

PROJECT SPECIFICATIONS FOR

Project:

**PUBLIC ADDRESS SYSTEM
DAVISON COMMUNITY SCHOOLS**

Owner:

**DAVISON COMMUNITY SCHOOLS
1490 N. Oak Rd.
Davison, MI 48423**

Designer:

**WRIGHT & HUNTER, INC.
818 W. 11 Mile Rd.
Royal Oak, MI 48067**

**December 16, 2022
ISSUED FOR BIDS**

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TP112	Siple Elementary School
TP113	Thomson Elementary School

SECTION 00 01 15
LIST OF DRAWING SHEETS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. List of drawings provided.

1.02 DRAWING SHEETS

- A. TP101 Davison High School First Floor
- B. TP102 Davison High School Second Floor
- C. TP103 Davison High School Third Floor
- D. TP104 Davison High School Alternative Education
- E. TP105 Davison Middle School First Floor
- F. TP106 Davison High School Second/Third Floor
- G. TP107 Central Elementary School Lower Level
- H. TP108 Central Elementary School First Floor
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- J. TP110 Gates Elementary School
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- L. TP112 Siple Elementary School
- M. TP113 Thomson Elementary School

PART 2 PRODUCTS - Not applicable to this Section.

PART 3 EXECUTION - Not applicable to this Section.

END OF SECTION

SECTION 00 01 20
LIST OF SCHEDULES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Timetable of key dates.

1.02 RELATED DOCUMENTS

- A. Section 00 11 13 Advertisement for Bids
B. Section 00 21 13 Instructions to Bidders
C. Section 00 41 13 Bid Forms

1.03 TIMETABLE

- A. The timetable of key dates for this RFB are as follows:

Bids Released	December 16, 2022
Vendor Questions Due	December 30, 2022, by 5:00 p.m.
Answers Due	January 4, 2023, by 5:00 p.m.
Bids Due	January 11, 2023, at 11:00 a.m.
Award to Vendor	February 2023 – exact date TBD
Installation Start	June 26, 2023
Installation Compete	August 8, 2023
Training	August 9-15, 2023
Project Completion	August 15, 2023

PART 2 PRODUCTS - Not applicable to this Section.

PART 3 EXECUTION - Not applicable to this Section.

END OF SECTION

**SECTION 00 11 13
ADVERTISEMENT FOR BIDS**

DATE: December 7, 2022

PROJECT: Public Address System
Davison Community Schools
Project No. 22-DCS-PAS-03

OWNER: Davison Community Schools
1490 N. Oak Rd.
Davison, MI 48423

DESIGNER: Wright & Hunter, Inc.
818 W. 11 Mile Road
Royal Oak, MI 48067

BID DUE DATE: Until 11:00 a.m. ET on January 11, 2023, the Owner will receive sealed bids for the work as set forth in the bid specifications and proposal forms ("RFB documents") at:

Davison Community Schools
Attn: Phil Thom, Executive Director of Operations
1490 N. Oak Rd.
Davison, MI 48423

Bids will be publicly opened and read aloud at this time. Bids received after the above date and time will **not** be accepted. Bids that do not include a sworn and notarized statement disclosing any familial relationship between the Owner and the bidder as defined in Michigan Public Act No. 232 of 2004 will not be accepted.

RFB documents will be available on December 16, 2022 and can be obtained from the Davison Community Schools District Bid Page located at www.davisonschools.org/page/84.

Each bid shall be accompanied by a certified check, cashier's check, money order, or bid bond made payable to Davison Community Schools in an amount not less than five percent (5%) of the base bid as a bid guarantee.

Withdrawal of any bid is prohibited for a period of ninety (90) days after the actual date of the opening thereof.

The Owner reserves the right to reject any or all bids, either in whole or in part, to reject a bid not accompanied by the required bid guarantee, or by other data required by the RFB documents and Michigan law or to reject a bid which is in any way non-compliant with the bid requirements. Submitted bids may be adjusted by unit prices included by the bidder to ensure all bids submitted are compared on the same basis with respect to required materials.

The Owner reserves the right to accept alternates in any order or combination and to determine the low bidder on the basis of the sum of the base bid and the alternates accepted.

END OF SECTION

**SECTION 00 21 13
INSTRUCTIONS TO BIDDERS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Submissions of bids, bidding procedures, Bid requirements, required disclosure statements, examination of bidding documents, contract liability, Bid modifications, discrepancies, withdrawal of Bids, alternatives, acceptance, rejection of Bids, and required bonds.

1.02 RELATED DOCUMENTS

- A. Section 00 11 13 Advertisement for Bids
- B. Section 00 41 13 Bid Forms
- C. Section 00 01 20 List of Schedules

1.03 SEALED BID RECEIPT

- A. The Owner is soliciting Bids until **11:00 a.m. ET on January 11, 2023**. Sealed Bids will be received at Davison Community Schools, 1490 N. Oak Rd., Davison, MI 48423 up to this time, at which time they will be publicly opened and read aloud at a public meeting.
- B. Bids must be received, and time stamped at Davison Community Schools on or before the due date and time specified. Contractors are responsible for timely receipt of their Bid. Bids which are received after the specified due date and time will not be considered.
- C. The original, plus two (2) hard copies and one (1) full electronic copy of the Contractor's Bid must be delivered in sealed package(s). All packages shall be clearly labeled with the following information:

- 1. SEALED BID ENCLOSED FOR PUBLIC ADDRESS SYSTEM**
- 2. Davison Community Schools
Attn: Phil Thom, Executive Director of Operations
1490 N. Oak Rd.
Davison, MI 48423
- 3. Contractor's Name and Address
- 4. Project Title: Public Address System - 22-DCS-PAS-03
- 5. Bid Due Date

1.04 BID REQUIREMENTS

- A. Provide the following information as required under each tab, assembled in three (3) ring binders complete with a Table of Contents. All pages shall have page numbers, which shall be included in the Table of Contents.

B. The Table of Contents shall be as follows:

1. Tab No. 1 Cover Letter
2. Tab No. 2 Required Bid Forms and Documents
 - a. Microsoft Word Document
 - 1) Bid Forms
 - 2) Familial Relationship Disclosure Statement
 - 3) Iran Economic Sanctions Act Disclosure Statement
 - b. Bid Bond or Bid Surety
 - c. Bill of Materials by Building shall include a complete bill of materials depicting quantities, manufacturer, catalog number, complete description, material unit price, extended price and labor cost breakdown.
3. Tab No. 3 Organizational Chart / Schedule / Manpower
4. Tab No. 4 Public Address System
5. Tab No. 5 Warranty, Maintenance and Service Agreements
6. Tab No. 6 Company Profiles for Prime Contractors, Major Subcontractors and Major Suppliers
7. Tab No. 7 Miscellaneous (Optional)

C. Description of Contents:

1. Tab No. 1, Cover Letter, shall include an executive overview of the Project and depict the Contractor's complete understanding of the Project.
2. Tab No. 2, Required Bid Forms and Documents, shall include a completed Bid Form with price break downs by building and completion dates, the Familial Relationship Disclosure Statement, Iran Economic Sanctions Act Disclosure Form and Criminal Background - Sex Offender Affidavit.

Other required forms include a Bid Bond or Bid Surety, and Appendix A shall include a complete bill of materials, by building depicting quantities, manufacturer, catalog number, complete description, material unit price, labor cost breakdown and extended price.

3. Tab No. 3, Organizational Chart, shall depict the prime Contractor, the subcontractors, major suppliers, Project managers, superintendents, executive staff of each firm, service staff, the names of the individuals occupying those positions, telephone numbers, and e-mail addresses of all individuals on the organizational chart.
 - a. The Contractor shall provide a schedule that depicts major milestones required to achieve the completion dates previously specified. Typical milestone events are as follows:
 - 1) Equipment delivery date and installation dates.

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- 2) Completion of system install / power up by site.
 - 3) Installation completion dates
 - 4) Final testing dates
 - 5) Provide an estimate of anticipated manpower required at each building to meet the specified completion dates.
4. Tab No. 4, Public Address System, shall include the following information:
- a. Manufacturers' names.
 - b. Installation company's name.
 - c. Number of years installing similar systems.
 - d. List of clients of similar size and type with contact information.
 - e. Description of system operations.
 - f. Equipment model numbers.
 - g. System configuration.
 - h. Complete bill of material indicating quantities (include line item prices), product descriptions, part numbers, and take-off for the products being provided must be included. Lump sum discounts are not acceptable.
5. Tab No. 5, Warranty information with sample maintenance and service contracts. Include current service rates, trip charge rates and any additional charges that may apply.
6. Tab No. 6 and 7 are self-descriptive as to their intended content.

1.05 FAMILIAL RELATIONSHIP DISCLOSURE STATEMENT

- A. As required by Public Act 232 of 2004, all bids shall be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the owner or any employee of the Contractor and any member of the Davison Community Schools board, or the superintendent of the school district.
- B. The Owner will not award a bid to a Contractor that does not provide this sworn and notarized disclosure statement.

1.06 IRAN ECONOMICS SANCTIONS ACT

- A. As required by the Iran Economic Sanctions Act, Public Act 517 of 2012, all bids shall be accompanied by a sworn and notarized statement certifying that the Contractor is not an "Iran linked business" within the meaning of Act.
- B. The Owner will not award a bid to a Contractor that does not provide this sworn and notarized disclosure statement.

1.07 EXAMINATION OF BIDDING DOCUMENTS AND SITE

- A. At the time of the Bid opening, each Contractor shall have examined the premises and sites to compare them with the RFB Documents.
- B. Failure or omission of any Contractor to examine any form, instrument or document contained in this RFB shall in no way relieve any Contractor from any obligation with respect to their Bid. No allowances or extra payment will be made to a Contractor for failure to

comply with the provisions of this Section, or by reason of error or oversight on the part of the Contractor.

- C. It is understood, and the Contractor hereby agrees, that it shall be solely responsible for all equipment and/or services that it bids. Notwithstanding the details presented in these specifications, it is the responsibility of the Contractor to verify the completeness of the equipment required and its suitability to meet the intent of this Bid. Each system bid shall be for a complete turnkey system.
- D. The Owner reserves the right to withdraw this RFB at any time or the right to accept or reject any and all Bids, either in whole or in part, submitted in response to this RFB, without penalty. The Owner also reserves the right to waive any informalities or irregularities therein, and to award the Contract to other than the Contractor(s) submitting the best financial Bid (low bidder), in its sole and absolute discretion. The Owner further reserves the right to select a single Contractor as a prime for the entire Project or for only portions of it. The Owner will be the sole judge of its needs and of the best elements of a Bid to meet those needs. The Owner's decision is final.
- E. Bids containing terms and conditions different from this section of this RFB may be rejected.

1.08 CONTRACT LIABILITY

- A. The Contractor will be required to assume responsibility for all contractual activities offered in this Bid whether or not the Contractor performs them. Further, the Owner will consider the Contractor to be the sole point-of-contact with regard to contractual matters, including payment of any or all charges resulting from the anticipated Contract. If any part of the Work or component of the Bid configuration is to be subcontracted, such Bids must include a list of subcontractors, including firm name and address, contact person, complete description of Work to be subcontracted or component to be provided and descriptive information concerning the subcontractor's responsibilities.
- B. The Owner reserves the right to approve subcontractors for this Project and to require the Contractor to replace subcontractors found to be unacceptable. The Contractor is totally responsible for adherence by the subcontractor to all provisions of the Contract. All Contract clauses between the Owner and the Contractor shall also apply to any contract between the selected Contractor and its subcontractor(s).

1.09 BID MODIFICATIONS

- A. Any exceptions, explanations, or statements, which the Contractor wishes to make, must be written on or attached to the Bid Form. Unless indicated, it is understood that the Bid is in strict accordance with all requirements and specifications contained in this RFB, including the Contract. The Technology Designer and/or the Owner may request additional information to clarify the Contractor's Bid, to verify responsiveness to mandatory specifications, or to facilitate the fair comparison of competing Bids.
- B. Bids shall be deemed final, conclusive, and irrevocable. No Bid shall be subject to correction or amendment for any error or miscalculation unless unit prices for the additional or missing item(s) are included on the Bid Form. Submitted Bids may be adjusted by unit prices up or down to ensure all Bids submitted are compliant and compared fairly. Bid prices shall provide for a complete turnkey system as specified. Installation shall include, but is not limited to, all labor required for a turnkey system.

1.10 DISCREPANCIES, OMISSIONS, AND INTERPRETATIONS

- A. Contractors shall promptly notify Wright & Hunter (the "Technology Designer") of any ambiguities, inconsistencies, or errors, which it may discover upon examination of this RFB, the Bid Form, Drawings, AIA documents, the Contract, purchase orders generated by the Owner, any addenda to the aforementioned documents and all other documents pertaining to the Structured Cabling System (the "Contract Documents") or of the site and local conditions. A Contractor requesting clarification or interpretation of the Bid/Contract Documents shall make a written request no later than the "Contractor Questions Due" date and time listed in Section 00 01 20. E-mail all questions to:

Brandon Julian
Email: bjulian@wrighthunter.com

- B. All questions and answers will be shared with all Contractors issued through the SIGMA and School District websites via addenda which shall become part of this RFB. Each Contractor must in its Bid, to avoid any miscommunication, acknowledge all addenda which it has received, but the failure of a Contractor to receive, or acknowledge receipt of, any addenda shall not relieve the Contractor of the responsibility for complying with the terms thereof.
- C. If prior to the Due Date for submission of Bids, a Contractor fails to notify the Technology Designer of a known error in this RFB or of an error that reasonably should have been known to the Contractor and if a Contract is awarded to the Contractor, the Contractor shall not be entitled to additional compensation or time, by reason of the error or its later correction.
- D. In the event it becomes necessary to provide additional clarifying data or information, or to revise any part of this RFB, addenda or revisions will be provided to all known recipients of the initial RFB.
- E. Failure to acknowledge receipt of addenda or revisions, in accordance with the instructions contained in such addenda or revision, may result in Bids not being considered. Each Contractor's Bid shall stipulate that it is predicated upon all the terms and conditions of this RFB and any addenda or revisions thereto.
- F. The submission of a Bid is an acknowledgment to comply with all terms of this RFB, the form of Contract and any other Bid/Contract Documents, except and only to the extent that the Contractor provides an express objection to a provision or provisions in writing, attached as a separate document along with its Bid Form, and specifically identifying the objection and providing a Bid alternative thereto. Any exceptions to the terms and conditions contained in the Contract, or any other special considerations or conditions requested or required by the Contractor relative to this RFB or the form of Contract shall be expressly/specifically enumerated by the Contractor and be submitted as part of its Bid, together with an explanation as to the reason such terms and conditions cannot be met by; provided however, that exceptions or special conditions of the Contractor will not be binding upon the School District unless those exceptions or special conditions are expressly accepted by the School District, and incorporated into the final Contract.

1.11 WITHDRAWAL OF BIDS

- A. Bids may be withdrawn, modified and resubmitted at any time prior to the time set for the Due Date of Bids. The Contractor may not withdraw its Bid prices during the ninety (90) day

period immediately following the Bid opening. All Bids and Bid prices shall be guaranteed for that period of time.

- B. When the selected Contractor(s) (the "Contractor") receives the notice of award from the Owner within the above ninety (90) day period, it shall guarantee the prices through the interval required through the duration of the Project.

1.12 ACCEPTANCE OF BID

- A. The Contract Documents shall include all bidding requirements and specifications, the terms of this RFB, the form of Contract, approved project specifications and approved project manual. Except as to any specific objection as required by Paragraph 1.10.E above, all of the foregoing, as well as the accepted portions of the Contractor's Bid shall become contractual obligations of the Contractor upon award by the Board of Education. Failure of the successful Contractor to accept these obligations in a contractual agreement may result in cancellation of the award and this RFB, forfeiture of the entire bid bond, and any additional damages incurred by the Owner. If the terms, conditions, or assumptions included in the Contractor's Bid or response to this RFB differ from the Contract Documents, the terms and conditions that are most favorable to the Owner, as determined in the Owner's sole discretion, shall be binding.
- B. The Owner reserves the right to reject any or all bids, either in whole or in part, to reject a bid not accompanied by the required bid guarantee, or by other data required by the RFB documents and Michigan law or to reject a bid which is in any way non-compliant with the bid requirements. Submitted bids may be adjusted by unit prices included by the bidder to ensure all bids submitted are compared on the same basis with respect to required materials.
- C. The Owner reserves the right to accept alternates in any order or combination and to determine the low bidder on the basis of the sum of the base bid and the alternates accepted.

1.13 REQUIRED BONDS

- A. At the time Bids are submitted, Contractors are required to submit a ninety (90) day Bid Guarantee Bond (5% of the total dollar amount).
- B. The successful Contractor will be required to furnish a Labor and Materials Bond valued at the full amount of the Contract at the time the Contract is awarded for all labor and materials to be contracted and, in any event, before any Work commences.
- C. The successful Contractor will be required to furnish a Performance Bond valued at the full amount of the Contract at the time the Contract is awarded and, in any event, before any Work commences.

1.14 QUANTITIES

- A. It is understood and agreed that the Owner reserves the right to either increase or decrease quantities and to buy additional services under the terms of any contract resulting from this bid, so long as in accordance with law.

1.15 PRICES

- A. Purchase prices shall remain firm throughout the entire contract.
- B. The Contractor must use the Bid Form included with this RFB. If additional pages are necessary, they must be in the same format as the original.
- C. Any rebates applied in response to this RFB must be applied to line-item pricing, and not be included as one lump sum.

1.16 ALTERNATIVES

- A. All Bids must be based upon the specifications included in this RFB. In addition to a base Bid, the submission of voluntary alternatives is acceptable. The base Bid must conform to the materials, labor and terminations established by the Bid specifications in this RFB. The Contractor must Bid the base Bid to be eligible to Bid an alternative. Each Contractor must identify in their response any deviations to the scope of Work and any construction requirements not addressed.

1.17 CERTIFICATION OF INDEPENDENT PRICE DETERMINATION

- A. By submission of a Bid, the Contractor certifies, and in the case of a joint Bid, each party thereto certifies as to its own organization, that in connection with this procurement:
 - 1. The prices in this Bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Contractor or with any competitor.
 - 2. Unless otherwise required by law, the prices, which have been quoted in this Bid, have not been knowingly disclosed by any Contractor and will not knowingly be disclosed by the Contractor prior to procurement or prior to award in the case of a negotiated procurement, directly or indirectly to any other Contractor or to any competitor.
 - 3. No attempt has been made or will be made by the Contractor to induce any other person or firm to submit or not to submit a Bid for the purpose of restricting competition.
- B. Each person signing this Bid certifies that:
 - 1. He/she is the person in the Contractor's organization responsible within that organization for the decision as to the prices being offered herein.
 - 2. He/she is not the person in the Contractor's organization responsible within that organization for the decision as to the prices being offered herein, but that he/she has been authorized in writing to act as agent for the persons responsible for such decision.
- C. By submission of Contractor's Bid to this Project, the Contractor certifies, and in the case of a joint Bid, each party thereto certifies as to its own organization, that in connection with this procurement: that no relationship exists between the Contractor and the procuring or contracting agency that interferes with fair competition or is in conflict of interest, and no

relationship exists between the Contractor and another person or organization that constitutes a conflict-of-interest that is adverse to the Owner.

1.18 PROPRIETARY INFORMATION

- A. This is a public Bid. Information submitted in response to this RFB is subject to Freedom of Information Act requests and to be viewed by any interested party by request. Any Bids identified in whole or in part as proprietary will be disqualified.
- B. Unless specifically excluded from this provision, all data, documentation and innovations resulting from contractual services will become the property of the Owner. Data contained in the Bid and all documentation provided as a result of these contractual services cannot be copyrighted or patented. Bids must clearly specify any data, documentation, software, or other innovations that are bid to be excluded from this provision and specifically provide, where applicable, for licensing of these materials to the Owner for the life of the system.

1.19 NONCOMPLIANCE

- A. Failure to include in the Contractor's Bid all information requested in this RFB may be cause for rejection of the Bid. When responding to this RFB, please clearly state whether your firm complies with each section.

1.20 COST LIABILITY

- A. The Owner assumes no responsibility or liability for costs incurred by the Contractor prior to the signing of any Contract resulting from this RFB.

PART 2 PRODUCTS - Not applicable to this Section.

PART 3 EXECUTION - Not applicable to this Section.

END OF SECTION

SECTION 00 41 13
BID FORMS

BID FOR:: DAVISON COMMUNITY SCHOOLS
DAVISON, MICHIGAN

PROJECT: PUBLIC ADDRESS SYSTEM

DATE: _____

CONTRACTOR'S NAME: _____

CONTRACTOR'S ADDRESS: _____

GENERAL:

Pursuant to and in compliance with the instructions in the Contract Documents, as defined in W&H Project No. 22-DCS-PAS-03 in the Request for Bid, the undersigned proposes and agrees to furnish equipment, materials, and labor and perform all Work necessary to complete the Public Address System contract for Davison Community Schools (the "Owner") in accordance with the plans and specifications prepared by Wright & Hunter, Inc. (the "Technology Designer") and agrees to accept payment as herein provided.

BASE BID:

Lump sum Bid for all Public Address System Work specified in this RFB and shown on the Drawings as indicated for Base Bid.

Dollars _____

Note: The amount shall be shown in both words and figures. In case of a discrepancy, the amount shown in words shall govern.

BONDS:

The undersigned affirms that the cost of a Labor and Material Payment Bond and a Performance Bond are included in the Base Bid amount above.

Amount included above for Bonds _____

MANDATORY ALTERNATES:

No Mandatory Alternates.

VOLUNTARY ALTERNATES:

The following Voluntary Alternates are offered by the Contractor. The Contractor shall provide a complete description of each Voluntary Alternate and indicate the amount to be added to or deducted from the Base Bid should the Owner accept a Voluntary Alternate. Attach additional pages if required to explain each Voluntary Alternate.

Voluntary Alternate 1 (VA-1):

Add / Deduct / No Change Dollars _____ \$

Voluntary Alternate 2 (VA-2):

Add / Deduct / No Change Dollars _____ \$

BASE BID BREAKDOWN:

The Contractor shall provide the following breakdown of the Base Bid. Failure to list this information shall be cause for the Bid to be considered unresponsive.

Base Bid:	Material	Labor	Other	Total
Davison High School	\$0.00	\$0.00	\$0.00	\$0.00
Davison Middle School	\$0.00	\$0.00	\$0.00	\$0.00
Central Elementary School	\$0.00	\$0.00	\$0.00	\$0.00
Gates Elementary School	\$0.00	\$0.00	\$0.00	\$0.00
Hill Elementary School	\$0.00	\$0.00	\$0.00	\$0.00
Siple Elementary School	\$0.00	\$0.00	\$0.00	\$0.00
Thomson Elementary School	\$0.00	\$0.00	\$0.00	\$0.00
Bonds			\$0.00	\$0.00
Total Base Bid	\$0.00	\$0.00	\$0.00	\$0.00

Failure to include in the Contractor's Bid all information requested in this RFB may be cause for rejection of the Bid. When responding to this RFB, please clearly state whether your firm complies with each section. The Contractor may list any clarifications or exceptions to this RFB below:

Section	Compliant Yes or No	Comments or Exceptions
00 10 10		
00 01 15		
00 01 20		
00 11 13		
00 21 13		
00 41 13		
00 72 13		
00 73 16		
01 11 00		
01 29 00		
01 77 19		
27 51 16		

Said unit prices shall be applicable to the pricing of additions to, or deletion from the Work indicated in the specifications. Unit prices may also be used to adjust a Bid up or down for any additional or missing item(s) to ensure all Contractors are being evaluated on a comparable level;

Add \$ _____ Deduct \$ _____

UP-3: Cost to provide and install an Indoor horn-type loudspeaker with 2-way communication.

Add \$ _____

Deduct \$ _____

UP-4: Cost to provide and install an outdoor horn-type loudspeaker with 2-way communication.

Add \$ _____

Deduct \$ _____

UP-5: Cost to provide and install a wall mounted loudspeaker with 2-way communication.

Add \$ _____

Deduct \$ _____

UP-6: Provide and install a 1-1/4" conduit sleeve through block wall including perimeter and interior fire stop materials.

Add \$ _____

Deduct \$ _____

TAXES:

The Contractor shall include in his/her Bid and shall pay all applicable Federal, State and local taxes of whatever character and description.

ADDENDA:

Addendum No. _____ Dated _____ Addendum No. _____ Dated _____

Addendum No. _____ Dated _____ Addendum No. _____ Dated _____

WITHDRAWAL OF BIDS:

The undersigned agrees that his/her Bid shall not be withdrawn for a period of ninety (90) days after the Due Date set for receipt of Bids.

COMMENTS: _____

SIGNATURE:

The undersigned understands that the Owner reserves the right to accept or reject any and all Bids, either in whole or in part, to waive any informalities or irregularities therein, and to award the Contract to other than the Bidder(s) submitting the best financial Bid (low bidder), in its sole and absolute discretion.

If award is made to our firm based upon our Bid, we agree to enter into the attached form of Contract with the Owner to furnish the Work in strict accordance with this Request For Bid, the Contract and our Bid.

My signature certifies that the Bid as submitted complies with all terms and conditions as set forth in this Request For Bid and the Contract, unless specifically enumerated as an exception as part of our Bid.

I hereby certify that I am authorized to sign as a Representative for the firm.

Signed and sealed this _____ day of _____, 2023

(Individual, Partnership, Corporation)

Affix Corporate Seal

By:

(Authorized Signature of Contractor)

(Business Address)

(Telephone Number)

INSTRUCTIONS: Submit one (1) original and two (2) hard copies.
Submit one (1) full electronic copy.
Retain one (1) copy of your files

**FAMILIAL RELATIONSHIP
DISCLOSURE STATEMENT**

Important: This disclosure statement must be included with your bid as required by state law (Public Act 232 of 2004).

The undersigned, the owner or authorized officer of _____ (the "Contractor"), pursuant to the familial disclosure requirement provided in the Davison Community Schools (the "School District") Request For Bid hereby represents and warrants that, except as provided below, no familial relationships exist between the owner or any employee of the Contractor, and any member of the Board of Education of the School District or the Superintendent of the School District. A list of the School District's Board of Education Members and its Superintendent may be found at davisonschools.org.

List any Familial Relationships:

By: _____ (Signature)

Title: _____ (Type or Print)

Date: _____

Subscribed and Sworn to Before Me:

This _____ day of _____, 2023 in and for the County of _____,

Michigan. My commission expires _____

Signature of Notary

**IRAN ECONOMIC SANCTIONS ACT
DISCLOSURE STATEMENT**

Important: This disclosure statement must be included with your bid as required by state law (Public Act 517 of 2012).

As required by Iran Economic Sanctions Act, Public Act 517 of 2012 (the "Act"), all bids shall be accompanied by a sworn and notarized statement certifying that the Contractor is not an "Iran linked business" within the meaning of the Act and that in the event Contractor is awarded a contract as a result of the aforementioned RFB, the Contractor will not become an "Iran linked business" at any time during the course of performing any services under the contract.

The Act defines an Iran Linked Business as an individual or any entity, including all successors, parent companies, subsidiaries and companies under common control, engaged in investment activities of \$20,000,000.00 or more with the energy sector of Iran, including providing of products used to construct or maintain oil or liquefied natural gas pipelines.

The Contractor further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or 2 times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of the School District's investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a Request for Bid for three (3) years from the date it is determined that the person has submitted the false certification.

By: _____ (Signature)

Title: _____ (Type or Print)

Date: _____

Subscribed and Sworn to Before Me:

This _____ day of _____, 2023 in and for the County of _____,

Michigan. My commission expires _____

Signature of Notary

**SECTION 00 72 13
GENERAL CONDITIONS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General conditions including contract, laws and permits, protection of persons, safety, implementation plan, additional resources, and clean-up and maintenance.

1.02 RELATED DOCUMENTS

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

1.03 RELATED SECTIONS

- A. Section 00 21 13 Instructions to Bidders
- B. Section 01 10 00 Summary of Work

1.04 CONTRACT

- A. A form of Contract is included with this RFB and shall be binding between the Owner and Contractor (the "Contract"). It is acknowledged that the form of Contract incorporates by reference the terms of this RFB and, in the event of any conflict among the Contract Documents; the provision most beneficial to the Owner shall govern. Notwithstanding the foregoing, the Owner reserves the right in its sole discretion to negotiate any term of the Contract prior to Contract award so long as any negotiated term does not affect the propriety of the competitive bidding process. While not limiting the breadth of the form of Contract's incorporation of the RFB, the following are all required Contractual provisions:

1.05 LAWS AND PERMITS

- A. The Contractor shall comply with all federal, state, and municipal laws, rules, regulations, ordinances, or orders governing or affecting in any way the Work under this Contract, including board of education policies. Additionally, the Contractor must follow both the School District's COVID-19 requirements and Contractor's own Preparedness and Response Plan prior to coming to a School District Facility. Also, the Contractor shall give all notices and obtain all permits necessary and required for the Work and shall pay all costs and fees for the same. The Contractor must furnish copies of all approved inspection certificates and approvals from authorities having jurisdiction within thirty (30) days of completion and acceptance of Work as evidenced by applicable acceptance documents.
- B. Where appropriate, all equipment and installation workmanship shall comply with specifications contained in Electronics Industries Association Standards and the National Electrical Code. As pertinent, all equipment shall be FCC-certified, FCC type accepted and/or UL listed. All Work shall be conducted according to the standards of good engineering practice.

1.06 PROTECTION OF PERSONS AND OTHER STRUCTURES

- A. The Contractor agrees to exercise special precautions to avoid damage to facilities of the Owner and others. The Contractor hereby assumes responsibility for any and all damage to such facilities arising out of or caused by the conduct or property of the Contractor, whether by the negligence of the Contractor, its agents, employees, or subcontractors. The Contractor shall make an immediate report to the Owner and the Technology Designer of any damage to the facilities or others. The Contractor hereby agrees to repair or replace at their own expense or to reimburse the Owner for expenses incurred by the Contractor in making necessary repairs and replacements.
- B. The Contractor shall assume all responsibility for bodily injury to persons, including death or damages sustained or claimed by its employees, the employees of the Owner, or by any other person, and also for damage to property, including property of the Contractor, the Owner or any other person; and also, for any interruptions to electric or community antenna television or other communications service which may occur or allegedly occur because of, or result from, or in any manner are connected with, or directly or indirectly, arise out of or are caused in whole or in part by the material provided or the Work performed by the Contractor, its agents, employees or subcontractors under the Contract.

1.07 SAFETY

- A. Each Contractor shall be responsible for its own safety and hazard program. Each program shall be in accordance with provisions of the Occupational Safety and Health Act (OSHA), Michigan OSHA (MIOSHA), the Environmental Protection Agency (EPA), and the Material Safety Data Sheets (MSDS). The Contractor shall maintain an effective safety program and conform to all federal and local safety codes. Upon written request by the Owner and/or the Project Manager, the Contractor shall provide the registered programs documenting safety and hazard programs.
- B. During Projects in construction zones or if site conditions require, the Contractor and all of his/her staff, agents and/or subcontractors must wear Contractor provided hard hats anytime they are onsite. The Contractor shall assume sole responsibility and liability for hat usage of his/her staff, agents and/or subcontractors.

1.08 IMPLEMENTATION PLAN

- A. The successful Contractor must prepare and submit a final implementation plan and timeline as part of the final Contract Documents. The Contractor and the Owner will mutually determine the critical dates that must be met, so long as consistent with the then-applicable Project Schedule. The Contractor will be required to adhere to, meet and maintain activities to the timeline schedule as planned. The Contractor will also be required to be flexible towards changes in the priorities of the timeline schedule during the entire project and will make all related changes at no additional cost to the Owner.

1.09 INTERRUPTION OF OCCUPANCY

- A. The installation must not interrupt the normal activity of the Owner. All work which will cause disruption of the Owner's existing systems and services must be accomplished during time periods when it is least inconvenient to the Owner and completed in the shortest possible

time frame (i.e. after normal school hours). The Owner is not responsible for any overtime and/or premium time not identified in the Contractor's base bid pricing response.

- B. Each Contractor is responsible to plan, coordinate and execute their work in such a manner that there will be no disruption of the Owner's operations. If an interruption of operations is unavoidable, the work will be scheduled with the Owner prior to beginning such work.

1.10 REJECTING DEFECTIVE WORK

- A. The Technology Designer and/or the Owner will have the authority to disapprove or reject work, which is defective, unsatisfactory, faulty, does not conform to the requirements of the Contract Documents, or does not meet the manufacturers' requirements. The Technology Designer and/or the Owner will also have the authority to require special inspection or testing of the work whether or not the work is fabricated, installed or completed.

1.11 SPECIFICATION DEVIATION

- A. Commodities procured under these specifications shall not deviate from those originally contracted for without written approval from the Owner and so long as consistent with law.
- B. The Owner has sole responsibility for the interpretation of all documents. Any claims and/or disputes associated with and/or arising from this RFB must be submitted in writing and directed to the Owner within thirty (30) days of dispute and/or claim.

1.12 EXECUTED CONTRACT TO CONSTITUTE ENTIRE AGREEMENT

- A. All contracts for work herein are subject to all existing and applicable provisions for the payment of prevailing rate of wages to laborers, workmen and mechanics engaged in the work.
- B. Except as set forth in Paragraph 1.12(C) below, the contents of the Contract Documents of the successful Contractor shall be contractual obligations upon bid acceptance. Failure of the successful Contractor to accept these obligations in a contractual agreement may result in a cancellation of award and forfeiture of bid bond.
- C. The Owner reserves the right to negotiate provisions in addition to those stipulated in this RFB or proposed by the successful Contractor for the purpose of obtaining the best possible offer. If the Contractor should discover any provisions in the contract that are contrary to or inconsistent with the law, ordinance, order or decree, the Contractor shall immediately report it to the Owner in writing.

1.13 CONTRACT SUSPENSION, TERMINATION AND CANCELLATION

- A. The Owner may cancel the contract effective as a result of this RFB in whole or in part as follows:
 - 1. By mutual agreement of the contracting parties. Upon such termination, the Owner's liability shall be limited to the reasonable value of services performed and deemed acceptable by the Owner upon the date of such mutual agreement.
 - 2. If the Owner deems that such termination is in its best interest. In the event that the Owner gives notice to terminate pursuant to this subsection, such notice shall be given no less than thirty (30) days prior to the date on which the termination becomes

effective. Upon such termination, the Owner's liability shall be limited to the reasonable value of services performed and deemed acceptable by the Owner as of the effective date of the termination.

3. For cause, which shall include, but is not necessarily limited to, failure or unwillingness of the Contractor to comply with the approved program, including attached conditions; failure to comply with applicable state statutes or other applicable laws or policies; or failure to comply with such directives as may become generally applicable at the time; refusing/failing to provide enough properly skilled workers to timely complete the work; failing to pay subcontractors and suppliers; failing to prosecute the work with diligence; and breaching any term of the Contract.
 4. Due to lack of appropriation of necessary funding, cancellation due to lack of appropriation shall be without penalty. Upon such cancellation, the Owner's liability shall be limited to the reasonable value of services performed and deemed acceptable by the Owner as of the effective date of cancellation.
- B. The Contract may only be modified by: (i) mutual written agreement of the parties, (ii) a properly-executed change order, signed by the Contractor, Owner and Technology Designer describing the additional/different work, price and time frame for performance, and (iii) a construction change directive issued by the Owner, for which the Contractor must commence prosecution of the work promptly (but no less than 10 days) and any modification to contract price or time will be later determined. In the event the parties cannot mutually agree to an adjustment in price or time for a construction change directive, the Technology Designer shall have the right and authority to determine same. If the Contractor objects to such determination, it may file a claim in accordance with the Contract. Rejection by the Contractor of any construction change directive may be the basis of contract suspension, termination, or cancellation.
- C. No cancellation will affect any expenditures or legally binding commitments made prior to receiving notice of the cancellation, suspension or termination provided such expenditures or commitments were made in good faith and not in anticipation of cancellation and are otherwise allowable.
- D. Upon execution of the Contract, the Owner shall be deemed the owner of all materials and equipment actually incorporated into or purchased for the project, as well as the owner of all documentation used with respect to same. In the event of cancellation prior to the full term of the contract, the Contractor shall arrange to provide the Owner with all work documents, computer programs and files used/developed by the Contractor during the period the contract was effective. The title to such programs and materials as well as any equipment and materials supplied while the contract is in effect, shall rest with the Owner.

1.14 DELAYS AND EXTENSIONS OF TIME

- A. If the Contractor is delayed at any time in the progress of the work by any act or neglect of the Owner, an employee of the Owner, any separate Contractor employed by the Owner (whether related to technology improvements or non-technology improvements), changes ordered in the work, acts of God, fires, floods epidemics, quarantine restrictions, or any other cause beyond the Contractor's reasonable control, then the contract time shall be extended by change order for such reasonable time as the Owner and the Contractor may determine. An extension of time for performance shall be the only remedy for any such delay, and damages related to any such delay are inapplicable.

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- B. If the Technology Designer and/or the Owner determines that the progress of the work falls behind the current project schedule due to the control, management, direction, acts or omissions of the Contractor, its agents or employees, the Contractor shall take whatever remedial action as directed, including, but not limited to the following:
1. Increase staff and labor force
 2. Work overtime
 3. Add or change subcontractors
 4. Utilize more expensive materials/methods
 5. Reschedule
- C. Costs of any remedial action, which are caused by the control, management direction, acts or omissions of the Contractor, its agents, or employees, shall not be assigned to the Owner and no increase in contract price will be authorized.

1.15 DELIVERY OF EQUIPMENT AND/OR MATERIALS

- A. Delivery shall be destination, set in place, ready for use unless otherwise specified, with packing and debris removed by the Contractor. The Contractor shall receive and accept its equipment and/or materials from the transportation company or carrier and shall provide all handling, carrying, etc., to the final location for each piece of equipment and/or materials in the building. Crating materials and other trash resulting from the installation shall be removed from the premises daily. Excelsior and similar hazardous trash shall be removed immediately upon unpacking. No accumulation of trash shall be permitted.
- B. The Contractor must have a representative at the job site during all unloading and placing of equipment. This service shall be included in the Contractor's Bid (and, thus, the Contract Sum). The Owner shall hold this representative operationally responsible for the services indicated and he/she shall have such capability and be given such responsibility by the Contractor that he/she can act on the Contractor's behalf in any situation, which may arise on the site of delivery. The Contractor's representative shall use some method, approved by the Owner, to show the item has been inspected and whether it has been "Approved" by the Contractor or if repairs or replacement is necessary. This shall be done prior to the Owner's final inspection. Any Owner rejection shall be honored, even if the Contractor has previously "approved" the equipment.
- C. Contractors are cautioned to check their manufacturing and shipping schedules carefully before fixing their proposed delivery schedule. If, for any reason, any items of equipment should arrive prior to the building being ready to receive them, the successful Contractor shall make its own arrangements for temporary storage arrangements at no cost to the Owner. No on site storage will be available and all staging should be complete before delivery and installation of the equipment.
- D. Contractors doing work are to cooperate fully and coordinate the work of all other Contractors to expedite the proper and timely completion of the furnishing projects. It is acknowledged that coordination with non-technology contractors (e.g., mechanical and electrical contractors installing improvements to facilitate technology upgrades) is expected and required, so as to provide a seamless and efficient installation of all Owner improvements pursuant to the bond project.
- E. In making delivery and installation, the Contractor must repair, at its own expense, any damage done to any of the buildings, equipment or property that are a part of this project that occur as a result of the control, management, direction, acts or omissions of the

Contractor, its agents or employees and hold the Owner harmless from any other claims or property damage and/or personal injury.

1.16 SUBCONTRACTING AND ASSIGNMENT

- A. The Contractor shall be responsible to the Owner for the acts and omissions of all its employees and all subcontractors, their agents and employees and all other persons performing any of the work under a contract with the Contractor.
- B. This Contract, with all its rights and duties, and any part thereof, shall not be deleted, subcontracted or assigned to another Contractor without prior written permission of the Owner.

1.17 RECORD KEEPING AND RECORD RETENTION

- A. It is acknowledged and agreed that the Contractor shall not be entitled to any additional costs or expenses for its scope of work, other than as is consistent with the Contractor's accepted Bid. For a change in the scope of work, the Contractor's costs shall be determined: (a) if a change order, as agreed in the approved change order, and (b) if a construction change directive and the parties cannot mutually agree to a modified amount, as determined by the Technology Designer. For purposes of the Technology Designer's determination, the Contractor shall establish and maintain adequate records of all expenditures incurred under the construction change directive. All records shall be kept in accordance with general accepted accounting procedures. All procedures shall be in accordance with Federal, State, and local ordinances.
- B. The Owner shall have the right to audit, review, examine, copy, and transcribe pertinent records or documents relating to any contract resulting from this RFB held by the Contractor. The Contractor shall retain all documents applicable to the contract for a period of not less than six (6) years after final payment has been made.

1.18 RISK OF LOSS OR DAMAGE

- A. The Owner shall be relieved from all risks of loss or damage to materials or equipment during the period of transportation, installation, and during the entire time the equipment is in possession of the Contractor, unless and until such time as unencumbered title for the equipment is vested in the Owner and the materials or equipment is in the exclusive possession of the Owner.
- B. Should the materials or equipment be lost or damaged under such circumstances where the Owner is relieved from the risk of loss or damage, the Contractor shall immediately cause the damaged materials or equipment to be repaired or replaced at no cost to the Owner.
- C. In such event, any payments for the lost or damaged equipment shall be suspended from the time loss or damage occurs until such time as the lost or damaged materials or equipment is repaired or replaced and accepted by the Owner.
- D. It is understood, and the Contractor hereby agrees, that the Contractor shall be solely responsible for all equipment and/or services that the Contractor proposes. Notwithstanding the details presented in these specifications, it is the responsibility of the Contractor to verify the completeness of the equipment required and its suitability to meet the intent of this RFB. Any additional equipment required for installation shall be provided by the Contractor; it is understood that complete operating systems are required.

1.19 ADDITIONAL RESOURCE REQUIREMENTS

- A. If the Contractor fails to complete the project or a segment of the project within the time period agreed to in the Contract Documents, and if as a result, the Owner finds it necessary to incur any additional costs and/or expenses (for example, needing to hire additional Contractors to complete work which is not being completed in a timely or satisfactory manner), the Contractor shall pay all those costs and expenses incurred by the Owner. These costs and expenses may include, but are not limited to, such items as additional hours spent by the Technology Designer, additional architectural fees and fees related to the acquisition of additional Contractors to complete the job. These costs and expenses may be retained by the Owner from any payments otherwise due to the Contractor for work, which has not been completed within the terms of the Contract Documents. The Owner may hire additional Contractors if seven (7) day notice has been given to the Contractor and the Contractor has failed to remedy the failure, to act in accordance with the notice, or has repudiated the contract. Failure by the Contractor to give adequate assurances when deadlines on the timeline have not been met will also result in the Owner's right to bring in other Contractors to complete the contract or a segment of the contract.

1.20 CLEAN-UP AND MAINTENANCE

- A. During preparation and construction, the project area must be kept free from scrap and debris in accordance with established safety and health standards. Upon completion of work, each day and at the end of the project, the Contractor will be held responsible to clean up and remove debris from the site. Damage to any portion of equipment or existing structure is the responsibility of the Contractor and repairs must be completed before acceptance and final payment is issued.

1.21 SYSTEM ACCEPTANCE

- A. Payment will be made only to the successful Contractor for services properly performed under the contract. The Owner will withhold retainage of 10% until final payment, which will follow the Contractor's fulfillment of all obligations.

1.22 INSPECTION OF WORK AND ACCEPTANCE TESTS ACCEPTANCE

- A. The Contractor shall at all times permit and facilitate inspection of the work by the Technology Designer and by public authorities having jurisdiction. The Technology Designer shall have the authority to stop the work, if necessary, to insure its proper execution. Tests will be performed and documented by the installing Contractor and turned over to the Owner as part of the "as-built" drawings at the time of completion. Deviations and/or corrections to the installation will be completed within ten (10) working days.

PART 2 PRODUCTS - Not applicable to this Section.

PART 3 EXECUTION - Not applicable to this Section.

END OF SECTION

**SECTION 00 73 16
INSURANCE REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Insurance requirements.

1.02 RELATED DOCUMENTS

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

1.03 INSURANCE

- A. The Contractor shall purchase and maintain insurance for protection from the claims set forth below which may arise out of or result from the Contractor's operations under the Contract, whether such operations be by the Contractor or Subcontractor, or by anyone directly employed by any of them:
1. Claims under workers or workmen's compensation, disability benefits and other similar employee benefit acts;
 2. Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
 3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
 4. Claims for damages insured by usual personal injury liability coverage, which are sustained by any person as a result of an offense directly, related to the employment of such person by the Contractor;
 5. Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom; and
 6. Claims for damages because of bodily injury or death of any person or property damage arising out of the maintenance or use of any motor vehicle. The insurance required shall be written in the following minimum limits:
 - a. General Liability:
 - 1) \$1,000,000
 - 2) Including personal injury and property damage
 - 3) \$2,000,000 each aggregate
 - b. Automobile Liability:
 - 1) \$1,000,000
 - 2) \$2,000,000 each aggregate
 - c. Workers' Compensation:
 - 1) As required by the State of Michigan

- d. Employers' Liability:
 - 1) \$1,000,000
 - 2) \$2,000,000 each aggregate
- B. Certificates shall name the Owner and Technology Designer as additional insured.
- C. The Contractor's insurance shall either be (i) occurrence-based and in effect from the commencement of work and for 18 months following final completion of the work, or (ii) claims-based and in effect from the commencement of work and in effect for 6 years following final completion of the work.

PART 2 PRODUCTS - Not applicable to this Section.

PART 3 EXECUTION - Not applicable to this Section.

END OF SECTION

**SECTION 01 11 00
SUMMARY OF WORK**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Project identification, project summary, Owner furnished equipment.

1.02 RELATED DOCUMENTS

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

1.03 PROJECT IDENTIFICATION

Public Address System
Davison Community Schools
1490 N. Oak Rd.
Davison, MI 48423

1.04 PROJECT SUMMARY

- A. Provide all labor, materials, equipment, and services necessary to furnish, install, program, test, and certify a fully operational Public Address System.
- B. All work shall be in accordance with the true intent of these drawings and specifications, and as required to leave all systems complete and in satisfactory operating condition, excluding those items listed under Work provided by Others.
- C. The Public Address System shall include, but is not limited to, the following principal components, materials, and services:
 - 1. Main Cabinet – remove existing equipment and reuse existing PA or MDF cabinets as appropriate. Provide blank panels on all unused spaces.
 - 2. Campus Controller
 - 3. Digital to Analog Station Campus Gateways
 - 4. Master Administration Consoles
 - 5. District Computer Paging Access
 - 6. Testing and documentation of existing speakers and cabling
 - 7. Other Requirements
 - 8. IP interface for system programming
 - 9. Bell schedules (initial programming by Contractor)
 - 10. Integration to phone system
 - 11. Programming system and zones
 - 12. Testing system, training staff, and documentation.
 - 13. UPS
 - 14. Ceiling speakers (Unit Price only)
 - 15. Surface speakers (Unit Price only)
 - 16. Horn Speakers (Unit Price only)
- D. The Public Address System equipment shall be new, of modern design, and current standard production of the various manufacturers.

- E. The Contractor shall verify dimensions and conditions at the job site prior to installation, and perform installation in accordance with these specifications, manufacturer's recommendations and the latest edition or revision of all applicable codes and standards.
- F. The Contractor shall provide any additional items, not specifically mentioned herein, necessary to meet system requirements as specified, without claim for additional pay.
- G. Provide all equipment, materials, labor, and services, not specifically mentioned or shown, which may be necessary to complete or perfect all parts of the installation. Ensure that they follow requirements stated or reasonably inferred by the contract documents.

1.05 OWNER FURNISHED EQUIPMENT

- A. The Owner may furnish various equipment for installation by the Vendor as indicated in the project documents.
- B. The Owner will pay for and arrange for delivery of this equipment in accordance with the Vendor's schedule and will inspect the deliveries for damage.
- C. If Owner furnished equipment is damaged, defective, or missing, through no fault of the Vendor, the Owner will arrange for replacement.
- D. The Vendor is responsible for protecting Owner furnished items from damage, and to repair or replace items damaged as a result of their operations.

PART 2 PRODUCTS Not applicable to this Section.

PART 3 EXECUTION Not applicable to this Section.

END OF SECTION

**SECTION 01 29 00
PAYMENT PROCEDURES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Payment procedures and requirements.

1.02 RELATED DOCUMENTS

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

1.03 PAYMENT FOR SERVICES

- A. No later than two (2) weeks prior to the date of the first application for payment, the Contractor shall furnish the Owner and Technology Designer with a breakdown of the contract amount setting forth the schedule of values of labor and materials of the various parts of the work on which this contract is based as detailed from the specifications or as further directed by the Owner. A meeting between the Technology Designer and the Contractor shall also be required before the first application for payment is submitted to set forth the procedure and format in which all applications are to be submitted. Final payment will be made only after the successful completion of a performance-testing period, the Owner's acceptance of the system and final documentation has been received and approved by the Technology Designer and the Owner.
- B. Final payment by the Owner to the Contractor shall be made within thirty (30) days of final completion, Owner acceptance of the system as installed and receipt and approval of final documentation by the Technology Designer and the Owner.
- C. Ten percent (10%) of the total contract amount will be withheld and will not be paid until after final acceptance, which includes submission and approval by the Owner and the Technology Designer of all work, testing results, documentation, and as-built drawings.

1.04 CONTRACT PAYMENT SCHEDULE

- A. The Contractor shall pay all sales, consumers, use, and all other applicable taxes required by law.
- B. The Technology Designer will review and certify the accuracy of invoices for the Owner's subsequent review, approval and payment. Certification by the Technology Designer that the invoice is an accurate account of work properly performed does not prevent the Owner from disputing the propriety of any applicable payment.
- C. Any questions regarding the payment process should be directed to the Technology Designer via email at bjulian@wrighthunter.com.
- D. All invoices and requests for payment should be sent directly to the Technology Designer via email at bjulian@wrighthunter.com.

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- E. Rates quoted in response to this request are firm for the duration of the proposed contract phase. No increases will be permitted. Any requests for modification to the original design and/or scope of work must be approved in writing by the Owner prior to any modification.
- F. Each Application for Payment shall be consistent with previous applications and payments as certified by the Technology Designer and paid for by the Owner.
1. The Application for Payment at time of Substantial Completion and the final Application for Payment involve additional requirements.
- G. Payment Application Times: The date for each progress payment is the 15th day of each month. The period of construction Work covered by each Application for Payment is the period ending fifteen (15) days prior to the date for each progress payment and starting the day following the end of the preceding period.
- H. Payment Application Forms: Use AIA Document G 702 and Continuation Sheets G 703 as the form for Application for Payment.
- I. If the bid involves more than one project, each project shall have separate payment application forms. The Technology Designer will identify each project.
- J. Application Preparation: Complete every entry on the form, including notarization and execution by the person authorized to sign legal documents on behalf of the Contractor. Incomplete applications will be returned without action.
1. Include amounts of Change Orders and Construction Change Directives issued prior to the last day of the construction period covered by the application.
- K. Transmittal: Submit three (3) executed copies of each Application for Payment to the Technology Designer. One copy shall include waivers of lien, proof of items stored, proof of insurance for stored items and similar attachments, when required.
- L. Waivers of Mechanics Lien: With each Application for Payment, submit waivers of mechanics lien from every entity who may lawfully be entitled to file a mechanics lien arising out of the Contract, and related to the Work covered by the payment. The Contractor acknowledges that liens cannot be placed on public property and are therefore inapplicable to this project.
- M. Application for Payment at Substantial Completion: Actions and submittals that shall proceed or coincide with this application include:
1. As built drawings (should be received by the Technology Consultant Once Contractor states the Project is complete – before punch list has been issued to the Contractor).
2. Warranties (guarantees) and maintenance agreements.
3. Test/adjust/balance reports.
4. Maintenance instructions.
5. Start-up performance reports.
6. Final cleaning.
7. Application for reduction of retainage, and consent of surety.
8. Punch list of incomplete Work.
-

N. Final Payment Application: Actions and submittals that shall precede or coincide with this application include:

1. Completion of Project closeout requirements.
2. Completion of items specified for completion after Substantial Completion.
3. Transmittal of required Project construction records to the Owner.
4. Proof that taxes, fees and similar obligations have been paid.
5. Removal of surplus materials, rubbish and similar elements.

1.05 CONTRACTOR'S SWORN STATEMENT AND WAIVER OF LIEN

A. The Contractor's sworn statement and waiver of lien shall be submitted with the invoice. The Contractor must state all subcontractors and status of payment for labor and materials to each. Payment will not be processed until these forms have been received.

PART 2 PRODUCTS - Not applicable to this Section.

PART 3 EXECUTION - Not applicable to this Section.

END OF SECTION

**SECTION 01 77 19
CLOSEOUT REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Project closeout requirements, Owner's right to use.

1.02 RELATED DOCUMENTS

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

1.03 CLOSEOUT

- A. Punch List

1. The Contractor shall perform required remedial work, without claim for additional labor or other costs. Where required, the Contractor shall re-test and submit a revised Test Report.
2. The Contractor shall notify the Technology Designer of completion of the Punch List.
3. If after notification and inspection by the Technology Designer, the identified Punch List items have not been corrected the Contractor will be notified that remedial work is still required. Additional time spent by the Technology Designer, due to the failure of the Contractor to correct Punch List items and finish the project by the agreed upon completion date as set forth in the Contract Documents, will be charged to the Contractor at the rate of one hundred twenty-five dollars (\$125) per hour and deducted from the Contractors retainage.
4. Fully detailed documentation, record drawings of the installation, cabinet layouts, and performance shall be submitted for review, as described within this RFB.
5. Final payment/retainage will NOT be considered if all aspects of Labeling, Testing and Documentation as described in this RFB have not been satisfied and approved by the Technology Designer.

1.04 THE OWNER'S RIGHT TO USE

- A. Acceptance of the Work of this Section will occur after completion of corrections and adjustments required by "Punch List" (as generated during on-site inspections and review of testing documentation).
- B. The Owner reserves the right to use equipment, material, and services provided as part of Work of this Section, prior to Acceptance, without incurring any obligation to accept any equipment or completed systems until Punch List work is complete and systems comply with Contract Documents.

PART 2 PRODUCTS – Not applicable to this Section.

PART 3 EXECUTION – Not applicable to this Section.

END OF SECTION

**SECTION 27 51 16
PUBLIC ADDRESS SYSTEM**

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. These Specifications, in conjunction with any Project Drawings, establish the requirements necessary to achieve the intended performance and function of the Public Address Systems.
 - 1. The Public Address System (PAS) is defined as all required horns, speakers, power supplies, amplifiers, master station consoles, cabling, remote cabinets, IP interface, testing, programming, documentation, and training for a complete installation.
- B. All work shall be in accordance with the intent of these specifications, and as required to leave the PAS complete and in manufacturer recommended operating conditions, excluding those items listed under "Related Work Provided by Others."
- C. The Contractor shall furnish all materials, labor, and any engineering services necessary to provide complete and professionally installed systems in excellent working order as described herein. Labor furnished shall be specialized and experienced in PAS installation.
- D. Public Address System
 - 1. The Contractor shall provide the services necessary to furnish, install, train, and support the PAS including an integrated system of peripheral apparatus conforming to acceptable industry standards.
 - 2. The PAS shall be new, of modern design, and current standard production of the manufacturer.
 - 3. The Contractor shall provide any additional items, not specifically mentioned herein, necessary to meet system requirements as specified, without claim for additional payment.
 - 4. The Contractor shall furnish all materials and labor to install new Public Address System (PAS) headend equipment at the following buildings:
 - a. Davison High School – new Rauland Telecenter U, reuse speakers and wiring
 - b. Davison Middle School- new Rauland Telecenter U, reuse speakers and wiring
 - c. Central Elementary School – new Rauland Telecenter U, reuse existing and wiring
 - d. Gates Elementary School - new Rauland Telecenter U, reuse existing and wiring

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- e. Hill Elementary School - new Rauland Telecenter U, reuse existing speakers and wiring
 - f. Siple Elementary School - new Rauland Telecenter U, reuse existing speakers and wiring
 - g. Thomson Elementary School - new Rauland Telecenter U, reuse existing speakers and wiring. Reinstall existing speakers in areas with new suspended ceilings.
- E. The Contractor shall provide as part of the submittal response a complete bill of materials, including catalog cuts and equipment configurations.
- F. All buildings will reuse existing speakers and wiring.
- G. Thomson Elementary School is receiving new suspended ceilings in some of the rooms. These rooms will require the reconnection and reinstallation of the existing ceiling speaker into the new suspended ceiling tiles. See Thomson Elementary School Project Drawing.
- H. Install a shortcut/app on one Building Administrator computer per building for programming access to the local PA system.
- I. Install a shortcut/app on two District Administrator computers per building for access to the PAS system.
- J. The Public Address System includes the following principal systems:
- 1. Main Cabinet – remove existing equipment and reuse existing PA or MDF cabinets as appropriate. Provide blank panels on all unused spaces.
 - 2. Campus Controller
 - 3. Digital to Analog Station Campus Gateways
 - 4. Master Administration Consoles
 - 5. District Computer Paging Access
 - 6. Testing and documentation of existing speakers and cabling
 - 7. Other Requirements
 - a. IP interface for system programming
 - b. Bell schedules (initial programming by Contractor)
 - c. Integration to phone system
 - d. Programming system and zones
 - e. Testing system, training staff, and documentation.
 - f. UPS
-

- 8. Ceiling speakers (Unit Price only)
- 9. Surface speakers (Unit Price only)
- 10. Horn Speakers (Unit Price only)

1.03 CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS

- A. It is intended that the Contractor furnishing materials or labor necessary for the completion of these specifications shall furnish it in compliance with these specifications. Where conflict exists with other specifications concerning such materials and labor, these specifications take precedence unless otherwise approved in writing by the Owner.
- B. Drawings pertaining to these specifications shall be considered as a part of said specifications and shall be a part of the Contract Documents.

1.04 RELATED WORK PROVIDED BY OTHERS

- A. Electrical power and wiring.
- B. Alarm systems and associated devices.
- C. Clock systems.

1.05 REQUIREMENTS OF REGULATORY AGENCIES

- A. The PAS will adhere to the most current applicable rulings of the Federal Communications Commission (FCC). Provide the FCC registration number with the equipment submittal. All components and installations shall bear an Underwriters' Laboratories (UL) listing and shall conform with the latest edition or revision of the following codes and standards:
 - 1. ANSI American National Standards Institute
 - 2. ASTM American Society for Testing and Materials
 - 3. CSI Construction Specifications Institute
 - 4. EIA Electronics Industries Alliance
 - 5. FCC Federal Communications Commission
 - 6. ICEA Insulated Cable Engineers Association
 - 7. IEEE Institute of Electrical and Electronics Engineers
 - 8. ISO International Organization for Standardization
 - 9. NEC National Electrical Code
 - 10. NEMA National Electrical Manufacturer's Association
 - 11. NFPA National Fire Protection Association.

12. TIA Telecommunications Industry Association

13. UL Underwriters Laboratories, Inc., UL 50

- B. The code or standard establishing the more stringent requirements shall be followed where areas of conflict occur between codes and standards or between codes and standards and drawings and specifications.

1.06 REFERENCES

- A. The following reference documents including the latest revisions and addendums shall be used:

1. BICSI Telecommunications Distribution Methods Manual
2. BICSI Cabling Installation Manual
3. International Standards Organization/International Electrotechnical Commission (ISO/IEC) 11801 – Information Technology – Generic Cabling for Customer Premises
4. ISO/IEC 18010 – Information Technology – Pathways and Spaces for Customer Premises Cabling
5. NFPA 255
6. Underwriters Laboratories (UL®) Cable Verification Program.
7. Electrical Component Standard: Provide work complying with applicable requirements of NFPA 70 “National Electrical Code” including, but not limited to:
 - a. Article 250, Grounding
 - b. Article 300, Part A. Wiring Method.
 - c. Article 310, Conductors for General Wiring
 - d. Article 725, Remote Control, Signaling Circuits
 - e. Article 800, Communication Systems
8. ASTM E84 and UL 723
9. UL Testing Bulletin

1.07 MANUFACTURER QUALIFICATIONS

- A. The PAS shall be manufactured and tested by manufacturers who are regularly engaged in the production of the components of similar systems for a minimum of five (5) years.

1.08 CONTRACTOR QUALIFICATIONS

- A. The Contractor of the PAS shall maintain service facilities in the installation to meet the warranty requirements. The facilities shall include a permanent source of factory trained

service technicians on twenty-four (24) hour call experienced in servicing these types of systems and shall provide warranty and routine maintenance service to afford the Owner maximum coverage. The Contractor shall also provide a central source of support to guarantee immediate answers to Owner's problems and questions.

- B. The Contractor selected for this project must be certified by the manufacturer(s) specified within their submittals, adhere to the engineering, installation and testing procedures and utilize the recommended components in provisioning the voice and data aspects of this Project.
- C. This Contractor shall have a minimum of five (5) years of experience in the specific application of the equipment proposed of these systems.
- D. The Contractor shall be experienced in all aspects of this work and shall be required to demonstrate direct experience on recent systems of similar type and size. The Contractor shall own and maintain tools and equipment necessary for successful installation and testing of the PAS and have personnel who are trained and certified in the use of such tools and equipment.
- E. Any subcontractor, who will assist the Contractor in performance of this work, shall have the same training and certification as the Contractor.

1.09 EXISTING CONDITIONS

- A. The Contractor shall verify dimensions and conditions at the job site prior to installation, and perform installation in accordance with these specifications, manufacturers' recommendations and the latest edition or revision of all applicable codes and standards.
- B. It is anticipated all work will be completed during the 2023 summer break. If it is required that any work needs to be completed after summer break when school is in session, all work shall be done after normal school hours unless given specific permission by the District and Building Administrators to work in certain areas during the school day. Work shift premium or any additional costs shall be included in your bid.
- C. Because it is imperative that the building not be left without a functioning Public Address System, it is imperative that the cutover from the old to new system be done after school hours and a backup plan should be in place should the cutover not be completed in time so as to not leave the school building without a functioning All Call system during the day. This may require a loaner amp or the existing system be temporarily used during that time.
- D. It is also imperative that student/worker interaction be limited as much as possible. All work crews and individuals are to be instructed as such. The school will enforce a zero tolerance policy on this. Any complaints received will result in the offended worker(s) to be permanently removed from the project.

1.10 JOB CONDITIONS

- A. The Contractor shall keep the job adequately staffed always. Unless prevented by illness, loss of personnel or other circumstances beyond its control, the Contractor shall maintain the same individual in charge throughout the Project.
- B. The Contractor shall cooperate with all appropriate parties to achieve well-coordinated progress with the overall construction completion schedule and satisfactory results. The Contractor shall watch for conflicts with work of other contractors on the job and execute, without claim for extra

payment, moderate moves or changes as are necessary to accommodate other equipment or to preserve symmetry and aesthetically pleasing appearance.

- C. The Contractor is responsible for the removal of paging speakers that are defective and deliver them to the Owner.
- D. The Contractor shall immediately report to the Owner any design or installation irregularities, particularly architectural elements that interfere with the intended system operations, so that appropriate action may be taken.
- E. The Contractor shall do all cutting, patching and painting necessary for proper and finished installation of the system and repair any damage done because of such installation. The Contractor shall cleanup and dispose of trash from all work areas daily.

1.11 QUALITY ASSURANCE

- A. Parts listed shall be complete, type, numbers and equipment furnished shall conform to manufacturer's specifications.
- B. All items of equipment shall be designed by the manufacturer to function as a complete system and shall be accompanied by the manufacturer's complete service notes and drawings detailing all interconnections.
- C. All materials shall be new and shall conform to applicable provisions of Underwriters Laboratories and the American Standards Association.
- D. The Contractor shall procure and pay for all necessary permits, licenses and inspections and observe any requirements stipulated therein. The Contractor shall conform in all trades with all local regulations and codes. For example, the requirement to install low voltage cabling in conduit. All conduits, wall penetrations, and conduits sleeves required for the PAS, shall be provided and installed by the PAS Contractor.
- E. The Contractor shall comply with federal, state, and local labor regulations and applicable union regulations.
- F. The Contractor shall be certain that all correct parts are ordered per the Products Section of this document and installed in accordance with manufacturers design and installation guidelines. The Contractor shall submit complete parts and part numbers to the Owner prior to installation of equipment.
- G. Complete documentation regarding the manufacturer warranty shall be submitted as part of the proposal. This shall include, but is not limited to a sample of the warranty that would be provided to the Owner when the installation is complete with documentation of the support procedure for warranty issues.
- H. The contractor shall show satisfactory evidence, upon request, that the supplier maintains a fully equipped service organization capable of furnishing adequate inspection and service to the system. The supplier shall maintain at his facility the necessary spare parts in the proper proportion as recommended by the manufacturer to maintain and service the equipment being supplied.

1.12 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract Sections:
- B. Submit equipment prints, full electronic wiring diagrams and specifications sheets for each item specified herein. Provide a tabulation of the specification clearly comparing the submitted item with the specified item, being able to refer to all written expressed functions and capabilities. Specification sheets shall be submitted on all items.
- C. Shop drawings detailing public address system.
- D. Wiring diagrams, detailing wiring for power, signal, and control.
- E. Submit wiring diagrams showing typical connections for all equipment.
- F. Submit a certificate of completion of installation and service training.

1.13 WARRANTY

- A. All PAS components and installation of same shall be guaranteed free of defects in materials and workmanship and shall be repaired or replaced within twenty-four (24) hours following report of such component defects and installation workmanship by the Owner.
- B. The Contractor shall be available on call and shall respond on site within one (1) business day of notice, and without cost to the Owner, during the first twelve (12) months of full scale operation, following acceptance of the system, to repair and/or correct any problems that may arise during the initial period of operation.
- C. Upon successful completion of the installation and subsequent inspection, the Contractor shall provide a five (5) year parts warranty on the Rauland equipment to the Owner. A one (1) year warranty shall be provided on all other parts and labor to the Owner.

PART 2 - PRODUCTS

2.01 MANUFACTURERS AND BASIS OF DESIGN

- A. Approved System Manufacturers:
 - 1. Rauland. No exceptions, district standard
 - 2. Basis of Design: Rauland Telecenter U

2.02 DISTRICT GOALS

- A. The intent of this RFB is to provide the school district with an integrated District-wide paging system. The following key features are desired:
 - 1. The ability to address all speakers in an individual building locally from either a dedicated console or from one to four administrator computers. Current wiring and configuration for two-way talk-back capability shall be maintained .

2. The ability to address all buildings simultaneously from one to four District Administrator computers using an installed application or web-server connection.
3. Sufficient UPS backup on each system to maintain system communications usage for 15 continuous minutes of operation. The intent here is to have the system up for at least one hour after power failure with a 25% operational load.
4. To provide a system GUI interface that allows each building to access the system via computer to make announcements, change bell schedules, pre-schedule texted announcements in a text to speech format and perform basic programming functions in a user-friendly environment. The ability to provide district wide bell schedules may be desired in the future as well.
5. The ability for the system to keep a log of all PA announcements and preferably a recording of the announcement be kept as a record of the transaction.
6. The ability for the system to have some sort of auto-failure capability should a local server or processor fail.
7. The ability for the system to interface with the District Phone system so as to allow functions such as All Call, Zone Page, Emergency Paging, and Individual Room Call.
8. The ability in larger buildings (i.e., Middle School and High School) to schedule volume level changes if an emergency announcement should be required during times such as 15 minutes prior to first class, class change times, and 15 minutes after last class dismissal.
9. Synchronization of the PA system with the master clock system in each building.
10. The District does not desire to incur any recurring software costs in the maintenance of these systems. The Successful vendor shall bear responsibility for any software costs not clearly delineated at bid time for the life of the systems.
11. Any deviations of a specific system from these District goals shall be clearly delineated as a Bid Exception and included in the written response to this bid. The District understands that certain features may have additional costs and will want to weigh the cost and benefits of systems with varying degrees of features.

2.03 SYSTEM REQUIREMENTS

- A. The PAS shall be a software-based VoIP paging and intercom system.
- B. The single server, software-based platform shall natively provide but not be limited to, a minimum of 10 audio channels for each individual school, 24-port gateways, existing speakers, IP Zone Modules, Paging Amplifiers, IP Administrative Console(s), SIP trunk enabled VOIP integration, local and district-wide paging, emergency notifications, calendar-based scheduling, application programming interface and integrated mapping. System shall include the latest classroom workflow enhancement capabilities as described herein.
- C. The PAS must be capable of supporting 25-volt speakers and equivalent competitive systems utilizing the existing architectural numbering scheme. The VoIP capabilities of the system will shall the support of the features across the various appliances within the facility. The following sections define how the system handles each of the features in the system.

- D. The contractor shall furnish and install all equipment, accessories, and materials in accordance with these specifications and drawings to provide a complete and operating VoIP school communications system including but not limited to:

2.04 EQUIPMENT AND MATERIAL

A. Enterprise Server and Software

1. Provides an enterprise based, single server platform with district-wide connectivity for native, individual school intercom, paging, bell event scheduling, emergency notification, text to speech and configuration for individual schools from a single server, accessed from anywhere via the web-based browser interface. The enterprise platform also provides for native, district-wide communication, control, notification, and classroom workflow enhancements. Systems that require individual servers or PC's at each school location or 3rd party or OEM additions to main system to accomplish the above, required performances shall not be acceptable.
 - a. Shall be capable of being installed in a virtual or physical server environment.
 - b. Supports HTTPS browsing.
 - c. Supports advanced encryption to ensure secure access.
 - d. Specified users shall receive email notifications when system devices go offline.
 - e. Includes logging and reporting of all system activity for a minimum of one year. These reports shall be capable of being exported to .CSV.
 - f. Shall provide a minimum of 20 bell schedules per school, with a minimum of 5 simultaneous schedules assignable to a specific school day. Bell schedules can be programmed to annunciate tones, activate relays, swing configurations, send emails, activate program distribution, and notify SIP trunk connected phones. Schedules shall be accessible from anywhere, via the native, web-based browser interface, with the proper credentials.
 - g. Shall allow for programmable end points to be automatically included or excluded for live paging, visual notifications, bell tones, or prerecorded audio, depending on the time of day or day of the week. These inclusions/exclusions shall be capable of being applied manually or automatically.
 - h. The software shall provide a native, district-wide graphical map view of all schools and their current status including emergency and on/off-line statuses.
 - i. The software shall provide the ability to identify individual classrooms that are not checked-in during an emergency using any web browser on the district's network. The software shall identify the name, extension, of the classroom that is not checked-in during the emergency.
 - j. Shall provide a minimum of 18 customizable emergency sequences, including condition specific All-Clear – with the ability to return the system to normal status.
 - k. Shall provide simultaneous communications to all schools or groups of schools within a district.

- I. The system provides the ability to export lists of bell schedule steps, emergency sequences, staff directory, users, peripherals, and zone targets.

B. Campus Controller

1. Provides call routing for paging and intercom for a single school or building on the district's network.
2. Supports a numbering plan allowing two, three, four, five, or six-digit extensions.
3. Ability to upgrade priority level from individual call-in activation.
4. The ability to automatically escalate incoming call-ins to an alternate console, telephone or group of telephones if a call-in remains unanswered for a predetermined amount of time.
5. Synchronizes system time to the district network time server.
6. Shall support a minimum of 100 independent zones for zone paging, program/music, distribution zones and class change tone zones; these assignments are a programmable function, changeable by time of day.
7. Shall support program distribution to be activated manually or automatically through an event/bell schedule.
8. Shall provide local survivability of 100% of local school communications if disconnected from the central server for a minimum of 14 days. Systems that cannot operate at all or operate in a degraded mode due to same conditions as indicated above, shall not be acceptable.
9. Provides SIP trunk interface to a district provided Telephone Network and shall be capable of allowing connected phones to display classroom call-ins, answer internal intercom call-ins, make pages, and change priorities of call-ins in progress. SIP trunk Interface shall provide:
 - a. Audio paging access from any sip trunk connected telephone to any single intercom speaker, zone (group) of intercom/paging speakers, or all speakers/paging horns throughout the entire facility.
 - b. Ability to answer a call-in directed to a SIP trunk connected extension.
 - c. Ability to upgrade a call-in directed to a SIP trunk connected extension.
 - d. Ability to initiate a school-wide emergency including lockdown and evacuation sequences from a SIP trunk connected telephone.
 - e. SIP device shall display call-in identification including classroom name, room number, and priority level.
 - f. In administrative areas where there are no overhead speakers send audio pages to a SIP trunk connected phone or group of phones, as determined by the owner.

C. POE Administrative Console

1. A full color screen with 64 soft keys, 3-line select, volume control, push to talk, speakerphone mode and left/right and up/down scrolling.
2. Shall allow for a PIN code for all actions individually or selected actions. Systems that require a PIN for "all or none" shall not be acceptable.
3. Audio paging access from any Console to any single intercom speaker, zone (group) of intercom/paging speakers, or all speakers/paging horns throughout the entire school as well as any owner defined SIP trunk connected phones or groups of phones.
4. Ability to perform intercom to any single IP Addressable Speaker Module.
5. Ability to display a minimum of 3 call-ins at a time on the screen while other call-ins are annunciating and the ability to scroll to view all call-ins.
6. Ability to upgrade a call-in priority via soft key.
7. Displays classrooms that have not activated a system check-in from a check-in activation, during an emergency event.

D. POE Classroom/Speaker Modules:

1. System shall include IP Addressable Classroom/Speaker Modules for classroom connection of speaker and other classroom devices.
2. Shall support DHCP.
3. Shall connect to network with a single RJ45 connector.
4. Shall support privacy. When the Privacy switch is activated, it prevents administrative or classroom telephones from monitoring the specific classroom/location intercom speaker.
5. Shall be designed to mount near ceiling and wall speakers in a plenum space
6. Shall support intercom, paging and level adjustment through the browser-based user interface or associated Kiosk. Manual or analog classroom volume controls that do not allow for emergency notification announcements to override classroom volume settings, shall not be acceptable.
7. Shall support and power a status light that displays individual classroom status including but not limited to call-ins of any priority, testing and emergency check-in.
8. Shall support supervision of call-switches.

E. POE Zone Paging Module

1. Shall be IP addressable and connect multiple speakers for district all page, zone paging, bells, audio events and, emergency notification.
2. Shall be rack and wall mountable.

3. Shall be able to belong to one or more than one independent zones for live paging, bells, pre-recorded audio, and emergency notification.

F. POE Addressable Aux I/O Module

1. Shall be IP addressable with two input contacts and two output contacts.
2. Contacts shall be individually addressable.
3. Shall be wall and rack mountable.
4. Shall be activated manually, by event/bell schedule, or as part of alternative condition sequence.

G. POE Program Line Input Module

1. Shall be IP addressable and provide line level audio program distribution into system.
2. Shall have a 3.5mm cable jack.
3. Shall be configured via web-based user interface.
4. Shall support assignment of system priority level such that emergency communications may override Line Input Module when active.

H. POE Microphone Input Module

1. Shall be IP addressable.
2. Shall support dynamic and condenser style microphones.
3. Shall support microphones with or without Push-To-Talk functionality.
4. Shall support configurable paging priorities.
5. Shall have adjustable microphone gain levels.
6. Shall support automatic increase of audio priority during an emergency.

I. POE Zone Page Powered Amplifier Module

1. Shall be IP addressable and provide 14 or 35 watts output.
2. Shall be wall or rack mounted.
3. Powered with either a wall wort or POE+

J. Owner Telephone System Connectivity

1. System shall be capable of connecting to the Public Switched Telephone Network (PSTN), analog Public Branch Exchange (PBX), or digital PBX/IP-PBX by connecting to an unlimited number of SIP trunks, analog FXO/FXS lines, or CO Trunks.

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2. Telephone service with public utilities will be arranged by the owner in conjunction with the equipment supplier. Equipment supplier shall generate a one-page document that will provide the owner with the number of outside lines.
- K. Provide and install the following quantity of speaker stations at each building as required:
1. Davison High School – 192 stations, new Rauland Telecenter U, reuse existing speakers and cabling.
 2. Davison Middle School – 48 stations, new Rauland Telecenter U, reuse existing speakers and cabling.
 3. Central Elementary School – 96 stations, new Rauland Telecenter U system, reuse existing speaker and cabling.
 4. Gates Elementary School – 48 stations, new Rauland Telecenter U, reuse existing speakers and cabling.
 5. Hill Elementary School – 48 stations, new Rauland Telecenter U, reuse existing speakers and cabling.
 6. Siple Elementary School – 48 stations, new Rauland Telecenter U, reuse existing speakers and cabling.
 7. Thomson Elementary School - 48 stations, new Rauland Telecenter U, reuse existing speakers and cabling.
- L. Ceiling speakers (for Unit Pricing only)
1. Approved Manufacturers:
 - a. Quam-Nichols Company, or pre-approved equivalent
 - b. Power rating: 25-Watt Peak, 15 Watt RMS
 - c. Size: 8 inch
 - d. Sensitivity: 97 dB average
 - e. Impedance: 8 ohms' nominal
 - f. Frequency Response: 45 Hz – 19kHz Nominal, 50Hz – 8kHz + 5Db
 - g. Magnetic weight: 10 oz. Nominal (260g)
 - h. Comply with TIA/EIA SE-103 and TIA/EIA-160
 - i. Tile Bridge: Provide each loudspeaker with load-bearing, rust-resistant steel tile bridge to match the supplied speaker.
 - j. Grills/Baffle: Provide each loudspeaker with flush mounted baffle, minimum thickness of 0.032-inch aluminum, with textured white finish, to match supplied speaker.
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M. Horn Speakers (for Unit Pricing only)

1. Approved Manufacturers:
 - a. Atlas, Bogen, Lowell Manufacturing, Quam-Nichols Company, or pre-approved equivalent
 - b. Maximum speaker power capacity of 15 watts continuous.
 - c. 8-ohm impedance
 - d. Frequency Response: Within plus or minus 6 db from 300 to 1200 Hz.
 - e. Protective cage or a speaker in a vandal-rated enclosure.
 - f. Outdoor , Locker Rooms, and Natatorium areas are to be provided speakers for harsh marine environment, all screws and mounting hardware, boxes etc. shall be stainless steel.
 - g. Provide as similar to Quam H16/SVP with SE1WVPS stainless steel enclosure.

N. Wall Surface Mount Speakers (for Unit Pricing only)

1. Provide same specifications as ceiling mounted speaker in square metal white enclosure with matching grille similar to Quam System 1 (flat) or System 2 (slanted) as required by mounting height.

O. Conductors and Cables

1. Conductors: Jacketed and twisted multi-pair, untinned solid copper. Sized as recommended by system manufacturer, but not smaller than 4 conductor No. 22 AWG.
2. Plenum rated cable
3. Shielding: For speakers-microphone leads and elsewhere recommended by manufacturer. West Penn 25292 (or equivalent) shall be considered the District standard.

P. Uninterrupted Power Supply (UPS)

1. The bidder shall supply a rack mountable UPS in the PAS rack with a 15-minute continuous load battery backup for the Paging System. The intent is to provide one (1) hour of PA operation after power failure with a 25% operational load time. It will meet the specifications listed in this section.
2. Acceptable manufacturers. APC, Middle Atlantic, or Eaton/Tripp Lite.
3. Minimum Specifications
 - a. Technology Type Line-Interactive variety Transfer Time on Inverter Shall not exceed 4 milliseconds.

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- b. Surge Protection Shall provide surge protection to the devices it supports. Otherwise, surge protectors must be provided for the required devices.
 - c. Noise Filtering Shall provide full-time EMI/RFI noise filtering to the devices it supports. Voltage Regulation
 - d. Shall provide as required (step-up [minimum 10% above input voltage] and step-down [minimum 10% below input voltage]).
 - e. Batteries Shall be sealed, maintenance free, and hot swappable.
 - f. Diagnostics Shall be equipped with a test button and the front panel display shall clearly indicate to the user these conditions: Online ; On Battery; UPS Overload/Load Level Status Replace Battery Conformance Shall be in conformance with standards set by UL, CSA, and FCC.
 - g. Connectivity Shall connect using a standard 20A circuit terminated with a NEMA 5-20P connector.
 - h. Mounting the unit shall be rack mounted and installed in the bottom of the rack being proposed.
 - i. Management: The UPS shall include an Ethernet connection for Network management and provide SNMP management.

PART 3 - EXECUTION

3.01 GENERAL

- A. The Contractor shall furnish and install all equipment as indicated in these specifications and if applicable, on the drawings. All wiring and terminations shall be in full conformance with all the current editions or revisions of all applicable codes and standards as previously listed under "Regulatory Agencies" of this Section of the Specifications for their intended use on this Project.
- B. No exposed cabling, in areas with finished ceilings, such as classroom and office areas, shall be permitted in the wiring of any functions of the provided system unless by Technology Designer request and/or approval. All cable shall be housed in appropriate raceways suitable and designed for such purposes.
- C. All cables must be routed, supported, and managed for a neat and aesthetically pleasing appearance. All work must be installed in a neat and workman like manner.
- D. The Contractor shall supply all equipment, materials, parts, connectors, and provide the necessary labor for the complete installation of the new PAS, following the recommendations of the equipment manufactures and the requirements of these Specifications and Drawings.
- E. The Contractor shall work carefully with all ceilings and return ceilings to original conditions. Every effort will be made to schedule the requirements under this contract in such a manner to complete all above ceiling work prior to ceiling tile installation. If the ceiling tiles are already installed, this shall not result in additional cost to the Owner.

- F. If the ceiling tile is installed, the Contractor shall be responsible for the replacement of all damaged or soiled acoustical panel ceiling tiles and grid. Contractor must clean the metal grid upon completion of Contractors work.
- G. The Contractor shall not place any distribution cabling alongside power lines, water pipes or share the same conduit, channel, or sleeve with electrical apparatus.
- H. The Contractor shall provide any necessary screws, anchors, clamps, Velcro tie wraps, "J" hooks, miscellaneous grounding, ladder rack, cable tray, and support hardware, etc., necessary to facilitate the installation of the system.
- I. It shall be the responsibility of the Contractor to furnish any special installation equipment or tools necessary to properly complete the system. This may include, but is not limited to, tools for terminating cables, testing and splicing equipment for copper and fiber cables, communication devices, jack stands for cable reels, or cable wenchers.
- J. All specialty back-boxes required by federal and local codes shall be provided by the Contractor.

3.02 SITE REQUIREMENTS

- A. The Contractor shall integrate the existing phone system with the new PAS.
- B. Paging System zones:
 - 1. Each classroom shall be an individual station, using a building room number designation of up to three alphanumeric or numeric characters.
 - 2. The contractor shall conduct a programming review with the Owner or Designated Building Administrator to confirm zone names and identify additional zones to be input into the software before final system turnover.
- C. All work shall be completed by the dates indicated in the Project Schedule.

3.03 EXAMINATION

- A. Examine conditions, with the Installer present, for compliance with requirements and other conditions affecting the performance of the public address system.
- B. Do not proceed until unsatisfactory conditions have been corrected.

3.04 COORDINATION

- A. Coordinate exact location for installation in each building as indicated on the project drawings.
- B. A standardized location within each space will be determined at the project kickoff meeting. Vendor shall adhere to the standard as much as practical, and immediately confer with the Owner or Technology Designer prior to installing in a non-standard location.

3.05 INSTALLATION

- A. All cables installed in ceiling spaces shall be plenum-rated and properly supported.

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- B. The Contractor will coordinate with building administration personnel the programming of bell schedules and select tones for various programmed and emergency events.
 - C. The Contractor shall assure that at the completion of cable installation, cables are free from twists, kinks, sharp bends, cuts, gouges, or any other physical damage that might cause alterations to the electrical characteristics of the cables.
 - D. Provide and install speakers per requirements herein and as indicated on the project drawings
 - E. This work shall be performed in accordance with acknowledged industry standards and professional practices. Install system in accordance with applicable codes. Install equipment in accordance with manufacturer's written instructions.
 - F. Install public address system in accordance with manufacturer's written recommendations and in accordance with NFPA 70E.
 - G. Integrate public address system with Owner's electrical, clock systems, and communications network.
 - H. Install wiring in accordance with requirements of local Authority Having Jurisdiction.
 - I. Conceal wiring except in unfinished spaces and as approved in writing by Engineer.
 - J. Install speakers only after painting and other finish work is completed in each room.
 - K. Install speakers and other devices square and plumb.
 - L. Wiring Methods
 - 1. Conceal wiring except in unfinished spaces.
 - 2. All new wiring on this project must be properly rated for the application.
 - 3. Any required cable shall be installed in a neat and workmanlike manner, following the standard procedures used in the electrical contracting trade.
 - 4. Exposed wiring will not be permitted under any circumstances on this project.
 - 5. Upon installation completion, a room-by-room test shall be conducted for every device in the system. A technician shall perform the test after school hours, and repairs shall be performed as needed at no cost to the Owner to any devices, which do not function correctly, including cable. A written room-by-room report following testing and repairs shall be prepared and submitted to the Engineer

3.06 FIELD QUALITY ASSURANCE

- A. Vendor Field Service:
 - 1. Provide services of a service representative for this project location to supervise the field assembly and connection of components and the pre-testing, testing, and adjustment of the system.

B. Inspection

1. Make observations to verify that units and controls are properly labeled, mounted properly, all equipment is plumb and level.

C. Testing:

1. Rectify deficiencies indicated by tests and completely re-test work affected by such deficiencies at the Vendor's expense. Verify by the system test that the total system meets the specifications and complies with applicable standards.

3.07 SYSTEM STARTUP

- A. At completion of installation and before final acceptance, turn on equipment and ensure equipment is operating properly, and PAS devices and components are functioning.
- B. Evaluate and test each device of the PAS on room-by-room basis using factory-trained technicians.
- C. Fix or replace devices which fail test or are functioning incorrectly.
- D. Submit evaluation and report showing results of room-by-room tests and overall system compliance within three (3) days of testing being carried out.
- E. The Contractor shall provide personnel onsite for the initial start-up dates to provide startup support and troubleshooting. The dates shall be mutually agreed upon by the Contractor and Owner. The Owner's expectation is that the required technicians will be onsite to assist the District administrative staff during this period.

3.08 TESTING AND COMMISSIONING

- A. Upon completion of the installation, each system device shall be fully tested for proper connectivity and operation with the Owner's time server. Demonstrate the same to the Owner and General Contractor for final acceptance
- B. Train Owner's maintenance personnel in the procedures and schedules involved in operating, troubleshooting, servicing, and preventative maintenance of the system. Operators Manuals and Users Guides shall be provided at the time of this training.

3.09 CLEANING AND PROTECTION

- A. Prior to final acceptance, clean system components
- B. Provide adequate protection to Owner facilities to protect from damage.
- C. Protect installed products and accessories from damage during construction.
- D. Repair damage to adjacent materials caused by PAS installation.
- E. Progress Cleaning: Perform cleanup as work progresses in accordance with applicable Section.
- F. Cleaning and waste management.

- G. Leave work area clean at end of each day.
- H. Final Cleaning: Upon completion, remove surplus materials, rubbish, tools, and equipment in accordance with applicable section - Cleaning and Waste Management.
- I. Waste Management:
 - 1. Coordinate recycling of waste materials with General Contractor or Construction Manager.
 - 2. Collect recyclable waste and dispose of or recycle field generated construction waste created during construction or final cleaning related to work of this Section.
 - 3. Remove recycling containers and bins from site and dispose of materials at appropriate facility.

3.10 DEMONSTRATION AND TRAINING

- A. Arrange system demonstration and training session for Owner's operation and maintenance personnel.
- B. Allow Owner and Technology Designer 14 days minimum advance notice before training session.
- C. Break down system demonstration and training session into logical segments for Owner's operations and maintenance personnel.
- D. Train Owner's maintenance personnel in procedures and schedules involved in operating, troubleshooting, servicing, and preventative maintenance of the PAS.
- E. Provide one (1) in-person training session per building.

3.11 EXAMINATION

- A. Examine conditions, with the Installer present, for compliance with requirements and other conditions affecting the performance of the PAS.
- B. Do not proceed until unsatisfactory conditions have been corrected.

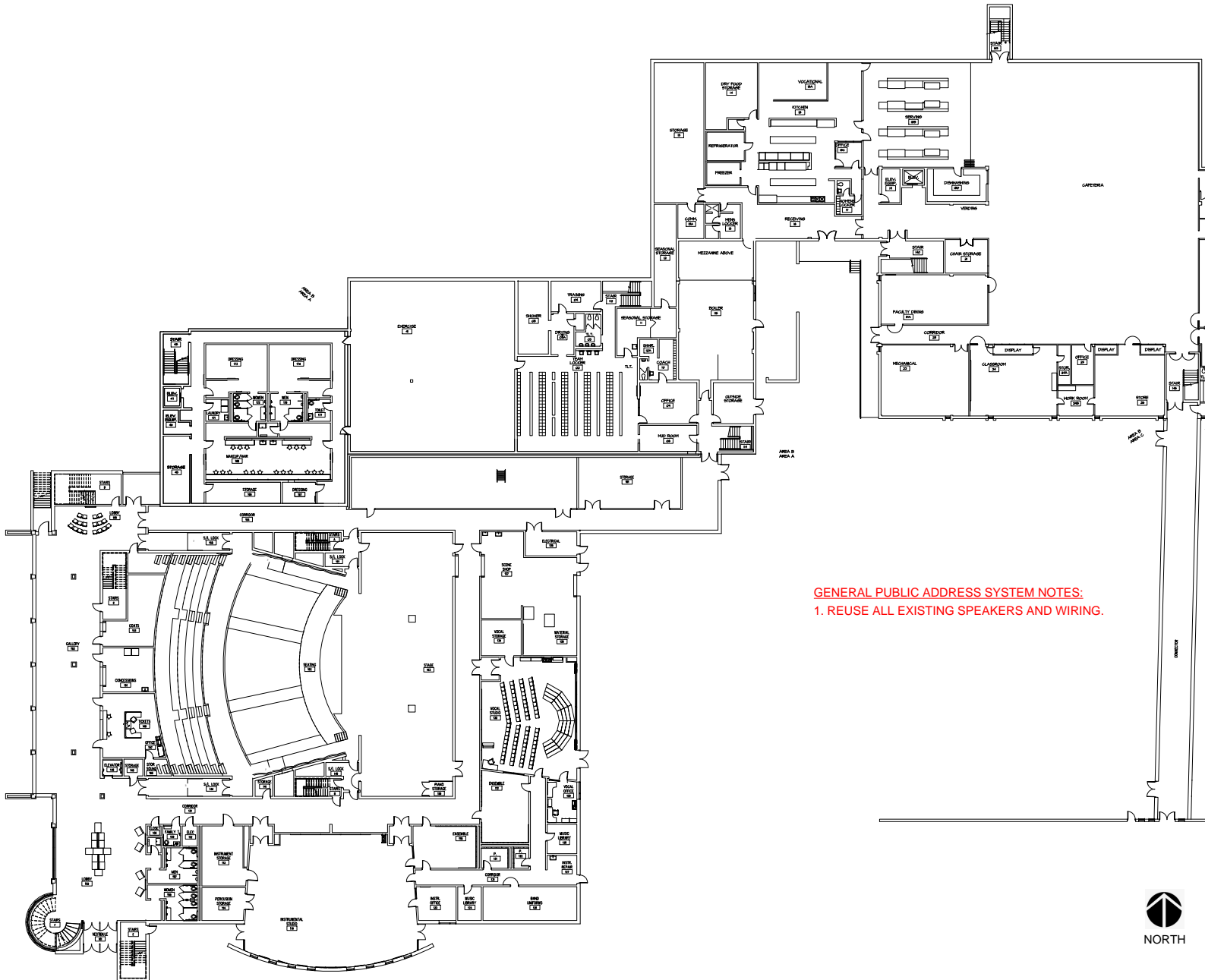
3.12 DRAWINGS AND DOCUMENTATION

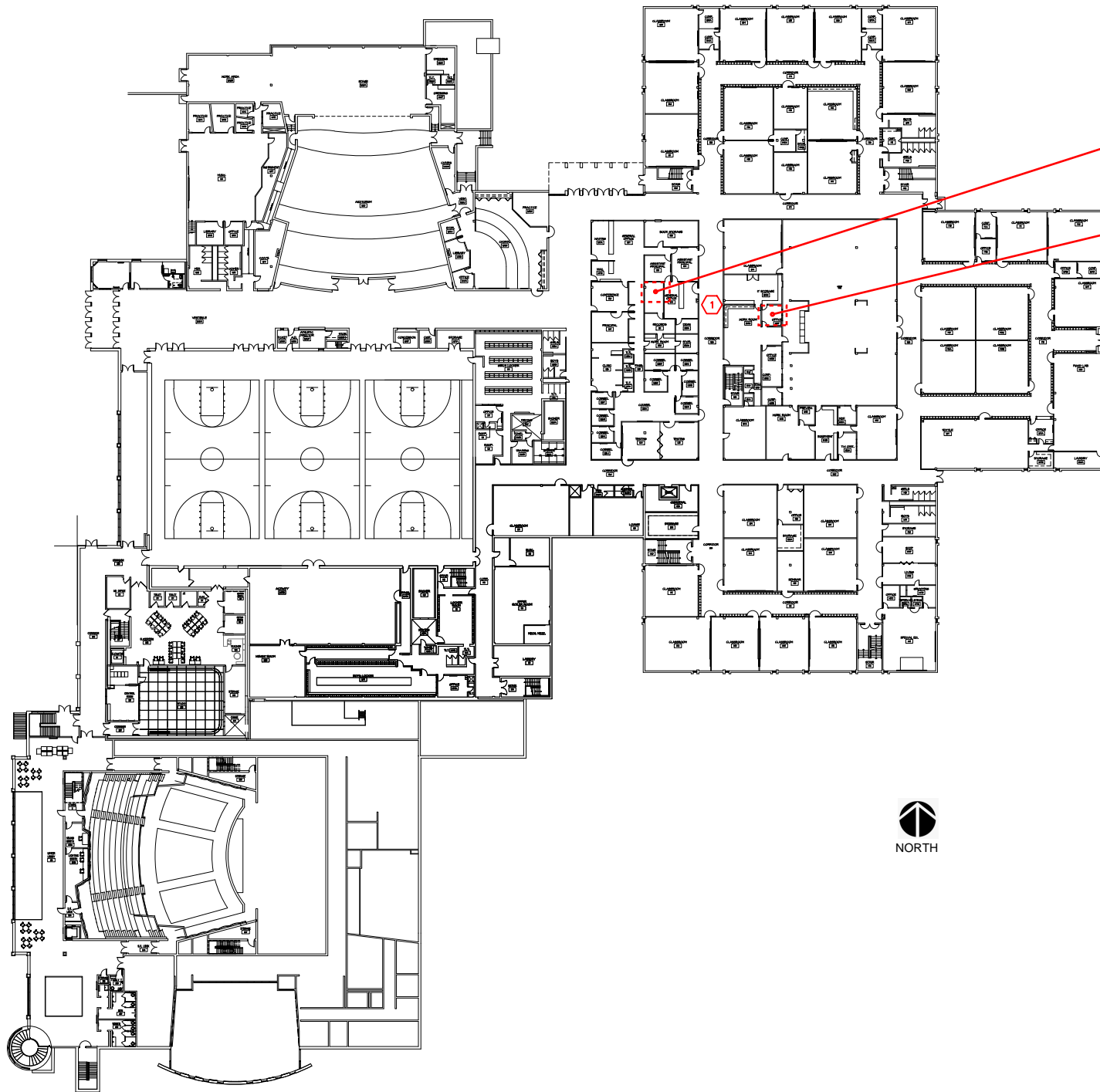
- A. Final closeout documents shall include screen shots or printouts of each systems programming showing activation and programming of the specified features of the systems along with a printout of the systems room and zone programming .
- B. All drawings and programming information contained therein become the sole property of the Owner.
- C. A statement on the vendor's letterhead shall accompany the closeout documents indicating any ongoing software costs, the parties payable to, and a certification that all current software maintenance fees are paid up front for five (5) years after systems acceptance.

3.13 OWNER'S RIGHT TO USE

- A. Acceptance of the Work of this Section will occur after completion of corrections and adjustments required by "Punch List" (as generated during on-site inspections and review of testing documentation).
- B. The Owner reserves the right to use equipment, material and services provided as part of Work of this Section, prior to Acceptance, without incurring any obligation to accept any equipment or completed systems until Punch List work is complete and systems comply with Contract Documents.

END OF SECTION





EXISTING PAS HEADEND
LOCATION

NEW PAS HEADEND
LOCATION

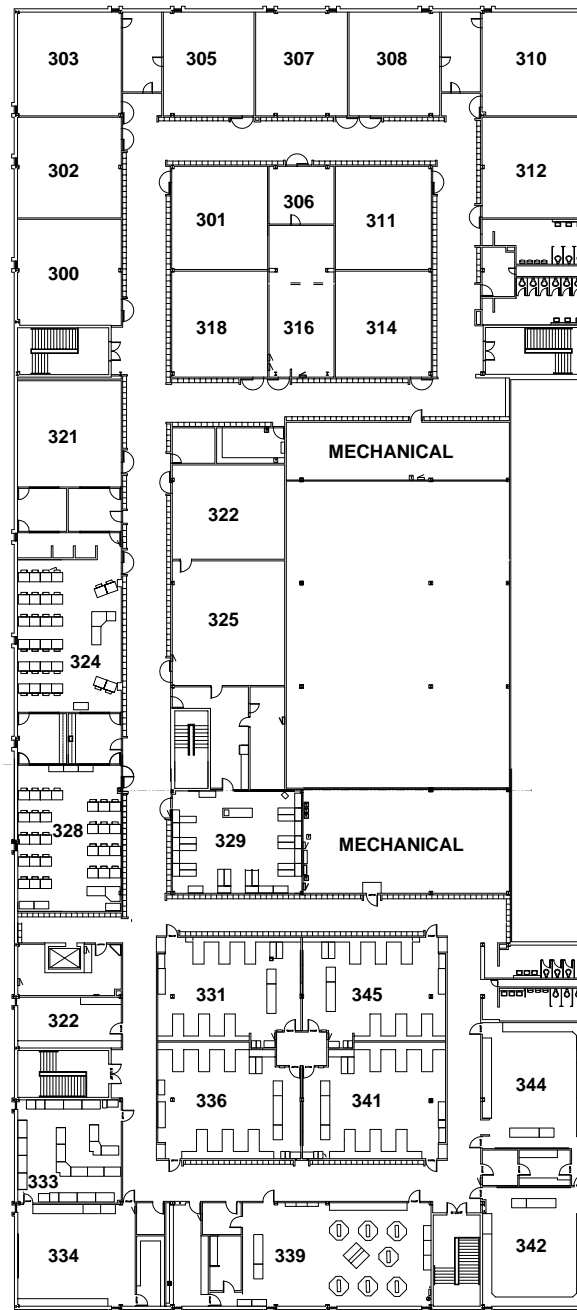
GENERAL PUBLIC ADDRESS SYSTEM NOTES:
1. REUSE ALL EXISTING SPEAKERS AND WIRING.

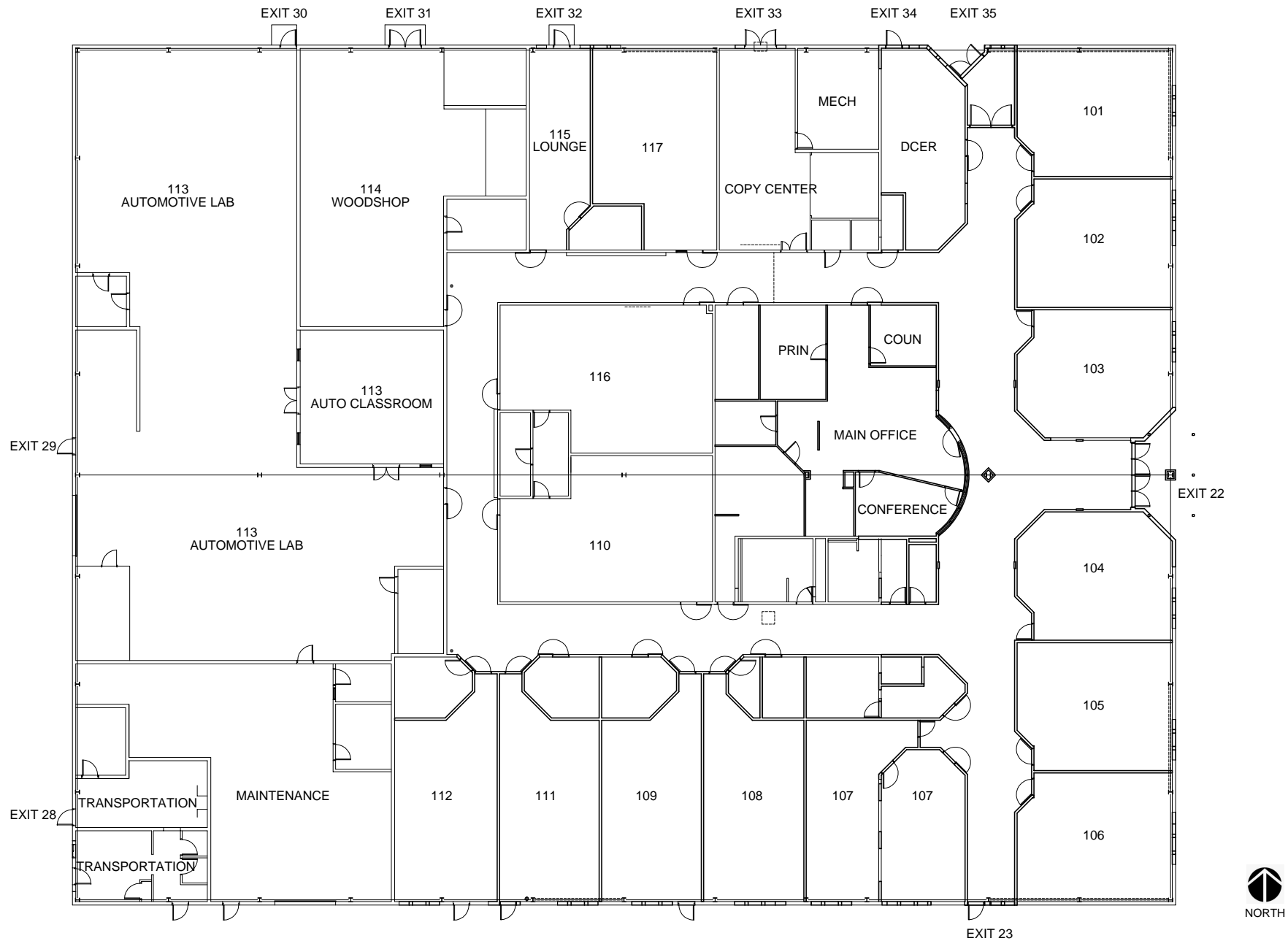
PUBLIC ADDRESS SYSTEM NOTES:

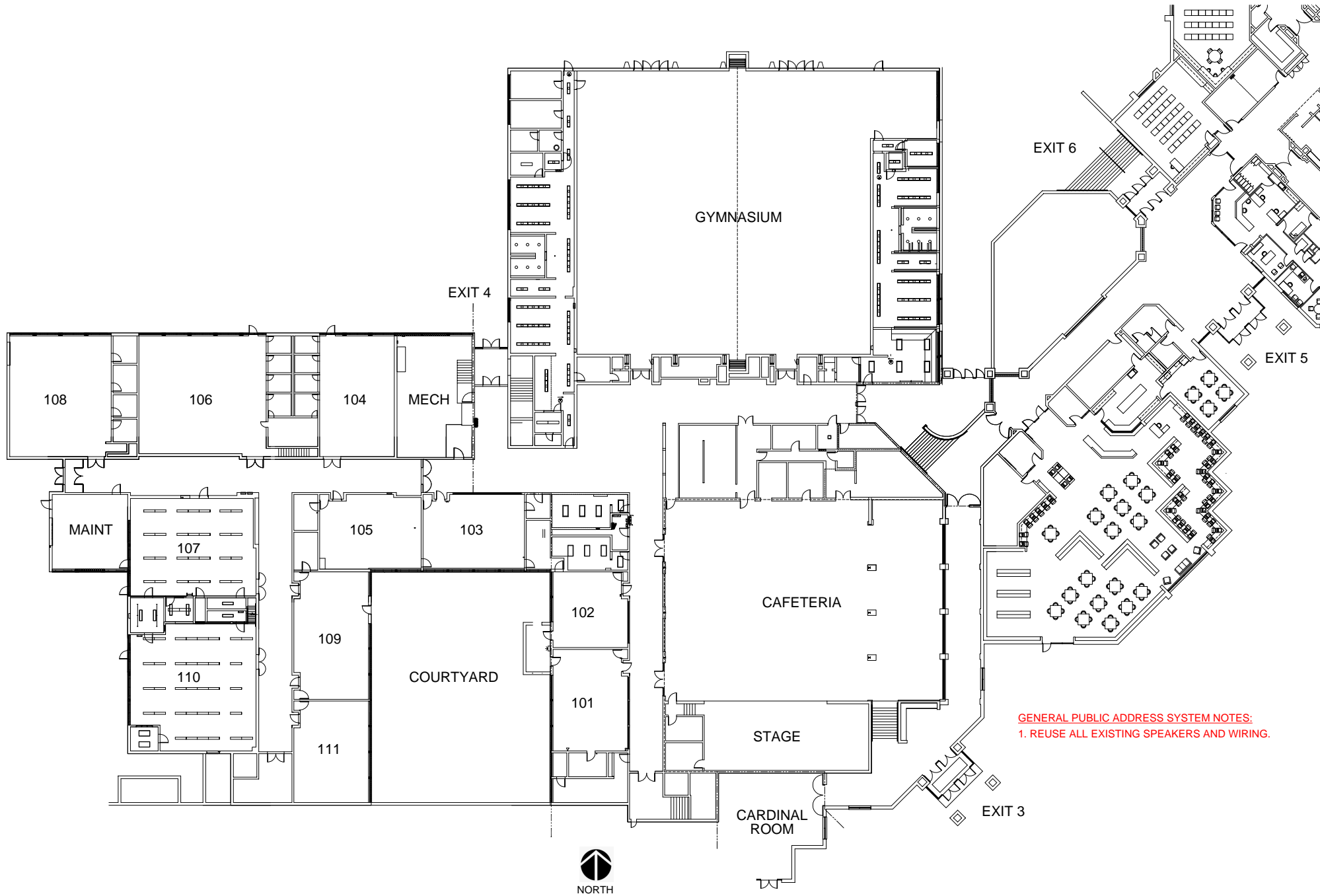
① INSTALL MULTIPAIR SPEAKER CABLE FROM
EXISTING PAS HEADEND LOCATION TO
NEW PAS HEADEND LOCATION.



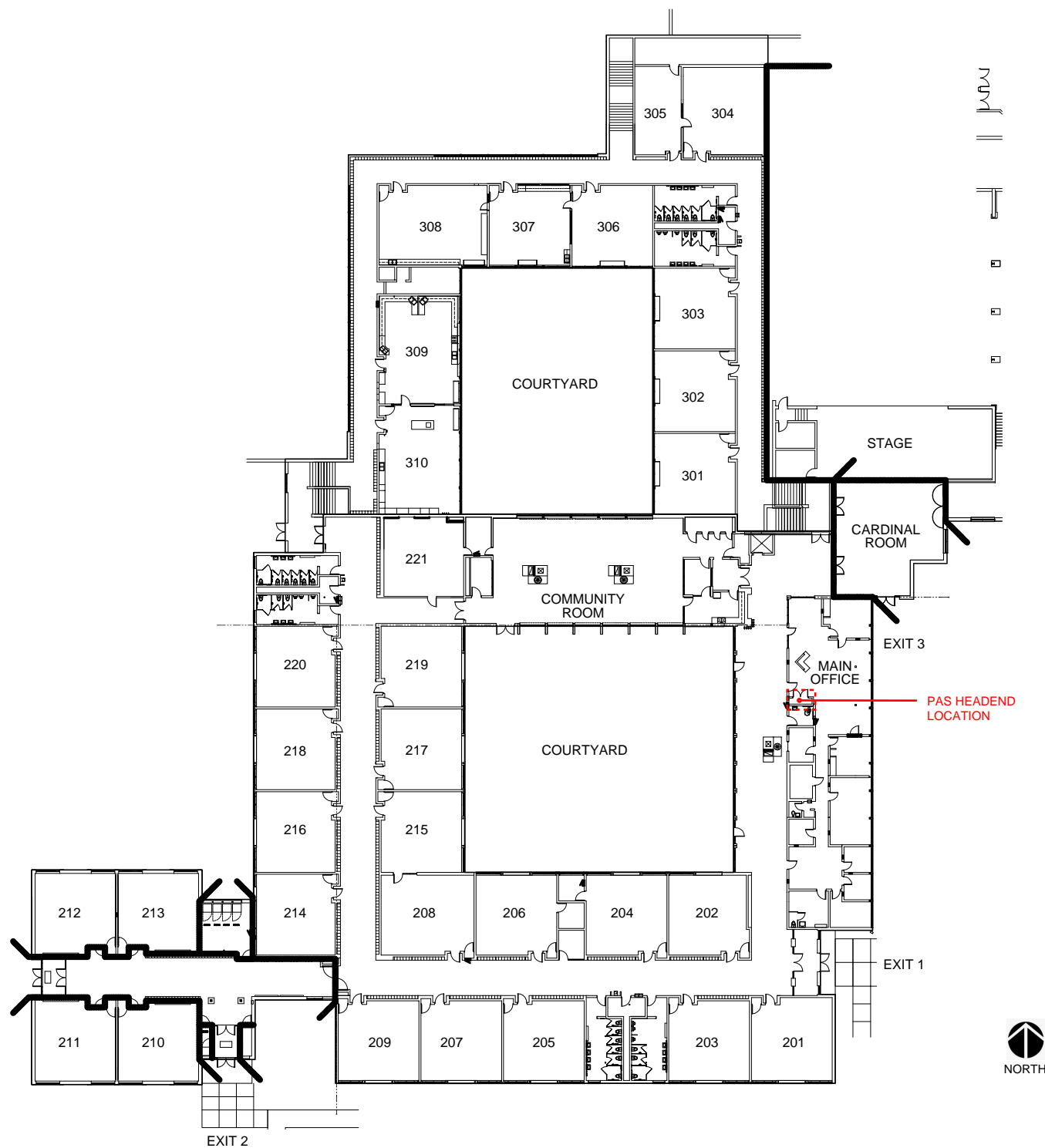
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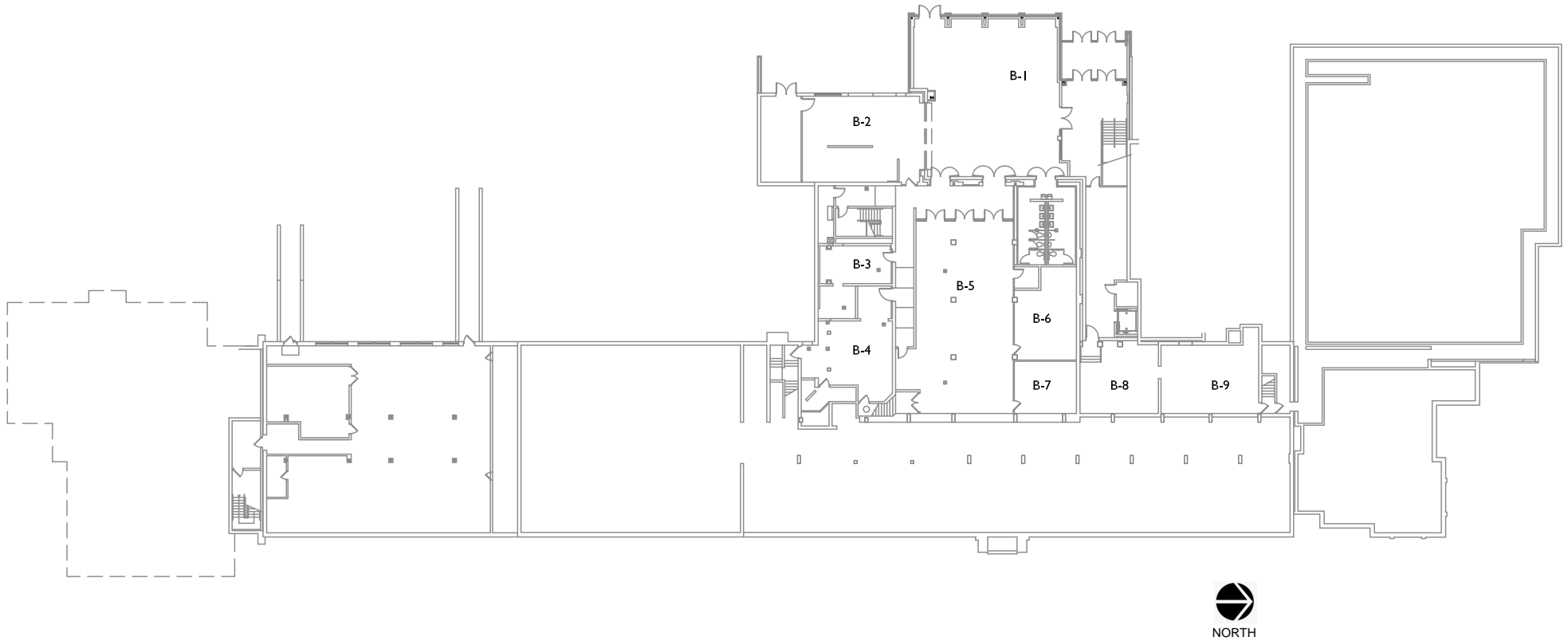




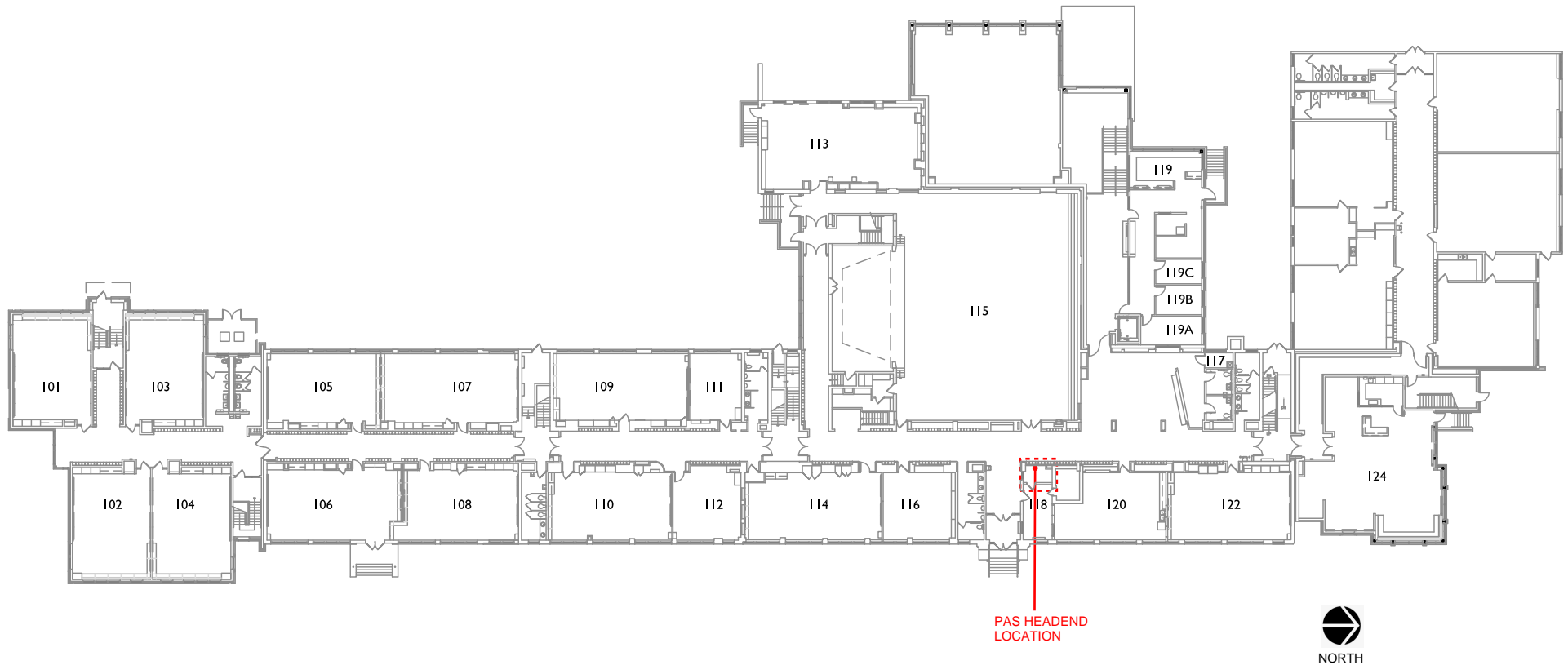
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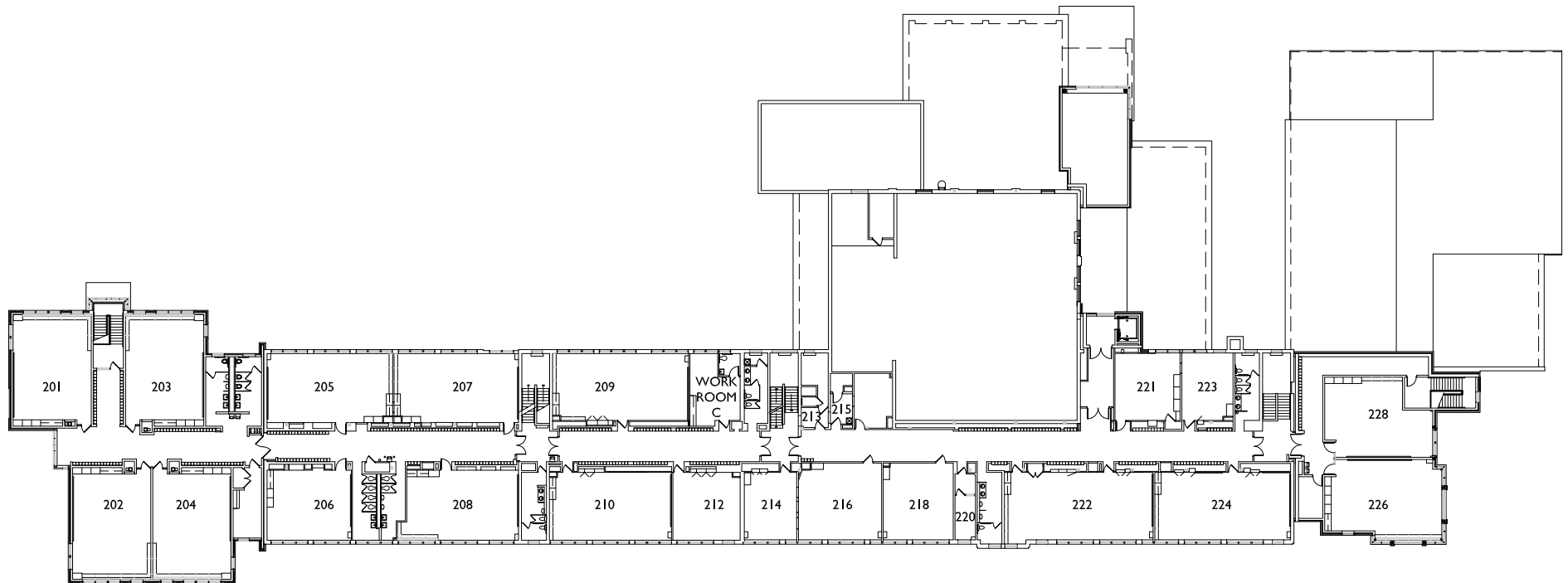
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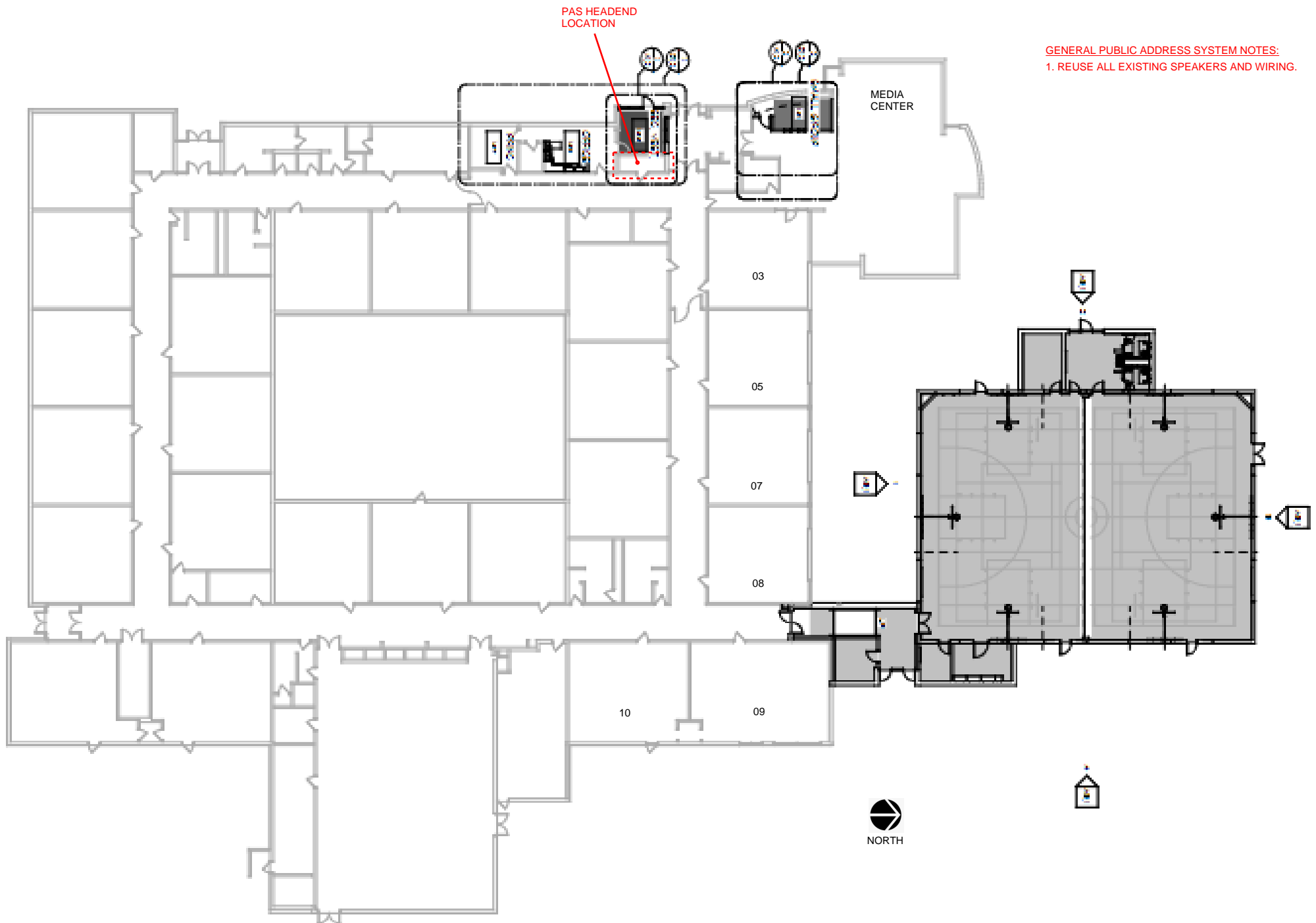


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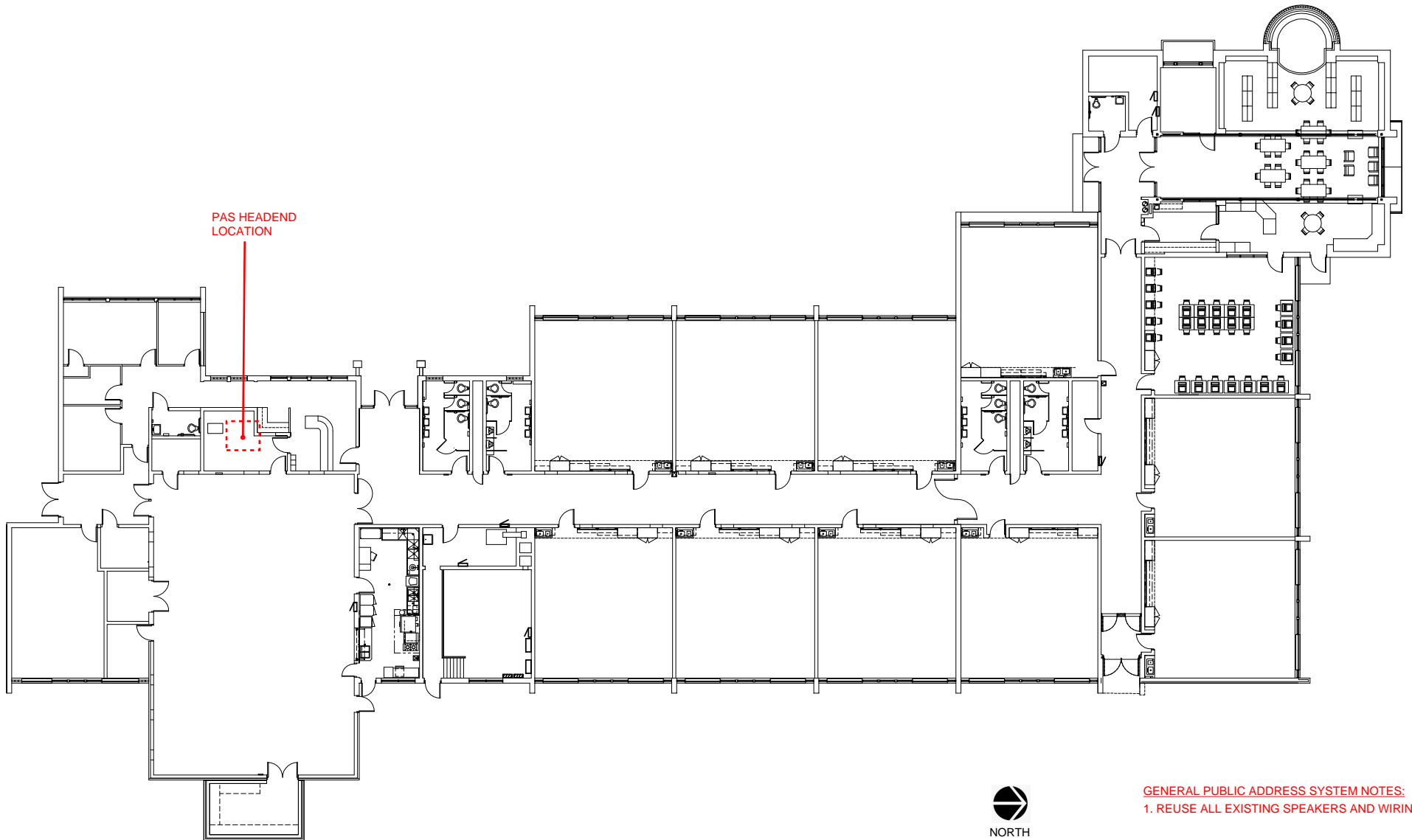


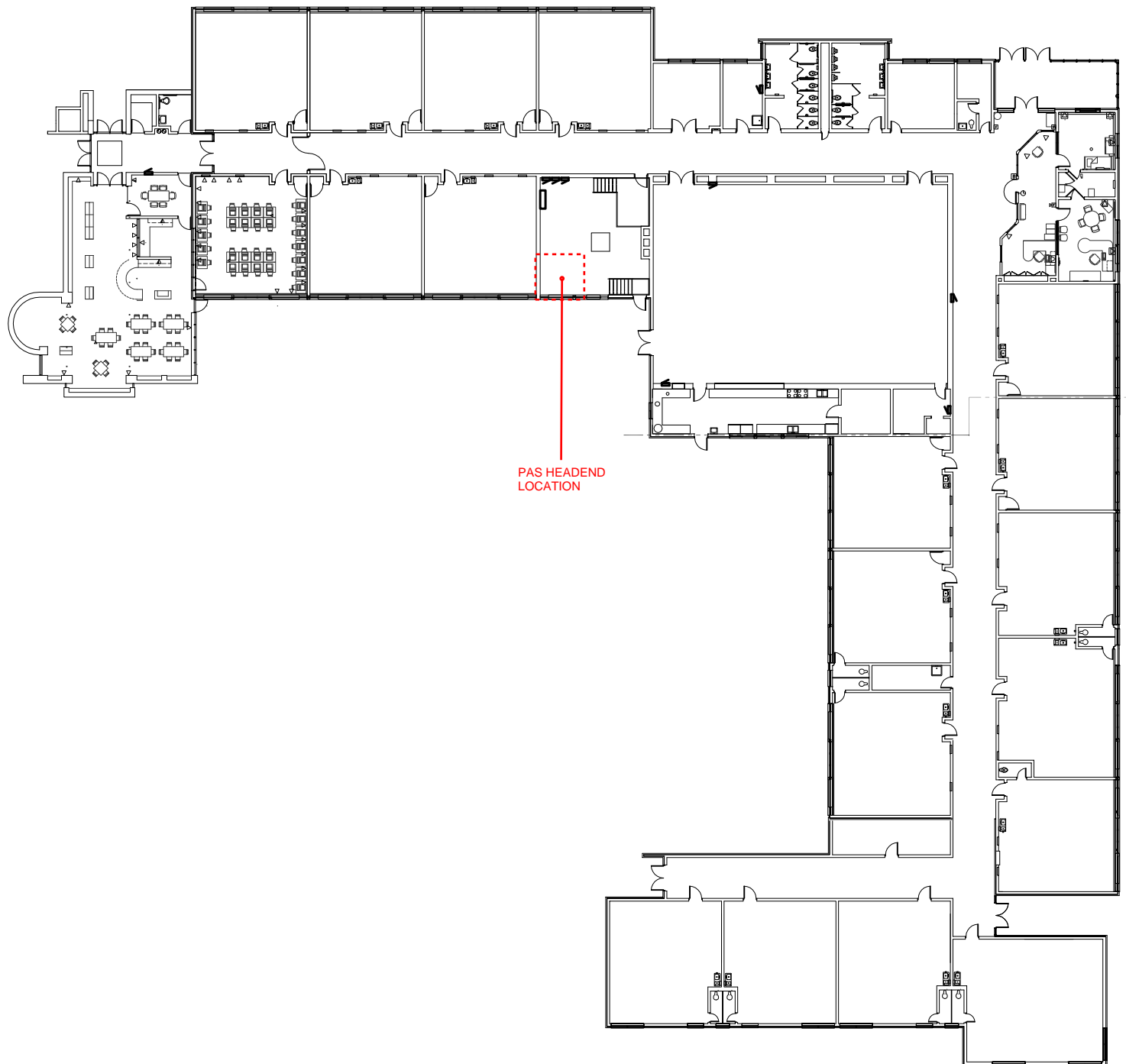
GENERAL PUBLIC ADDRESS SYSTEM NOTES:
1. REUSE ALL EXISTING SPEAKERS AND WIRING.





GENERAL PUBLIC ADDRESS SYSTEM NOTES:
 1. REUSE ALL EXISTING SPEAKERS AND WIRING.





GENERAL PUBLIC ADDRESS SYSTEM NOTES:
 1. REUSE ALL EXISTING SPEAKERS AND WIRING.



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PROJECT



PUBLIC ADDRESS SYSTEM
 Davison Community Schools

SHEET

SIPLE ELEMENTARY
PUBLIC ADDRESS SYSTEM PLAN

ISSUE DATE

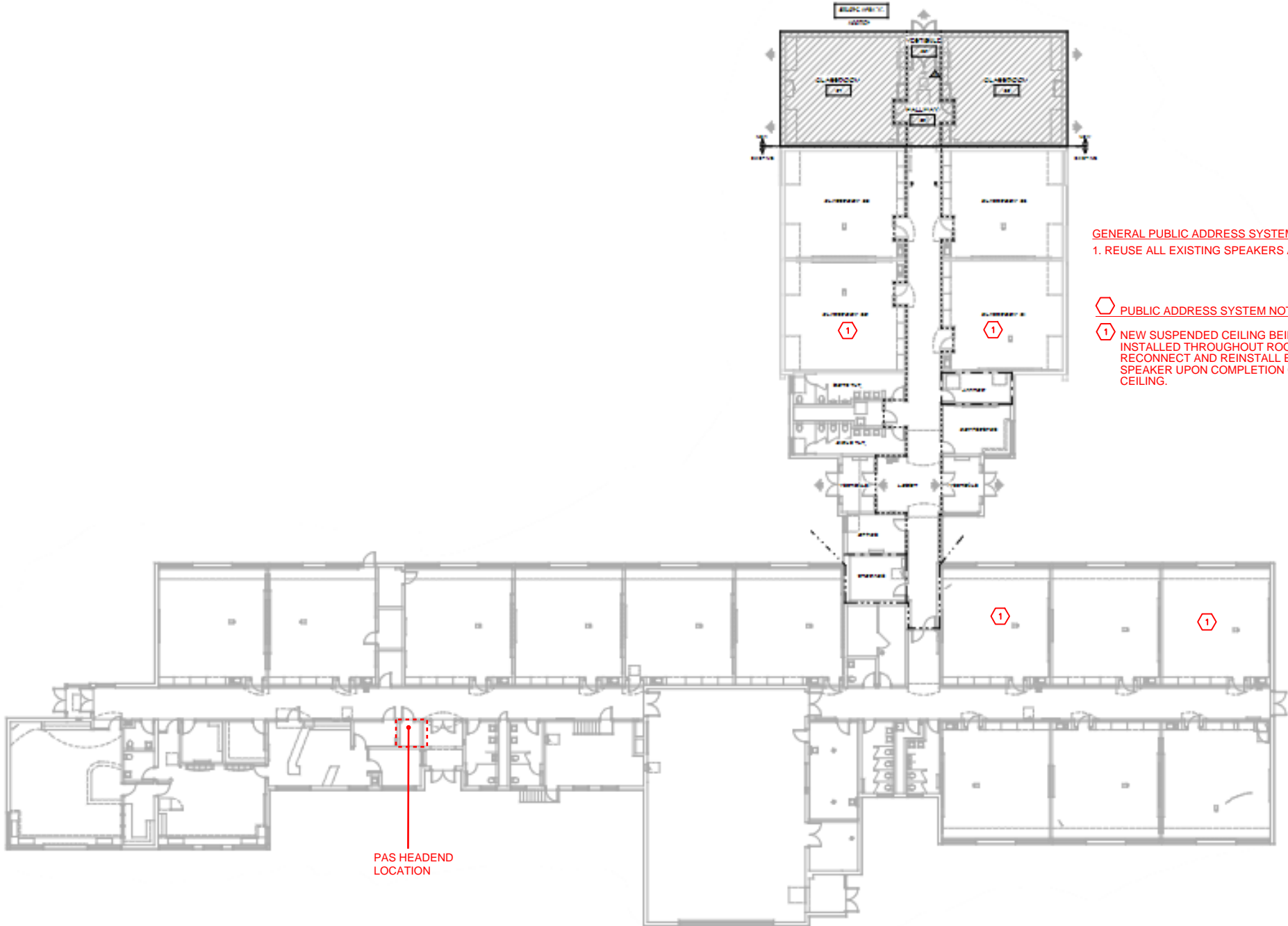
12.16.2022

ISSUED FOR

BIDS

DRAWING NUMBER

TP112



GENERAL PUBLIC ADDRESS SYSTEM NOTES:
 1. REUSE ALL EXISTING SPEAKERS AND WIRING.

PUBLIC ADDRESS SYSTEM NOTES:
 1. NEW SUSPENDED CEILING BEING INSTALLED THROUGHOUT ROOM. RECONNECT AND REINSTALL EXISTING SPEAKER UPON COMPLETION OF NEW CEILING.

PAS HEADEND
 LOCATION

