCUIT DESCRIPTION       |                                       |    |
| 1 TUNNEL LIGHTS  | 20             | 1                 | 300              | 360                                 |  |                                    | 1        | 20                        | RECEPTACLE - ELEV PIT AND EXHAUST FAN | 2  |
| 3 TUNNEL LIGHTS  | 20             | 1                 |                  | 300                                 | 180  |                                    | 1        | 20                        | RECEPT. 601                           | 4  |
| 5 TUNNEL LIGHTS  | 20             | 1                 |                  |                                     | 300  | 500                                | 1        | 20                        | HVAC - ELEV CONTROLLER (EX CIRCUIT)   | 6  |
| 7 TUNNEL LIGHTS  | 20             | 1                 | 300              | 360                                 |  |                                    | 1        | 20                        | HVAC - EF-1                           | 8  |
| 9 FREEZER  | 20             | 2                 |                  | 800                                 | 180  |                                    | 1        | 20                        | RECEPTS. 417                          | 10 |
| 11 -   | --             | --                |                  |                                     | 800  | 360                                | 1        | 20                        | RECEPTS.                              | 12 |
| 13 COOLER  | 20             | 1                 | 500              | 180                                 |  |                                    | 1        | 20                        | RECEPTS. 600                          | 14 |
| 15 COMPRESSORS   | 20             | 3                 |                  | 1000                                | 180  |                                    | 1        | 20                        | RECEPTS. 518                          | 16 |
| 17 -   | --             | --                |                  |                                     | 1000   | 180                                | 1        | 20                        | RECEPTS. 518                          | 18 |
| 19 -   | --             | --                | 1000             | 1000                                |  |                                    | 1        | 25                        | HVAC - SP-1                           | 20 |
| 21 HVAC - SP-1 CTRL  | 20             | 1                 |                  | 500                                 | 500  |                                    | 1        | 20                        | HVAC - ELEV LTS                       | 22 |
| 23   |                |                   |                  |                                     |  | 0                                  | 1        | 20                        | SPARE                                 | 24 |
| 25 SPARE   | 20             | 1                 | 0                | 0                                   |  |                                    | 1        | 20                        | SPARE                                 | 26 |
| 27 SPARE   | 20             | 1                 |                  | 0                                   | 0  |                                    | 1        | 20                        | SPARE                                 | 28 |
| 29 SPARE   | 20             | 1                 |                  |                                     | 0  | 0                                  | 1        | 20                        | SPARE                                 | 30 |
| 31 SPARE   | 20             | 1                 | 0                | 0                                   |  |                                    | 1        | 20                        | SPARE                                 | 32 |
| 33 SPARE   | 20             | 1                 |                  | 0                                   | 0  |                                    | 1        | 20                        | SPARE                                 | 34 |
| 35 SPARE   | 20             | 1                 |                  |                                     | 0  | 0                                  | 1        | 20                        | SPARE                                 | 36 |
| 37 SPARE   | 20             | 1                 | 0                | 0                                   |  |                                    | 1        | 20                        | SPARE                                 | 38 |
| 39 SPARE   | 20             | 1                 |                  | 0                                   | 0  |                                    | 1        | 20                        | SPARE                                 | 40 |
| 41 SPARE   | 20             | 1                 |                  |                                     | 0  | 0                                  | 1        | 20                        | SPARE                                 | 42 |
| TOTAL LOAD:  |                | 4000              | VA               | 3640                                | VA   | 3140                               | VA       |                           |                                       |    |
| ADDITIONAL FEED THRU LUGS LOAD (IF APPLICABLE):  |                | 0                 | VA               | 0                                   | VA   | 0                                  | VA       |                           |                                       |    |
| TOTAL AMPS:  |                | 34                | A                | 31                                  | A  | 26                                 | A        |                           |                                       |    |
| LOAD CLASSIFICATION  | CONNECTED LOAD | DEMAND FACTOR     | ESTIMATED DEMAND |                                     |  |                                    |          | PANEL TOTALS              |                                       |    |
| HVAC -   | 2860 VA        | 100.00%           | 2860 VA          |                                     |  |                                    |          |                           |                                       |    |
| RECEPTACLE -   | 360 VA         | 100.00%           | 360 VA           |                                     |  |                                    |          | TOTAL CONNECTED LOAD:     | 10780 VA                              |    |
| Spare  | 7560 VA        | 100.00%           | 7560 VA          |                                     |  |                                    |          | TOTAL ESTIMATED DEMAND:   | 10780 VA                              |    |
|  |                |                   |                  |                                     |  |                                    |          | TOTAL CONNECTED LOAD (A): | 30 A                                  |    |
|  |                |                   |                  |                                     |  |                                    |          | TOTAL ESTIMATED DEMAND... | 30 A                                  |    |
| NOTES:   |                |                   |                  |                                     |  |                                    |          |                           |                                       |    |
| PROVIDE SPD BREAKER PER ONLINE SCHEDULE  |                |                   |                  |                                     | RECEPTACLE DEMAND FACTOR = FIRST 10kVA X 100% + 50% OF REMAINDER |                                    |          |                           |                                       |    |
| AIC RATING IS CALCULATED VALUE, PROVIDE IC RATING AT LEAST 25% HIGHER AS PER SPECIFICATIONS. |                |                   |                  |                                     |  |                                    |          |                           |                                       |    |

| PANELBOARD "EXIST EP2" LOAD SCHEDULE                               |                |                   |                  |                                     |        |                  |          |                           |                            |    |
|--|----------------|-------------------|------------------|-------------------------------------|--------|------------------|----------|---------------------------|----------------------------|----|
| EXISTING PANEL: EP2  |                | MOUNTING: SURFACE |                  | VOLTAGE: 208/120V, 3PH, 4W          |        | FED FROM: TX-EP2 |          |                           |                            |    |
| LOCATION: MECH. 133 / FIRST FLOOR                                  |                | AMPS: 100 A MB    |                  | A.I.C. VALUE: ERROR CALCULATING SSC |        |                  |          |                           |                            |    |
|  |                |                   |                  |                                     |        |                  |          |                           |                            |    |
| CIRCUIT DESCRIPTION  | TRIP (A)       | POLES             | A (VA)           | B (VA)                              | C (VA) | POLES            | TRIP (A) | CIRCUIT DESCRIPTION       |                            |    |
| 1 RECEPTS 106  | 20             | 1                 | 900              | 180                                 |        |                  | 1        | 20                        | RECEPT 100A                | 2  |
| 3 PA EQUIPMENT 114   | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | ELEV LTS                   | 4  |
| 5 RECEPTACLE - MEETING 100A  | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | ELEV PIT RECEPT            | 6  |
| 7 FACP 100   | 20             | 1                 | 500              | 0                                   |        |                  | 1        | 20                        | RECEPT 156A                | 8  |
| 9 RECEPTACLE - MEETING 100B  | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | RECEPT 156A                | 10 |
| 11 RECEPTS 129   | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | RECEPT 156A                | 12 |
| 13 RECEPTS 129   | 20             | 1                 | 540              | 180                                 |        |                  | 1        | 20                        | RECEPTS 232                | 14 |
| 15 RECEPTS 112   | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | RECEPTS 232                | 16 |
| 17 RECEPTS 334   | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | RECEPTS 232                | 18 |
| 19 RECEPTACLE - MEETING 100C                                       | 20             | 1                 | 540              | 1260                                |        |                  | 1        | 20                        | RECEPTACLE - OFFICE 100    | 20 |
| 21 RECEPTACLE - MEETING RM 176                                     | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | MEETING RM 176             | 22 |
| 23 RECEPTACLE - CONF RM 177  | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | RECEPTACLE - RECEPTION 175 | 24 |
| 25 RECEPTACLE - RECEPTION 175                                      | 20             | 1                 | 720              | 360                                 |        |                  | 1        | 20                        | TECHNOLOGY - RECEPTION 175 | 26 |
| 27 RECEPTACLE - RECEPTION 175                                      | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | SPARE                      | 28 |
| 29 SPARE   | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | SPARE                      | 30 |
| 31 SPARE   | 20             | 1                 | 0                | 0                                   |        |                  | 1        | 20                        | SPARE                      | 32 |
| 33 SPARE   | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | SPARE                      | 34 |
| 35 SPARE   | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | SPARE                      | 36 |
| 37 SPARE   | 20             | 1                 | 0                | 0                                   |        |                  | 1        | 20                        | SPARE                      | 38 |
| 39 SPARE   | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | SPARE                      | 40 |
| 41 SPARE   | 20             | 1                 |                  |                                     |        |                  | 1        | 20                        | SPARE                      | 42 |
| TOTAL LOAD:  |                | 5180              | VA               | 3540                                | VA     | 3060             | VA       |                           |                            |    |
| TOTAL AMPS:  |                | 44                | A                | 30                                  | A      | 26               | A        |                           |                            |    |
| LOAD CLASSIFICATION  | CONNECTED LOAD | DEMAND FACTOR     | ESTIMATED DEMAND |                                     |        |                  |          | PANEL TOTALS              |                            |    |
| RECEPTACLE -   | 6540 VA        | 100.00%           | 6540 VA          |                                     |        |                  |          |                           |                            |    |
| Spare  | 4520 VA        | 100.00%           | 4520 VA          |                                     |        |                  |          | TOTAL CONNECTED LOAD:     | 11780 VA                   |    |
| TECHNOLOGY -   | 720 VA         | 100.00%           | 720 VA           |                                     |        |                  |          | TOTAL ESTIMATED DEMAND:   | 11780 VA                   |    |
|  |                |                   |                  |                                     |        |                  |          | TOTAL CONNECTED LOAD (A): | 33 A                       |    |
|  |                |                   |                  |                                     |        |                  |          | TOTAL ESTIMATED DEMAND... | 33 A                       |    |
| NOTES: NEW BREAKERS INSTALLED IN EXISTING PANEL ARE SHOWN IN BOLD. |                |                   |                  |                                     |        |                  |          |                           |                            |    |
| RECEPTACLE DEMAND FACTOR = FIRST 10kVA X 100% + 50% OF REMAINDER   |                |                   |                  |                                     |        |                  |          |                           |                            |    |

| ELECTRICAL HVAC FEEDER SCHEDULE | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| DESCRIPTION | FED FROM | DISCONNECT MEANS | CURRENT (FLA) | DEMAND (FLA) | BREAKER/P OLES | FEEDER | # OF SETS | WIRE | GROUND | EMT |




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