

POUDRE SCHOOL DISTRICT R-1

REQUEST FOR QUALIFICATIONS FIRE ALARM PROJECTS DESIGN SERVICES

CACHE LA POUDRE MIDDLE
FORT COLLINS HIGH
LESHER MIDDLE
LINCOLN MIDDLE
POUDRE HIGH
ROCKY MOUNTAIN HIGH
TRAUT ELEMENTARY
WEBBER MIDDLE
WERNER ELEMENTARY

RFQu # 20-700-002

RFQu SCHEDULE

RFQu Issued October 7, 2019
Pre-proposal Conference October 23, 2019

Questions Due October 29, 2019 2 p.m. MST

RFQu Closing Date November 7, 2019 2:00 p.m. MS

Poudre School District Procurement Services - RFQu #20-700-002

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1.0 PROJECT DESCRIPTION AND SCHEDULE

Poudre School District R-1 (the "District") is issuing this Request for Qualifications ("RFQu") from vendors for Architectural Design Services. The anticipated project description and schedule are as follows:

1.1 PROJECT DESCRIPTION

As identified in the District's 2016 Bond Proposal, at least nine PSD schools likely require new voice evacuation fire alarm systems. The Project Scope (Exhibit A), is based on a construction budget of \$967,000. Technical specifications are provided below Exhibit B). Individual site maps are provided below (Exhibits C-K)

Complete architectural services, including scheduling and staging of all design services, programming, design, bidding, construction overview and project close-out will be required from the selected firm. While services may be scheduled in stages, this solicitation is for the selection of all architectural services necessary for the entire project. Bidding and construction of the projects will be through a traditional design/bid/build process to qualified general contractors.

It is highly recommended, but not required, that proposing vendors attend a preproposal conference to become familiar with the selection process, the schedule, and the elements of the contract. To be followed by visits to each site immediately following the meeting.

DATE: Wednesday, October 23, 2019

TIME: 10:00 a.m. MST

WHERE: Starting at The Operations Conference Room

ADDRESS: 2445 LaPorte Avenue

Fort Collins, CO 80521

1.2 PROJECT SCHEDULE

- 1.2.1 Anticipated time for design work to commence November 2019
- 1.2.2 Anticipated construction bid date: spring 2020
- 1.2.3 Anticipated occupancy: no later than mid-August 2020.

2.0 MINIMUM QUALIFICATION REQUIREMENTS

As set forth in more detail below, the District will only consider proposals for this Project from vendors that meet the following qualification criteria:

- 2.1 Principal Architect of record must be registered and licensed in the State of Colorado.
- 2.2 Vendor must have an established office within 150 miles of Fort Collins, Colorado at the time of RFQu response submission.
- 2.3 Vendor must demonstrate completion of Projects of a similar size and scope within the last five (5) years.

3.0 SUBMITTAL REQUIREMENTS

As set forth in more detail below, the District is requiring the following information from all vendors as part of their response:

- 3.1 Letter addressing the considerations below
 - 3.1.1 Completed Architect's Qualification Statement AIA Document B305 1993 or successor form. (Exhibit L)
- 3.1.2 Design professional's summary of previous work for the District.
 - 3.1.3 Design professional's experience on projects of similar type and size within the last five (5) years.
 - 3.1.4 Whether the design professional or any of its principals has ever declared bankruptcy under their current names or former names.
 - 3.1.5 Whether the design professional or any of its principals has ever made an assignment for the benefit of creditors.
 - 3.1.6 Whether there are any unsatisfied judgements or liens against the design professional or any of its principals.
- 3.2 Description of the proposed Project team and approach
 - 3.2.1 Qualifications of proposed key team members
 - 3.2.2 Project approach which shall include:
 - 3.2.2.1 Budget and Cost Control
 - 3.2.2.2 Quality Control
 - 3.2.2.3 Schedule Management
- 3.3 Statement of the vendor's capabilities.
 - 3.3.1 Current and projected workload.

- 3.4 Proposed Fee Schedule
 - 3.4.1 Submittals must include a complete Proposed Fee Schedule & Hourly Rates as provided in Exhibit M.
 - 3.4.2 Fee Proposal Schedule <u>must include</u> the following consultant fees where applicable to this Project:
 - 3.4.2.1 Architectural Fee
 - 3.4.2.2 Structural
 - 3.4.2.3 Mechanical
 - 3.4.2.4 Electrical
 - 3.4.3 Identify any additional consultants included in fee proposal not specified above.
 - 3.4.4 Identify hourly rates for the following where applicable to this Project:
 - 3.4.4.1 Principal
 - 3.4.4.2 Project Manager
 - 3.4.4.3 Project Architect
 - 3.4.4.4 CAD Technician
 - 3.4.4.5 Interior Designer
 - 3.4.4.6 Clerical
 - 3.4.5 Additional services and consultants listed on the Fee Schedule & Hourly Rates will be negotiated on an as-needed basis after award of this RFQu.

4.0 RFQu PROCEDURES AND DEADLINES

The procedures and deadlines associated with this RFQu are as follows:

1.1 The District shall provide copies of this RFQu and its related documents to vendors through the electronic solicitation platform www.bidnetdirect.com
(BidNet), where registered bidders are required to submit their electronic RFQu response along with the first and last name, telephone number and e-mail address of the employee within the vendor's organization who will be designated as the District's primary contact with respect to this RFQu and the vendor's response thereto. The District may provide copies of this RFQu to other vendors upon request, who are also requested to provide the first and last name, telephone number and e-mail address of the employee within their organization

- who will be designated as the District's primary contact with respect to this RFQu and their response thereto.
- 4.2 At no time during the solicitation process, will communication regarding this RFQu be permitted with any district employee, other than Jon Babcock, the District Senior Procurement Agent associated with this RFQu, until an award has been announced. Communication with any district employee other than Jon Babcock may disqualify your organization's proposal from consideration.
- 4.3 Questions regarding this RFQu must be in writing and directed to the District through the BidNet platform any time after the issuance of this RFQu through and including **2:00 p.m. MST on October 29, 2019**.
 - 4.3.1 Each question must be submitted <u>individually</u>. Multiple questions per entry will not be answered.
 - 4.3.2 Each question submitted, as well as the District's response thereto, shall be posted to Bidnet as an addendum.
- 4.4 Electronically submitted proposals, as provided in section 3.0 of this RFQu, must be received in BidNet's electronic solicitation portal on or before **2:00 p.m. MST on November 7, 2019**. At that time the submission portal will close, and no further submissions will be allowed, nor considered.
- 4.5 District staff shall review the written proposals to this RFQu during the proposal consideration period commencing on November 7, 2019. During the proposal consideration period, questions may be asked of and additional information may be requested from specified District personnel and select vendors may be asked to give presentations to District staff regarding their RFQu responses.
- 4.6 The selected vendor's services are subject to and conditioned on: (a) an agreement by the District and vendor regarding the terms of a written contract between the parties, including but not limited to the terms specified in section 3.0 of this RFQu; and (b) the execution of the written contract by authorized representatives of the District and vendor.
- 4.7 This RFQu does not commit the District to select or contract with any vendor that provides a response, or to pay any costs incurred by vendors in responding to the RFQu or negotiating a contract. The District reserves the right to reject any and all responses to this RFQu at any point in the process, to waive any irregularities and/or informalities with respect to the RFQu procedures and deadlines, and to select the vendor whose response it deems in its sole discretion to be in the best interest of the District. The award of this RFQu to a selected vendor is contingent upon the execution of a mutually acceptable agreement, a sample of which is provided as AIA Document B101-2017 (Exhibit N). If a mutually acceptable agreement is not executed, the District reserves the right, at its sole discretion, to negotiate with a subsequent vendor(s) who submitted a responsive and responsible response to this RFQu per the specified terms herein.

Information and materials submitted in response to this RFQu may be considered public records subject to disclosure under the Colorado Open Records Act ("CORA"), C.R.S. §§ 24-72-200.1 to -205.5. Information and materials that vendor believes are confidential and not subject to disclosure under CORA must be submitted separately with a citation to the section of CORA and any other relevant law under which vendor believes they are confidential. The District, not the vendor, shall determine whether information and materials so identified will be withheld as confidential, but will inform vendor in advance of disclosure to give it an opportunity to take legal action to protect its interests vis-à-vis the party making the CORA request.

-- End -

Exhibit A

Scope of Work

In order to create a safer learning environment and comply with the 2012 International Fire Code (IFC), Poudre School District (the "District") is undertaking a project to analyze existing fire alarm systems at nine schools with the intent of developing a replacement plan. These new systems would replace the current obsolete systems with audible voice evacuation speakers meeting current IFC requirements for instruction during a fire emergency.

It is the District's intention to contract with a professional engineering design firm to provide construction drawings for the purpose of installing new fire alarm systems at these nine schools:

Cache La Poudre Middle - 3515 W Cr 54G, La Porte, CO 80535 Fort Collins High - 3400 Lambkin Way, Fort Collins, CO 80525 Lesher Middle - 1400 Stover St, Fort Collins, CO 80524 Lincoln Middle - 1600 Lancer Dr, Fort Collins, CO 80521 Poudre High – 201 S. Impala Drive, Fort Collins, CO 80521 Rocky Mountain High - 1300 W Swallow Rd, Fort Collins, CO 80526 Traut Elementary - 2515 Timberwood Dr, Fort Collins, CO 80528 Webber Middle - 4201 Seneca St, Fort Collins, CO 80526 Werner Elementary - 5400 Mail Creek Ln, Fort Collins, CO 80525

This project (the "Project") consists of a complete design of a new fire alarm system for Lesher Middle and Werner Elementary. The work shall include a complete system design, along with specifications for a complete fire alarm system replacement. The implementation of these new systems is a priority and our intentions are to solicit these projects for Summer 2020 installation.

Cache La Poudre Middle, Fort Collins High, Lincoln Middle, Poudre High, Rocky Mountain High, Traut Elementary, and Webber Middle require a feasibility level review and cost estimate for site specific conditions of the existing fire alarm system. The vendor shall consider utilizing any current components of these systems for future code compliant construction. The vendor shall supply a summary report of each location, including code analysis, basic system requirements, and a conceptual level construction cost estimate.

The selected vendor shall provide engineering design services for new fire alarm systems to comply with the IFC, as adopted by the Poudre Fire Authority (PFA).

The selected vendor shall provide complete fire alarm design services along with bidding and construction phase services. The selected vendor's project team will work closely with the District's Operations Department.

Exhibit B

SECTION 28 31 00 - FIRE DETECTION AND ALARM

Part 1: General

1.01 Summary

A. DESCRIPTION

- 1. This section of the specification includes the furnishing, installation, connection and testing of the microprocessor controlled, intelligent reporting fire alarm equipment required to form a complete, operative, coordinated system. It shall include, but not be limited to, alarm initiating devices, alarm notification appliances, Fire Alarm Control Panel (FACP), auxiliary control devices, annunciators, and wiring as specified herein.
- The fire alarm system shall comply with requirements of the latest edition of NFPA Standard 72 National Fire Alarm Code (NFPA 72) and the International Fire Code (IFC) and as supplemented by this specification. The system shall be electrically supervised and monitor the integrity of all conductors.
- 3. The FACP and peripheral devices shall be manufactured 100% by a single U.S. manufacturer (or division thereof).
- 4. The system shall be an active/interrogative type system where each addressable device is repetitively scanned, causing a signal to be transmitted to the main fire alarm control panel (FACP) indicating that the device and its associated circuit wiring is functional. Loss of this signal at the main FACP shall result in a trouble indication as specified hereinafter for the particular input.
- 5. The fire alarm system shall be manufactured by an ISO 9001 certified company and meet the requirements of BS EN9001: ANSI/ASQC Q9001-1994.
- The system and its components shall be Underwriters Laboratories, Inc. listed under the appropriate UL testing standard as listed herein for fire alarm applications and the installation shall follow the UL listing.
- 7. The installing company shall provide a full-time project supervisor dedicated to the supervision of the fire alarm installation.
 - i. The project supervisor shall have at least 5 years of experience installing addressable fire alarm systems.
 - ii. The project supervisor shall be on site at all times that the fire alarm system installation is in progress, including system testing.
 - iii. The project supervisor shall submit a resume of project experience and references to the Poudre School District for approval at the time of submission of bid for services.
 - iv. The installing company shall also provide distributor information documented in F at the time of submission of bid for services.
 - v. The installing company shall provide a unit price list for the addition or deletion of fire alarm system devices.
 - a. The unit price list will be utilized for any modifications/spare parts for the project and shall include overhead and profit.
- 8. The fire alarm system equipment distributor shall employ and provide a consistent NICET (minimum Level II Fire Alarm Technology) technician on site to guide the final checkout and to ensure the systems integrity.
 - i. The fire alarm system equipment distributor shall submit the resume, project experience and references of the planned primary technician to the Poudre School District at the time of bid submission.
 - ii. The fire alarm system equipment distributor shall also submit similar information for two back-up technicians.

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iii. The fire alarm system equipment distributor shall provide a unit price list of all components of the proposed fire alarm system for both additions and deletions. This unit price list will be utilized for any modifications/spare parts for the project.

B. SCOPE

1. The system shall be designed such that each signaling line circuit (SLC) is limited to only 80% of its total capacity at initial installation.

- i. The FACP shall be a Notifier NFS2-320 or NFS2-640 as required to support the quantity of devices and allowing for at least 20% expansion capability.
- ii. The FACP shall be located in the main entry.
- iii. The FACP shall include an integrated UDACT that sends fire alarm system signals to Central Security, the monitoring company. Provide two dedicated phone lines from the telephone panel to the FA. The UDACT shall transmit point contact ID to the monitoring company.
- iv. 120VAC Emergency Power shall be utilized for the FACP. Pull the emergency circuit to the FACP if the existing 120VAC circuit is not on emergency power. Remote power supplies are not required to be on emergency circuits. A 120V convenience outlet shall be installed near the FACP, and on the same wall as the FACP, if one is not already available for use of a laptop for FA Tech.
- v. The FACP shall monitor the sprinkler system flow and tampers.
- vi. A weatherproof notification appliance shall be mounted on the school exterior 10 feet above the fire department connection to indicate waterflow.
- vii. Smoke detectors spaced in compliance with NFPA 72 and manufacturer requirements shall be located in electrical rooms and at power supply locations.
- viii. Smoke detectors shall be provided for elevator recall and heat detectors shall be provided to actuate signal to shunt trip elevator controller power. Shunt trip power shall be supervised.
- ix. HVAC systems delivering over 2000cfm shall be shut down upon activation of respective duct detector or respective area smoke detector. The fire alarm system installer is responsible for coordinating the interconnection between the fire alarm system output module and the HVAC shutdown. Upon activation of a duct detector, a signal to shut down the respective HVAC unit shall take place while simultaneously sending a signal to the Building Automation System indicating the duct detector activation.
- x. Emergency lighting shall turn on upon activation of the fire alarm system. The fire alarm system installer is responsible for providing the interconnection between the fire alarm system output module and the lighting control panel. (Note: Some schools emergency lighting is not controlled with a lighting control panel and are on 24/7, so this would not apply.)
- xi. The kitchen Ansul system shall be monitored.
- xii. Wire shall match the type and color indicated and shall be secured with Caddy bridle rings and clamps. (283100 2.2)
- xiii. Ceiling mounted back boxes shall be installed using Caddy T-bars. (283100 2.2)
- xiv. Surface mounted or suspended mounted devices shall be dressed with Notifier device specific surface skirts. The FACP shall be dressed with the Notifier Trim Kit.
- xv. Gymnasium notification appliances shall be protected with protective covers.
- xvi. All equipment shall be clearly labeled with the device address on the base of the detector or manual pull station with type lettered labels with a text at a font size of at least 18 point.

- a. Smoke detectors and manual pull stations shall be labeled with the device address on the base of the detector or manual pull station.
- b. All notification appliances shall be labeled with the notification appliance circuit designation. The "end of line" shall be clearly labeled.
- c. Monitor and relay modules shall be labeled with the device address and function. (For example: L1M-23 Waterflow, L1M-50 Mag Door Release, etc.)
- d. Duct detectors shall be labeled with the device address on the base of the detector and the ceiling grid shall be labeled as duct detector, HVAC unit and device address.
- xvii. Test insulation integrity by performing megger testing on each circuit prior to device termination. All wire shall be meggered in the presence of the fire protection engineer prior to device termination. Submit megger readings for review upon completion of readings.

- xviii. Each device/circuit shall be initially tested in accordance with the requirements of NFPA 72 and the PSD testing form. The fire alarm system equipment vendor must provide an accurate panel download in electronic format to the design engineer at least two days prior to preliminary testing. The fire alarm system vendor shall complete a final form based on the test form template provided by the school district and shall be customized specific to the project prior to testing.
- xix. Horns and strobes shall silence simultaneously.
- xx. All power supplies monitor modules and control relays shall be located in an accessible, observable location (not above ceiling grid). Monitor modules and control relays shall be grouped in a mechanical room, storage closet or similar area approved by PSD prior to installation.
- xxi. Disable zones shall be programmed as follows: Z99 or Z210 shall silence notification appliances, bypass door and gate release and bypass HVAC shutdown.
- xxii. All power supplies shall be individually monitored for a trouble condition.
- xxiii. Duct detectors shall be located in accordance with NFPA 90 requirements and shall be accessible for maintenance. Duct detector power shall be resettable power from the Fire Alarm Control Panel.
 - a. Remote test switches shall be keyed and located no higher than 7ft above finished floor. Obtain PSD Electrical Dept. permission to mount the remote test switch higher than 7ft AFF. The test switch in this case shall be the magnet type (not keyed).
 - b. Remote test switches shall be located in common corridors or other public areas. Fore special circumstances obtain approval from the PSD Electrical Dept. for all remote test switch locations PRIOR to mounting.
 - c. Label all remote test switches with HVAC unit number and device address in a minimum text size of 18-point font.

C. Basic Performance:

- 1. Alarm, trouble and supervisory signals from all intelligent reporting devices shall be encoded on NFPA Style 4 (Class B) Signaling Line Circuits (SLC). Minimize T-taps in order to reduce trouble-shooting problems. Although Style 4 is permitted, follow the riser diagram as a guide for home runs back to the fire alarm control panel.
- 2. Initiation Device Circuits (IDC) shall be wired Class B (NFPA Style B) as part of an addressable device connected by the SLC Circuit.
- 3. Notification Appliance Circuits (NAC) shall be wired Class B (NFPA Style Y).

- 4. On Style 6 or 7 (Class A) configurations a single ground fault or open circuit on the system Signaling Line Circuit shall not cause system malfunction, loss of operating power or the ability to report an alarm.
- 5. Alarm signals arriving at the FACP shall not be lost following a primary power failure (or outage) until the alarm signal is processed and recorded.
- 6. NAC circuits shall be arranged such that there is a minimum of one circuit per floor of the building or smoke zone whichever is greater.
- 7. The fire alarm system vendor is responsible for all components and equipment required for a fully function fire alarm system that meets the intent of the contract documents and specifications.
- D. Basic System Functional Operation: When a fire alarm condition is detected and reported by one of the systems initiating devices, the following functions shall immediately occur:
 - 1. The system alarm LED on the system display shall flash.
 - 2. A local piezo electric signal in the control panel shall sound.
 - 3. A backlit LCD display shall indicate all information associated with the fire alarm condition, including the type of alarm point and its location within the protected premises.
 - i. Location descriptions for devices shall be reviewed and approved by the PSD Electrical Department.
 - 4. The FACP shall log the information associated each new fire alarm control panel condition, along with time and date of occurrence.

- 5. All system output programs assigned via control-by-event interlock programming to be activated by the particular point in alarm shall be executed, and the associated system outputs (notification appliances and/or relays) shall be activated.
- 6. Additional system functions shall be programmed as described on the contract documents Matrix Sequence of Operations table.
- 7. The audio portion of the system shall sound the proper audio signal (consisting of tone) to the appropriate zones.
- 8. Pass codes required for modifying all levels of the fire alarm control panel programming shall be given to the PSD electrician.
- E. Meetings: Project Dependent
- 1.02 Related Sections
- 1.03 Definitions
- 1.04 Submittals

A. General:

- 1. Four copies of all submittals shall be submitted to PSD consultant for review and PE stamp PRIOR to submittal to authority having jurisdiction.
- 2. Three copies of all submittals shall be submitted to the authority having jurisdiction for review and approval.
- All references to manufacturer's model numbers and other pertinent information herein is intended to establish minimum standards of performance, function and quality. ONLY NOTIFIER EQUIPMENT AS DESCRIBED WITHIN THE SPECIFICATIONS AND CONTRACT DOCUMENTS ISACCEPTABLE.
- **B.** Shop Drawings
- C. Manuals
- D. Software Modifications
- E. Certifications
- 1.05 Quality Assurance
- 1.06 Scheduling

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A. GUARANTEE

1. All work one (1) year from the date of acceptance. The full cost of maintenance, labor and materials required to correct any defect during this one-year period shall be included in the submittal bid.

B. POST CONTRACT MAINTENANCE

1. Complete maintenance and repair service for the fire alarm system shall be available from a factory trained authorized representative of the manufacturer of the major equipment for a period of five (5) years after expiration of the guarantee.

C. APPROVALS

- 1. The system shall have proper listing and/or approval from the following nationally recognized agencies: UL Underwriters Laboratories Inc.
- 2. The fire alarm control panel shall meet UL Standard 864 (Control Units) and UL Standard 1076 (Proprietary Burglar Alarm Systems). The Fire Alarm Control Panel and all transponders shall meet the modular listing requirements of Underwriters Laboratories, Inc. Each subassembly, including all printed circuits, shall include the appropriate UL modular label. This includes all printed circuit board assemblies, power supplies, and enclosure parts. Systems that do not include modular labels may require return to the factory for system upgrades and are not acceptable.
- 1.07 Delivery, Storage, and Handling
- 1.08 Regulatory Requirements

A. Smoke Detection:

- Smoke detectors shall be located throughout all common corridors. These smoke
 detectors shall control magnetic door hold opens. Door holders shall release upon general
 alarm. (Fully sprinklered schools shall only have smoke detectors within 5 feet of magnetic
 door holders.)
- 2. A smoke detector shall be located in the main electrical room.

- 3. Smoke detectors shall be located at all fire alarm remote power supply panels and fire alarm control panel locations unless the environment is unsuitable for smoke detectors in which case 135-degree fixed temperature heat detectors shall be utilized.
- 4. Smoke detectors shall be located in all computer classrooms.
- 5. Smoke detectors shall be located in the Library/Media Center
- 6. A smoke detector shall be located in each modular classroom.
- 7. Smoke detectors shall be located in elevator lobbies, elevator machine room, and the top of shaft for elevator control purposes as allowed by codes.
- 8. Smoke detectors shall be provided as required by the International Mechanical Code for fire/smoke dampers if applicable to the school.

B. Heat Detection:

- 1. Heat detectors shall be located in all code required areas, not suitable for smoke detection.
- Intelligent 135-degree rate of rise heat detectors shall be located in all chemical storage areas, science prep rooms and science classrooms. (Applicable only to Poudre HS, Wellington JH and CLPMS.)
- 3. Intelligent 135-degree rate of rise heat detectors shall be located cafeterias and gyms.
- 4. Intelligent 135-degree fixed temp heat detectors shall be located in kitchens and home economics classrooms.
- Heat detectors shall be located in all boiler rooms, chiller rooms, and other similar rooms.
 These detectors shall be intelligent\analog type device set to the highest fixed temperature.

- 6. Heat detectors shall be located in the elevator machine rooms and top of shaft for elevator shunt trip purposes only as required by state code. These detectors shall be intelligent\analog type device.
- 7. A heat detector shall be located in the kiln room. The detector shall be intelligent\analog type device set to the highest fixed temperature.
- 8. Duct Smoke Detection:
- 9. Duct smoke detectors shall be intelligent analog/addressable type, which shall report to the fire alarm system as a "supervisory" type device.
- 10. Duct smoke detectors shall be located in the return air ductwork of all HVAC units greater than 2,000cfm.
- 11. Duct smoke detectors shall be located in the supply and return ductwork of all HVAC units greater than 15,000 cfm.
- 12. Remote Test Switches for Duct Detectors:
 - i. Shall be keyed and located no higher than 7ft AFF. Obtain PSD Electrical Dept. permission to mount higher than 7ft AFF. The test switch in this case shall be the magnet type (not keyed).
 - ii. Shall be located in common corridors or other public areas. For special circumstances, obtain approval from the PSD Electrical Dept. for all locations prior to mounting.
 - iii. Label all switches with HVAC unit number and device address in a minimum text size of 18-point font.
- 13. Manual Fire Stations:
- 14. Manual stations shall be dual action type with a key (not allen wrench).
- 15. Manual pull stations shall be located at each main (double doors) building exit, gym, cafeteria, and Library/Media Center.
- 16. Manual pull stations shall be located at each kitchen, boiler and mechanical rooms with exterior building access.
- 17. Manual pull stations shall be provided at all portable modular classroom exits.
- 18. Manual stations shall be mounted with the operating mechanism at 48" above finished floor.
- 19. Manual pull stations in fully sprinklered schools shall be located in at least three locations: kitchen, kiln area and near the elevator. For existing schools protected with automatic sprinklers, the new pull stations shall be located to match existing pull station locations.

- 20. Audible, visual and audible/visual notification appliances:
- 21. Horns and horn/strobes shall be generally located to provide a minimum of 15db above ambient sound levels throughout building areas.
- 22. Horns in classrooms shall be set to lowest db setting and then adjusted up as required.
- 23. Horn/strobes shall be located in all mechanical rooms, and other high-noise environment areas.
- 24. Strobes shall be located in all common "public area" spaces, including corridors, classrooms, restrooms, open office areas, clinics, conference rooms and other areas where more than two-person occupancy would be expected.
- 25. Strobes shall be located in copy rooms, work rooms, storage rooms greater than 400 square feet, and storage rooms where high occupant normal usage levels are anticipated.
- 26. Strobes shall not be installed in single occupant offices.

C. Remote Monitoring:

1. Two new phone lines shall be provided to each FACP. The fire alarm system shall report point contact ID to the monitoring company.

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2. The fire alarm system shall connect to a local area network which will allow Poudre School District to observe fire alarm system status (no control) via a secured internet connection.

Part 2: Products 2.01 Manufacturers

- 1. FACP: Shall be based upon Notifier 3030
- 2. Substitutions: No Substitutions allowed

2.02 Products

A. GENERAL

- 1. All equipment and components shall be new, and the manufacturer's current model. The materials, appliances, equipment and devices shall be tested and listed by a nationally recognized approvals agency for use as part of a protective signaling system, meeting the National Fire Alarm Code.
- 2. All equipment and components shall be installed in strict compliance with manufacturers' recommendations. Consult the manufacturer's installation manuals for all wiring diagrams, schematics, physical equipment sizes, etc., before beginning systeminstallation.
- 3. All equipment shall be attached to walls and ceiling/floor assemblies and shall be held firmly in place (e.g., detectors shall not be supported solely by suspended ceilings). Fasteners and supports shall be adequate to support the required load.

B. CONDUIT AND WIRE

1. Conduit:

- i. Conduit shall be utilized for fire alarm system cable in all exposed or inaccessible areas and where subject to physical damage.
- ii. All conduit shall be installed by a licensed electrician.
- iii. All conduit shall be red, hot-galvanized, fire alarm EMT.
- iv. Cable must be separated from any open conductors of power, or Class 1 circuits, and shall not be placed in any conduit, junction box or raceway containing these conductors.
- v. Wiring for 24-volt DC control, alarm notification, emergency communication and similar power-limited auxiliary functions may be run in the same conduit as initiating and signaling line circuits. All circuits shall be provided with transient suppression devices and the system shall be designed to permit simultaneous operation of all circuits without interference or loss of signals.
- vi. Conduit shall not enter the fire alarm control panel, or any other remotely mounted control panel equipment or back boxes, except where conduit entry is specified by the FACP manufacturer.
- vii. Conduit shall be trade size 3/4-inch (19.1 mm) minimum.
- viii. Conduit shall be provided for all areas where wire would be exposed or unprotected.
- ix. Conduit shall be provided for all inaccessible spaces.
- x. Conduit edge protection shall be provided for all transitions from conduit to bridle rings.

xi. Conduit sleeves shall be used for all penetrations through fire rated or non-fire rated walls and partitions. Sleeves through fire rated walls shall be fire caulked on both sides of the wall and filled after cable installation.

2. Wire:

- i. All fire alarm system wiring shall be new.
- ii. Wire between buildings shall be listed for use in wet locations.
- iii. Provide transient surge suppression for all circuits that exit building structures.
- iv. FPLP (fire rated plenum cable) shall be utilized for the all fire alarm circuits.

- v. Wire colors shall be as follows:
- vi. NAC strobe wire shall be ORANGE(+)/Black(-). (FPLP jacket with orange tracer)
- vii. NAC speaker wire shall be BLUE(+)/Black(-). (FPLP jacket with blue tracer)
- viii. SLC wire shall be RED(+)/Black(-). (FPLP jacket with preprinted SLC)
- ix. IDC wire shall be BROWN(+)/Black(-). (FPLP jacket with brown tracer)
- x. HVAC wire shall be GREEN(+)/Black(-). (FPLP jacket with green tracer)
- xi. Network audio wire shall be YELLOW(+)/Black(-). (FPLP jacket with yellow tracer)
- xii. All 120VAC shall be run in conduit and THHN shall meet NEC color standards.
- xiii. Wire size shall be as follows:
- xiv. NAC strobe wire shall be 14AWG.
- xv. NAC speaker wire shall be 14AWG TW/SH.
- xvi. SLC wire shall be 16AWG.
- xvii.IDC wire shall be 16AWG
- xviii. HVAC wire shall be 16AWG.
- xix. Network audio shall be 16AWG.
- xx. All 120VAC shall meet NEC standards.
- xxi. Wire runs may not be spliced. Pull continuous lengths from device terminal to device terminal in order to maintain the integrity of the electrically supervised system.
- xxii. Fire alarm system wiring shall be run in a neat and workmanship like manner. Cable shall be parallel or at right angles to building lines.
- xxiii. Wiring shall be in accordance with local, state and national codes and as recommended by the manufacturer of the fire alarm system. Number and size of conductors shall be as recommended by the fire alarm system manufacturer, but not less than 16 AWG (1.02 mm) for Initiating Device Circuits and Signaling Line Circuits, and 14 AWG (1.63 mm) for Notification Appliance Circuits.
- xxiv. All wire and cable shall be listed and/or approved by a recognized testing agency for use with a protective signaling system.
- xxv. All wire shall be clearly designated with typed labels at each junction box and at the FACP.
- xxvi. Wire and cable not installed in conduit shall have a fire resistance rating suitable for the installation.
- xxvii. Wire and cable not installed in conduit shall be securely fastened to a structural member at intervals not exceeding NFPA 70 requirements.
- xxviii. An additional 4 feet of cable shall be looped at each device location and independently supported to the structure for future minor relocations.
- xxix. On structural steel use Caddy beam clamps # BC, BC200 or spring steel clips Caddy # 2FMP28, M24, M58 or M912.
- xxx. Do not use power fasteners. Only screws and anchors are acceptable.
- xxxi. Any substitutions shall be submitted to the engineer for approval prior to installation. Substitutions shall be of equal or greater than in nature.
- xxxii. All wire shall be supported with Caddy Beam clamps & Threaded Bridle Rings. Bridle Ring size is dependent upon the number of conductors requiring support. Any substitutions shall be of equal or greater than innature.
- xxxiii. Caddy Threaded Bridle Ring Cat.# 4BRT20: 1 1/4" inside diameter
- xxxiv. Caddy Threaded Bridle Ring Cat.# 4BRT32: 2" inside diameter
- xxxv. Caddy Threaded Bridle Ring Cat.# 4BRT64: 4" inside diameter

- xxxvi. Wire ties shall be used at the end of wire runs only. Any exceptions shall be approved by the authority having jurisdiction (AHJ) and the PSD-Electrician in writing. xxxvii. Wiring used for the multiplex communication circuit (SLC) shall be twisted and unshielded and support a minimum wiring distance of 12,500 feet. The design of the system shall permit use of IDC and NAC wiring in the same conduit with the SLC communication circuit.
- xxxviii. All field wiring shall be electrically supervised for open circuit and ground fault. xxxix. The fire alarm control panel shall be capable of t-tapping Class B (NFPA Style 4) Signaling Line Circuits (SLCs). Systems that do not allow or have restrictions in, for example, the number of t-taps, length of t-taps etc., are not acceptable. T-tapping is permitted only as documented on the riser diagram for the specific project.
- xl. Each wire shall be labeled at each junction box and termination. The wire label shall be securely fastened to the circuit and shall indicate in minimum 18-point font typed lettering the circuit type (SLC, IDC, NAC, Power, etc.) in addition to the circuit number matching the as-built documentation. (For example: SLC Loop 1, IDC kitchen hood, IDC waterflow, NAC 1-4 or Power 3.)
- xli. All wire shall be red with a designated stripe to indicate circuit type. xlii. No wire may be run in the flute of the deck.
- xliii. Wire may not be secured to other wire. Wire must be secured in accordance with NEC 70 and the specifications.
- xliv.Terminal Boxes, Junction Boxes and Cabinets: All boxes and cabinets shall be UL listed for their use and purpose. All box knock outs shall have plastic edge protection. (SEA PCR50 or equivalent or plenum rated as required.)
- xlv. Ceiling mounted electrical boxes shall be secured with Caddy T-bar Hangars Cat. # 512HD.
- xlvi. Initiating circuits shall be arranged to serve like categories (manual, smoke, waterflow). Mixed category circuitry shall not be permitted except on signaling line circuits connected to intelligent reporting devices.
- xlvii. The fire alarm control panel shall be connected to a separate dedicated emergency branch circuit, maximum 20 amperes. This circuit shall be labeled at the main power distribution panel as FIRE ALARM. Fire alarm control panel primary power wiring shall be 12 AWG. The control panel cabinet shall be grounded securely to either a cold-water pipe or grounding rod.

3. MAIN FIRE ALARM CONTROL PANEL:

- i. The main FACP Central Console shall be a NOTIFIER Model NFS2-320 or NFS2-640 and shall contain a microprocessor based Central Processing Unit (CPU). The CPU shall communicate with and control the following types of equipment used to make up the system: intelligent addressable smoke and thermal (heat) detectors, addressable modules, control circuits, and notification appliance circuits, local and remote operator terminals, printers, annunciators, and other system-controlled devices.
- ii. The FACP shall be contained in only Notifier SBB-D4 Cabinets. There shall be a minimum of 20% spare expansion capacity in the cabinet. Additional cabinets may be utilized to meet the expansion capacity requirement.
- iii. In conjunction with intelligent Loop Control Modules and Loop Expander Modules, the main FACP shall perform the following functions:
- iv. Supervise and monitor all intelligent addressable detectors and monitor modules connected to the system for normal, trouble and alarm conditions.

- v. Supervise all initiating signaling and notification circuits throughout the facility by way of connection to addressable monitor and control modules.
- vi. Detect the activation of any initiating device and the location of the alarm condition.

 Operate all notification appliances and auxiliary devices as programmed. In the event

- of CPU failure, all SLC loop modules shall fallback to degrade mode. Such degrade mode shall treat the corresponding SLC loop control modules and associated detection devices as conventional two-wire operation. Any activation of a detector in this mode shall automatically activate associated Notification Appliance Circuits.
- vii. Visually and audibly annunciate any trouble, supervisory, security or alarm condition on operator's terminals, panel display, and annunciators.
- viii. When a fire alarm condition is detected and reported by one of the systems initiating devices or appliances, the following functions shall immediately occur:
- ix. The system alarm LED shall flash.
- x. A local piezo-electric audible device in the control panel shall sound a distinctive signal.
- xi. The 640-character backlit LCD display shall indicate all information associated with the fire alarm condition, including the type of alarm point and its location within the protected premises.
- xii. Printing and history storage equipment shall log and print the event information along with a time and date stamp.
- xiii. All system outputs assigned via preprogrammed equations for a particular point in alarm shall be executed, and the associated system outputs (alarm notification appliances and/or relays) shall be activated.
- xiv. When a trouble condition is detected and reported by one of the systems initiating devices or appliances, the following functions shall immediately occur:
- xv. The system trouble LED shall flash.
- xvi. A local piezo-electric audible device in the control panel shall sound a distinctive signal.
- xvii. The 640-character backlit LCD display shall indicate all information associated with the trouble condition, including the type of trouble point and its location within the protected premises.
- xviii. Printing and history storage equipment shall log and print the event information along with a time and date stamp.
- xix. All system outputs assigned via preprogrammed equations for a particular point in trouble shall be executed, and the associated system outputs (trouble notification appliances and/or relays) shall be activated.
- xx. When a supervisory condition is detected and reported by one of the systems initiating devices or appliances, the following functions shall immediately occur:
- xxi. The system trouble LED shall flash.
- xxii. A local piezo-electric audible device in the control panel shall sound a distinctive signal.
- xxiii. The 640-character backlit LCD display shall indicate all information associated with the supervisory condition, including the type of trouble point and its location within the protected premises.
- xxiv. Printing and history storage equipment shall log and print the event information along with a time and date stamp.

- xxv. All system outputs assigned via preprogrammed equations for a particular point in trouble shall be executed, and the associated system outputs (notification appliances and/or relays) shall be activated.
- xxvi. When a pre-alarm condition is detected and reported by one of the systems initiating devices or appliances, the following functions shall immediately occur:
- xxvii. The system pre-alarm LED shall flash.
- xxviii. A local piezo-electric audible device in the control panel shall sound a distinctive signal.
- xxix. The 640-character backlit LCD display shall indicate all information associated with the fire alarm condition, including the type of alarm point and its location within the protected premises.
- xxx. Printing and history storage equipment shall log and print the event information along with a time and date stamp.

xxxi. All system outputs assigned via preprogrammed equations for a particular point in alarm shall be executed, and the associated system outputs (alarm notification appliances and/or relays) shall be activated.

4. Operator Control:

5. Acknowledge Switch:

- i. Activation of the control panel acknowledge switch in response to new alarms and/or troubles shall silence the local panel piezo electric signal and change the alarm and trouble LEDs from flashing mode to steady-ON mode. If multiple alarm or trouble conditions exist, depression of this switch shall advance the LCD display to the next alarm or trouble condition. In addition, the FACP shall support Block Acknowledge to allow multiple trouble conditions to be acknowledged with a single depression of this switch.
- ii. Depression of the Acknowledge switch shall also silence all remote annunciator piezo sounders.

6. Signal Silence Switch:

i. Depression of the Signal Silence switch shall cause all programmed alarm notification appliances and relays to return to the normal condition. The selection of notification circuits and relays that are silence able by this switch shall be fully field programmable within the confines of all applicable standards. The FACP software shall include silence inhibit and auto-silence timers.

7. Drill Switch:

i. Depression of the Drill switch shall activate all programmed notification appliance circuits. The drill function shall latch until the panel is silenced or reset.

8. System Reset Switch:

i. Depression of the System Reset switch shall cause all electronically latched initiating devices to return to their normal condition. Initiating devices shall re-report if active. Active notification appliance circuits shall not silence upon Reset. Systems that deactivate and subsequently re-activate notification appliance circuits shall not be considered equal. All programmed Control-By-Event equations shall be re-evaluated after the reset sequence is complete if the initiating condition has cleared. Non-latching trouble conditions shall not clear and re-report upon reset.

9. Lamp Test:

i. The Lamp Test switch shall activate all local system LEDs, light each segment of the liquid crystal display and display the panel software revision for service personal.

10. Scroll Display Keys:

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i. There shall be Scroll Display keys for FIRE ALARM, SECURITY, SUPERVISORY, TROUBLE, and OTHER EVENTS. Depression of the Scroll Display key shall display the next event in the selected queue allowing the operator to view events by type.

11. System Capacity and General Operation:

- i. The control panel shall be capable of expansion up to 318 analog/addressable detectors and 318 monitor or control modules (636 addressable devices).
- ii. The Fire Alarm Control Panel shall include a full featured operator interface control and annunciation panel that shall include a backlit 640-character liquid crystal display, individual, color coded system status LEDs, and a QWERTY style alphanumeric keypad for the field programming and control of the fire alarm system. Said LCD shall also support graphic bit maps capable of displaying the company name and logo of either the owner or installing company.
- iii. All programming or editing of the existing program in the system shall be achieved without special equipment and without interrupting the alarm monitoring functions of the fire alarm control panel.
- iv. The FACP shall provide the following features: Maintenance Alert to warn of excessive detector dirt or dust. Detector sensitivity read/test information and System Status Reports to display or print. Smoke Detector Alarm Verification. Pre-signal, meeting NFPA-72 requirements. Rapid manual station reporting (under 3 seconds). Periodic Detector Test conducted automatically by the control panel every two

- hours. March time, temporal (ANSI Cadence) Walk Test will check for two detectors set to same address.
- v. The main CPU shall contain Form-C relay contacts rated at 2.0 amps/30VDC for the following: Alarm, Trouble, Supervisory.
- vi. The CPU shall contain four Class B or A (NFPA Style Y or Z) programmable Notification Appliance Circuits.
- vii. AWACS (trademark) Advanced warning addressable combustion sensing. AWACS represents a set of software algorithms. This feature provides more rapid detection with a much greater degree to stability. These complex algorithms require many calculations on each reading of each detector made possible by the very high-speed microcomputer.
- viii. Cooperating Multi –Detector Sensing. An AWACS feature is the ability of a smoke sensor to consider readings from nearby sensors in making alarm or pre-alarm decisions. Without statistical sacrifice in the ability to resist false alarms, it allows a sensor to increase its sensitivity to actual smoke by a factor of almost two to one.

12. Central Processing Unit:

- The Central Processing Unit shall communicate with, monitor, and control all other modules within the control panel. Removal, disconnection or failure of any control panel module shall be detected and reported to the system display by the Central Processing Unit.
- ii. The Central Processing Unit shall contain and execute all control-by-event (including Boolean functions including but not limited to AND, OR, NOT, ANYx, and CROSSZONE) programs for specific action to be taken if an alarm condition is detected by the system. Such control-by-event programs shall be held in non-volatile programmable memory and shall not be lost with system primary and secondary power failure.

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- iii. The Central Processing Unit shall also provide a real-time clock for time annotation, to the second, of all system events. The time-of-day and date shall not be lost if system primary and secondary power supplies fail.
- iv. The CPU shall be capable of being programmed on site without requiring the use of any external programming equipment. Systems that require the use of external programmers or change of EPROMs are not acceptable.
- v. Consistent with UL864 standards, the CPU and associated equipment are to be protected so that voltage surges or line transients will not affect them.
- vi. Each peripheral device connected to the CPU shall be continuously scanned for proper operation. Data transmissions between the CPU and peripheral devices shall be reliable and error free. The transmission scheme used shall employ dual transmission or other equivalent error checking techniques.
- vii. The CPU shall provide an EIA-232 interface between the fire alarm control panel and the UL Listed Electronic Data Processing (EDP) peripherals.
- viii. The CPU shall provide two EIA-485 ports for the serial connection to annunciation and control subsystem components.
- ix. The EIA-232 serial output circuit shall be optically isolated to assure protection from earth ground.
- x. The CPU shall provide one high-speed serial connection for support of network communication modules.
- xi. The CPU shall provide double pole relays for FIRE ALARM, SYSTEM TROUBLE, SUPERVISORY, and SECURITY. The SUPERVISORY and SECURITY relays shall provide selection for additional FIRE ALARM contacts.

13. Display:

- i. The system display shall provide all the controls and indicators used by the system operator and may also be used to program all system operational parameters.
- ii. The display assembly shall contain, and display as required, custom alphanumeric labels for all intelligent detectors, addressable modules, and software zones.
- iii. The system display shall provide a 640-character backlit alphanumeric Liquid Crystal Display (LCD). It shall also provide ten Light-Emitting-Diodes (LEDs), which indicate

- the status of the following system parameters: AC POWER, FIRE ALARM, PREALARM, SECURITY, SUPERVISORY, SYSTEM TROUBLE, OTHER EVENT, SIGNALS SILENCED, POINT DISABLED, and CPU FAILURE.
- iv. The system display shall provide a QWERTY style keypad with control capability to command all system functions, entry of any alphabetic or numeric information, and field programming. Two different password levels with up to ten (one Master and nine User) passwords shall be accessible through the display interface assembly to prevent unauthorized system control or programming.
- v. The system display shall include the following operator control switches: ACKNOWLEDGE, SIGNAL SILENCE, RESET, DRILL, and LAMP TEST. Additionally, the display interface shall allow scrolling of events by event type including, FIRE ALARM, SECURITY, SUPERVISORY, TROUBLE, and OTHER EVENTS. A PRINT SCREEN button shall be provided for printing the event currently displayed on the 640-character LCD.

14. Loop (Signaling Line Circuit) Control Module:

 The Loop Control Module shall monitor and control a minimum of 318 intelligent addressable devices. This includes 159 intelligent detectors (Ionization, Photoelectric, or Thermal) and 159 monitor or control modules.

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- ii. The Loop Control Module shall contain its own microprocessor and shall be capable of operating in a local/degrade mode (any addressable device input shall be capable of activating any or all addressable device outputs) in the unlikely event of a failure in the main CPU.
- iii. The Loop Control Module shall provide power and communicate with all intelligent addressable detectors and modules on a single pair of wires. This SLC Loop shall be capable of operating as a NFPA Style 6 (Class B) circuit.
- iv. The SLC interface board shall be able to drive an NFPA Style 6 twisted unshielded circuit up to 12,500 feet in length. The SLC Interface shall also be capable of driving an NFPA Style 6, no twist, no shield circuit for limited distances determined by the manufacturer. In addition, SLC wiring shall meet the listing requirements for it to exit the building or structure. "T"-tapping shall be allowed in either case.
- v. The SLC interface board shall receive analog or digital information from all intelligent detectors and shall process this information to determine whether normal, alarm, or trouble conditions exist for that particular device. Each SLC Loop shall be isolated and equipped to annunciate an Earth Fault condition. The SLC interface board software shall include software to automatically maintain the detector's desired sensitivity level by adjusting for the effects of environmental factors, including the accumulation of dust in each detector. The analog information may also be used for automatic detector testing and the automatic determination of detector maintenance requirements.

15. Enclosures:

- i. The control panel shall be housed in a UL-listed cabinet suitable for surface or semiflush mounting. The cabinet and front shall be corrosion protected, given a rustresistant prime coat, and manufacturer's standard finish.
- ii. The back box and door shall be constructed of 0.060 steel with provisions for electrical conduit connections into the sides and top.
- iii. The door shall provide a key lock and include a transparent opening for viewing all indicators. For convenience, the door shall have the ability to be hinged on either the right or left-hand side.
- iv. The control unit shall be modular in structure for ease of installation, maintenance, and future expansion.

16. System Circuit Supervision:

i. The FACP shall supervise all circuits to intelligent devices, transponders, annunciators and peripheral equipment and annunciate loss of communication with these devices. The CPU shall continuously scan above devices for proper system operation and upon loss of response from a device shall sound an audible trouble, indicate which

- device or devices are not responding and print the information in the history buffer and on the printer.
- ii. Transponders that lose communication with the CPU shall sound an audible trouble and light an LED indicating loss of communications.
- iii. Sprinkler system valves, standpipe control valves, PIV, and main gate valves shall be supervised for off-normal position.
- iv. All speaker and emergency phone circuits shall be supervised for opens and shorts. Each transponder speaker and emergency phone circuit shall have an individual ON/OFF indication (green LED).

17. Field Wiring Terminal Blocks:

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i. All wiring terminal blocks shall be the plug-in/removable type and shall be capable of terminating up to 12 AWG wire. Terminal blocks that are permanently fixed to the PC board are not acceptable.

18. Remote Transmissions:

- i. Provide local energy or polarity reversal or trip circuits as required.
- ii. The system shall be capable of operating a polarity reversal or local energy or fire alarm transmitter for automatically transmitting fire information to the fire department.
- iii. Provide capability and equipment for transmission of zone alarm and trouble signals to remote operator's terminals, system printers and annunciators.
- iv. Transmitters shall be compatible with the systems and equipment they are connected to such as timing, operation and other required features.

19. System Expansion:

i. Design the main FACP and required components so that the system can be expanded in the future (to include the addition of twenty percent more circuits or zones) without disruption or replacement of the existing control panel. This shall include hardware capacity, software capacity and cabinet space.

20. Field Programming:

- i. The system shall be programmable, configurable and expandable in the field without the need for special tools, laptop computers, or other electronic interface equipment. There shall be no firmware changes required to field modify the system time, point information, equations, or annunciator programming/information.
- ii. It shall be possible to program through the standard FACP keyboard all system functions.
- iii. All field defined programs shall be stored in non-volatile memory.
- iv. Two levels of password protection shall be provided in addition to a key-lock cabinet. One level shall be used for status level changes such as point/zone disable or manual on/off commands (Building Manager). A second (higher-level) shall be used for actual change of the life safety program (installer). These passwords shall be five (5) digits at a minimum. Upon entry of an invalid password for the third time within a one-minute time period an encrypted number shall be displayed. This number can be used as a reference for determining a forgotten password.
- v. The system programming shall be "backed" up via an upload/download program and stored on compatible removable media. A system back-up disk shall be completed and given in duplicate to the building owner and/or operator upon completion of the final inspection. The program that performs this function shall be "non-proprietary", in that, it shall be possible to forward it to the building owner/operator upon his or her request.
- vi. The installer's field programming and hardware shall be functionally tested on a computer against known parameters/norms which are established by the FACP manufacturer. A software program shall test Input-to-Output correlations, device Type ID associations, point associations, time equations, etc. This test shall be performed on an IBM-compatible PC with a verification software package. A report shall be generated of the test results and two copies turned in to the engineer(s) on record.

21. Specific System Operations:

i. Smoke Detector Sensitivity Adjust: Means shall be provided for adjusting the sensitivity of any or all analog intelligent smoke detectors in the system from the

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- system keypad or from the keyboard of the video terminal. Sensitivity range shall be within the allowed UL window.
- ii. Alarm Verification: Each of the Intelligent Addressable Smoke Detectors in the system may be independently selected and enabled to be an alarm verified detector. The alarm verification function shall be programmable from 5 to 50 seconds and each detector shall be able to be selected for verification during the field programming of the system or any time after system turn-on. Alarm verification shall not require any additional hardware to be added to the control panel. The FACP shall keep a count of the number of times that each detector has entered the verification cycle. These counters may be displayed and reset by the proper operator commands.

22. System Point Operations:

- i. Any addressable device in the system shall have the capability to be enabled or disabled through the system keypad or video terminal.
- 23. System output points shall be capable of being turned on or off from the system keypad or the video terminal.
 - i. Point Read: The system shall be able to display the following point status diagnostic functions without the need for peripheral equipment. Each point shall be annunciated for the parameters listed:
 - a. Device Status.
 - b. Device Type.
 - c. Custom Device Label.
 - d. Software Zone Label.
 - e. Device Zone Assignments.
 - f. Analog Detector Sensitivity.
 - g. All Program Parameters.
 - ii. System Status Reports: Upon command from an operator of the system, a status report will be generated and printed, listing all system statuses:
 - iii. System History Recording and Reporting: The fire alarm control panel shall contain a history buffer that will be capable of storing up to 4000 system events. Each of these events will be stored, with time and date stamp, until an operator requests that the contents be either displayed or printed. The contents of the history buffer may be manually reviewed; one event at a time, and the actual number of activations may also be displayed and or printed. History events shall include all alarms, troubles, operator actions, and programming entries.
 - iv. The history buffer shall use non-volatile memory. Systems which use volatile memory for history storage are not acceptable.
 - v. Automatic Detector Maintenance Alert: The fire alarm control panel shall automatically interrogate each intelligent system detector and shall analyze the detector responses over a period of time.
 - vi. If any intelligent detector in the system responds with a reading that is below or above normal limits, then the system will enter the trouble mode, and the particular Intelligent Detector will be annunciated on the system display and printed on the optional system printer. This feature shall in no way inhibit the receipt of alarm conditions in the system, nor shall it require any special hardware, special tools or computer expertise to perform.
 - vii. The system shall include the ability (programmable) to indicate a "pre-alarm" condition. This will be used to alert maintenance personal when a detector is at 80% of its alarm threshold in a 60 second period.

- ix. Remote power supply expands Synchronized NAC outputs by 4 circuits (supported by 8 amps) or can provide 4 amps continuous.
- x. Notifier model FCM-1 mounted in FCPS-24S6 for addressable control from SLC loop.
- xi. The power supply shall include back up batteries and shall be powered by 120VAC dedicated emergency power circuit.

C. SYSTEM COMPONENTS

- 1. Waterflow Indicator:
 - i. Waterflow Switches shall be an integral, mechanical, non-coded, non-accumulative retard type.
 - ii. Waterflow Switches shall have an alarm transmission delay time which is conveniently adjustable from 0 to 60 seconds. Initial settings shall be 30-45 seconds.
 - iii. All waterflow switches shall come from a single manufacturer and series.
 - iv. Waterflow switches shall be provided and connected.
 - v. Where possible, locate waterflow switches a minimum of one (1) foot from a fitting which changes the direction of the flow and a minimum of three (3) feet from a valve.
 - vi. Sprinkler and Standpipe Valve Supervisory Switches:
 - vii. Each sprinkler system water supply control valve riser, zone control valve, and standpipe system riser control valve shall be equipped with a supervisory switch. Standpipe hose valves, and test and drain valves shall not be equipped with supervisory switches.
 - viii. PIV (post indicator valve) or main gate valves shall be equipped with a supervisory switch.
 - ix. The switch shall be mounted so as not to interfere with the normal operation of the valve and adjusted to operate within two revolutions toward the closed position of the valve control, or when the stem has moved no more than one-fifth of the distance from its normal position.
 - x. The supervisory switch shall be contained in a weatherproof aluminum housing, which shall provide a 3/4-inch (19 mm) conduit entrance and incorporate the necessary facilities for attachment to the valves.
 - xi. The switch housing shall be finished in red baked enamel.
 - xii. The entire installed assembly shall be tamper proof and arranged to cause a switch operation if the housing cover is removed, or if the unit is removed from its mounting.
 - xiii. Valve supervisory switches shall be provided and connected.
 - xiv. This unit shall provide for each zone: alarm indications, using a red alarm and yellow trouble long-life LEDs and control switches for the control of fire alarm control panel functions. The annunciator will also have an ON-LINE LED, local piezo electric signal, local acknowledge/lamp test switch, and custom slide-in zone/function identification labels.
 - xv. Switches shall be available for remote annunciation and control of output points in the system, system acknowledge, telephone zone select, speaker select, global signal silence, and global system reset within the confines of all applicable standards.
- 2. Alphanumeric LCD Type Annunciator:

- i. The alphanumeric display annunciator shall be a supervised, remotely located backlit LCD display containing a minimum of eighty (80) characters for alarm annunciation in clear English text.
- ii. The LCD annunciator shall display all alarm and trouble conditions in the system.
- iii. An audible indication of alarm shall be integral to the alphanumeric display.
- iv. The display shall be UL listed for fire alarm application.
- v. It shall be possible to connect up to 32 LCD displays and be capable of wiring distances up to 6,000 feet from the control panel.
- vi. The annunciator shall connect to a separate, dedicated "terminal mode" EIA-485 interface. This is a two-wire loop connection and shall be capable of distances to 6,000 feet. Each terminal mode LCD display shall mimic the main control panel.

- vii. The system shall allow a minimum of 32 terminal mode LCD annunciators. Up to 10 LCD annunciators shall be capable of the following system functions: Acknowledge, Signal Silence and Reset, which shall be protected from unauthorized use by a keyswitch. The keyswitch will be part of a separate, lockable housingenclosure.
- viii. All interfaces and associated equipment are to be protected so that they will not be affected by voltage surges or line transients consistent with UL standard 864.
- ix. Universal Digital Alarm Communicator Transmitter (UDACT). The UDACT is an interface for communicating digital information between a fire alarm control panel and an UL-Listed central station.
- x. The UDACT shall be compact in size, mounting in a standard module position of the fire alarm control cabinet. Optionally, the UDACT shall have the ability for remote mounting, up to 6,000 feet from the fire alarm control panel. The wire connections between the UDACT and the control panel shall be supervised with one pair for power and one pair for multiplexed communication of overall system status. Systems that utilize relay contact closures are not acceptable.
- xi. The UDACT shall include connections for dual telephone lines (with voltage detect), per UL/NFPA/FCC requirements. It shall include the ability for split reporting of panel events up to three different telephone numbers.
- xii. The UDACT shall be completely field programmable from a built-in keypad and 4-character red, seven segment display.
- xiii. The UDACT shall be capable of transmitting events in at least 15 different formats. This ensures compatibility with existing and future transmission formats.
- xiv. Communication shall include vital system status such as:
 - a. Independent Zone (Alarm, trouble, non-alarm, supervisory)
 - b. Independent Addressable Device Status
 - c. AC (Mains) Power Loss
 - d. Low Battery and Earth Fault
 - e. System Off Normal
 - f. 12- and 24-Hour Test Signal
 - g. Abnormal Test Signal (per UL requirements)
 - h. EIA-485 Communications Failure
 - i. Phone Line Failure
- xv. The UDACT shall support independent zone/point reporting when used in the Contact ID format. In this format the UDACT shall support transmission of up to 2,040 points. This enables the central station to have exact details concerning the origin of the fire or response emergency.

- xvi. The UDACT shall be programmed and pre-tested for Point ID communication with: Central Security, 1-800-441-3662, contact Sandy Boyce.
- xvii. Coordinate off-line times with Central Security during testing.
- xviii. Place the system on-line during the Fire Department Dispatch test maximum time allowed for Fire Department Dispatch to be notified of an alarm condition is three minutes.
- 3. Field Wiring Terminal Blocks:
 - For ease of service all panel I/O wiring terminal blocks shall be removable, plug-in types and have sufficient capacity for #18 to #12 AWG wire. Terminal blocks that are permanently fixed are not acceptable.
 - ii. Programmable Electronic Sounders:
 - a. Electronic sounders shall operate on 24 VDC nominal.
 - b. Electronic sounders shall be field programmable without the use of special tools, at a sound level of at least 90 dBA measured at 10 feet from the device.
 - c. Shall be flush or surface mounted.
- 4. Multi-Candela Strobe Lights (Notifier SW series, SCW series for ceiling applications)
 - i. Shall operate on 24 VDC nominal.
 - ii. Shall meet the requirements of the ADA (Americans with Disabilities Act) as well as UL Standard 1971, shall be fully synchronized, and shall meet the following criteria:
 - iii. The maximum pulse duration shall be 2/10 of one second.

- iv. Strobe intensity shall meet the requirements of UL 1971.
- v. The flash rate shall meet the requirements of UL 1971.
- vi. Notification appliances located in gymnasiums shall be protected with a STI horn/strobe damage stopper.
- vii. All strobes shall be synchronized.
- viii. All strobes shall be red.
- ix. Multi-Candela audible/visual combination devices (Notifier P2W series, PC2W series for ceiling applications)
- x. Shall meet the applicable requirement for audibility.
- xi. Shall meet the requirements for visibility.
- xii. All audible/visual combination devices shall be red.

5. Electromagnetic Door Holders:

- i. Electromagnetic door holder power shall be 120VAC.
- ii. Electromagnetic door holders shall release upon loss of 120VAC power to the FACP.
- iii. Power for door holders shall be provided as part of the base bid.
- iv. Assure door closure upon release of an installed electromagnetic door holder. Include the replacement of any necessary door hardware in the bid section associated with the addition of door holders.

6. Circuit Protection:

- i. All wire exiting the main building shall be protected with UL listed circuit protection.
- ii. All wire entering a remote building shall be protected with UL listed circuit protection.

7. Remote Test Switches for Duct Detectors:

i. Shall be keyed and located no higher than 7ft AFF. Obtain PSD Electrical Dept. permission to mount higher than 7ft AFF. The test switch in this case shall be the magnet type (not keyed).

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- Shall be located in common corridors or other public areas. For special circumstances, obtain approval from the PSD Electrical Dept. for all locations prior to mounting.
- iii. Label all switches with HVAC unit number and device address in a minimum text size of 18-point font.

D. SYSTEM COMPONENTS - ADDRESSABLE DEVICES

1. Addressable Devices – General:

- Addressable devices shall use simple to install and maintain decade, decimal address switches. Devices shall be capable of being set to an address in a range of 001 to 159.
- ii. Addressable devices, which use a binary-coded address setting method, such as a DIP-switch, are not an allowable substitute.
- iii. Detectors shall be intelligent (analog) and addressable and shall connect with two wires to the fire alarm control panel Signaling Line Circuits.
- iv. Addressable smoke and thermal detectors shall provide dual alarm and power/polling LEDs. Both LEDs shall flash green under normal conditions, indicating that the detector is operational and in regular communication with the control panel, and both LEDs shall be placed into steady red illumination by the control panel, indicating that an alarm condition has been detected. If required, the LED flash shall have the ability to be removed from the system program. An output connection shall also be provided in the base to connect an external remote alarm LED.
- v. The fire alarm control panel shall permit detector sensitivity adjustment through field programming of the system. The panel on a time-of-day basis shall automatically adjust sensitivity.
- vi. Using software in the FACP, detectors shall automatically compensate for dust accumulation and other slow environmental changes that may affect their performance. The detectors shall be listed by UL as meeting the calibrated sensitivity test requirements of NFPA Standard 72, Chapter 7.

- vii. The detectors shall be ceiling-mount and shall include a separate twist-lock base with tamper proof feature. Bases shall include an option for a sounder base with a built-in (local) sounder rated at 85 DBA minimum, a relay base and an isolator base designed for Style 7 applications.
- viii. The detectors shall provide a test means whereby they will simulate an alarm condition and report that condition to the control panel. Such a test may be initiated at the detector itself (by activating a magnetic switch) or initiated remotely on command from the control panel.
- ix. Detectors shall also store an internal identifying type code that the control panel shall use to identify the type of device (ION, PHOTO, THERMAL).
- x. Detectors will operate in an analog fashion, where the detector simply measures its designed environment variable and transmits an analog value to the FACP based on real-time measured values. The FACP software, not the detector, shall make the alarm/normal decision, thereby allowing the sensitivity of each detector to be set in the FACP program and allowing the system operator to view the current analog value of each detector.
- xi. Addressable devices shall store an internal identifying code that the control panel shall use to identify the type of device.

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- xii. A magnetic test switch shall be provided to test detectors and modules. Detectors shall report an indication of an analog value reaching 100% of the alarm threshold.
- xiii. A magnetic test switch shall be provided to test detectors and modules. Detectors shall report an indication of an analog value reaching 100% of the alarm threshold.
- xiv. Addressable modules shall mount in a 4-inch square (101.6 mm square), 2-1/8 inch (54 mm) deep electrical box. An optional surface mount Lexan enclosure shall be available.

2. Addressable Manual Fire Alarm Box (manual station):

- i. Addressable manual fire alarm boxes shall, on command from the control panel, send data to the panel representing the state of the manual switch and the addressable communication module status. They shall use a key operated test-reset lock and shall be designed so that after actual emergency operation, they cannot be restored to normal use except by the use of a key.
- ii. All operated stations shall have a positive, visual indication of operation and utilize a key type reset.
- iii. Manual fire alarm boxes shall be constructed of Lexan with clearly visible operating instructions provided on the cover. The word FIRE shall appear on the front of the stations in raised letters, 1.75 inches (44 mm) or larger.

3. Intelligent Photoelectric Smoke Detector:

i. The detectors shall use the photoelectric (light-scattering) principal to measure smoke density and shall, on command from the control panel, send data to the panel representing the analog level of smoke density.

4. Intelligent Thermal Detectors:

Thermal detectors shall be intelligent addressable devices rated at 135 degrees
 Fahrenheit (58 degrees Celsius) and have a rate-of-rise element rated at 15 degrees F
 (9.4 degrees C) per minute. It shall connect via two wires to the fire alarm control
 panel signaling line circuit.

5. Intelligent Duct Smoke Detector:

- The smoke detector housing shall accommodate or an intelligent photoelectric detector, of that provides continuous analog monitoring and alarm verification from the panel.
- ii. When sufficient smoke is sensed, an alarm signal is initiated at the FACP, and appropriate action taken to change over air handling systems to help prevent the rapid distribution of toxic smoke and fire gases throughout the areas served by the duct system.
- 6. Addressable Dry Contact Monitor Module:

- Addressable monitor modules shall be provided to connect one supervised IDC zone of conventional alarm initiating devices (any N.O. dry contact device) to one of the fire alarm control panel SLCs.
- ii. The IDC zone shall be suitable for Style D or Style B operation. An LED shall be provided that shall flash under normal conditions, indicating that the monitor module is operational and in regular communication with the control panel.
- iii. For difficult to reach areas, the monitor module shall be available in a miniature package and shall be no larger than 2-3/4 inch (70 mm) \times 1-1/4 inch (31.7 mm) \times 1/2 inch (12.7 mm). This version need not include Style D or an LED.

7. Addressable Control Module:

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- Addressable control modules shall be provided to supervise and control the operation of one conventional NACs of compatible, 24 VDC powered, polarized audio/visual notification appliances.
- ii. The control module NAC may be wired for Style Z or Style Y (Class A/B) with up to 1 amp of inductive A/V signal, or 2 amps of resistive A/V signal operation.
- iii. Audio/visual power shall be provided by a separate supervised power circuit from the main fire alarm control panel or from a supervised UL listed remote power supply.
- iv. Audio/visual power shall be provided by a separate supervised power circuit from the main fire alarm control panel or from a supervised UL listed remote power supply.
- v. The control module shall be suitable for pilot duty applications and rated for a minimum of 0.6 amps at 30 VDC.

8. Addressable Relay Module:

- i. Addressable Relay Modules shall be available for HVAC control and other building functions. The relay shall be form C and rated for a minimum of 2.0 Amps resistive or 1.0 Amps inductive. The relay coil shall be magnetically latched to reduce wiring connection requirements, and to ensure that 100% of all auxiliary relay or NACs may be energized at the same time on the same pair of wires.
- ii. All annunciators shall be locked. Keys to the annunciator shall be located in the Fire Department Knox Box.

E. BATTERIES

- 1. The battery shall have sufficient capacity to power the fire alarm system for not less than twenty-four hours plus 5 minutes of alarm upon a normal AC power failure.
- 2. The batteries are to be completely maintenance free. No liquids are required. Fluid level checks for refilling, spills, and leakage shall not be required.
- 3. If necessary, to meet standby requirements, external battery and charger systems may be used.
- 4. Batteries for the intelligent power supplies may not be combined. Each power supply must be protected with a respective set of 7-amp hour batteries.

Part 3: Execution

- 3.01 Preparation
- 3.02 Installation
 - 1. Installation shall be in accordance with the NEC, NFPA 72, local and state codes, as shown on the drawings, and as recommended by the major equipment manufacturer.
 - All conduit, junction boxes, conduit supports, and hangers shall be concealed in finished
 areas and may be exposed in unfinished areas. Smoke detectors shall not be installed prior
 to the system programming and test period. If construction is ongoing during this period,
 measures shall be taken to protect smoke detectors from contamination and physical
 damage.
 - 3. All fire detection and alarm system devices, control panels and remote annunciators shall be flush mounted when located in finished areas and may be surface mounted when located in unfinished areas.

4. Manual fire alarm boxes shall be suitable for surface mounting or semi-flush mounting and shall be installed not less than 42 inches (1067 mm), nor more than 48 inches (122 mm) above the finished floor.

B. TEST

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- 1. The service of a competent, factory-trained engineer or technician authorized by the manufacturer of the fire alarm equipment shall be provided to technically supervise and participate during all of the adjustments and tests for the system.
- 2. Before energizing the cables and wires, check for correct connections and test for short circuits, ground faults, continuity, and insulation.
- 3. Close each sprinkler system flow valve and verify proper supervisory alarm at the FACP.
- 4. Verify activation of all waterflow switches.
- 5. Open initiating device circuits and verify that the trouble signal actuates.
- 6. Open and short signaling line circuits and verify that the trouble signal actuates.
- 7. Open and short notification appliance circuits and verify that trouble signal actuates.
- 8. Ground all circuits and verify response of trouble signals.
- 9. Check presence and audibility of tone at all alarm notification devices.
- 10. Check installation, supervision, and operation of all intelligent smoke detectors using the walk test.
- 11.Each of the alarm conditions that the system is required to detect should be introduced on the system. Verify the proper receipt and the proper processing of the signal at the FACP and the correct activation of the control points.
- 12. When the system is equipped with optional features, the manufacturer's manual shall be consulted to determine the proper testing procedures. This is intended to address such items as verifying controls performed by individually addressed or grouped devices, sensitivity monitoring, verification functionality and similar.

C. FINAL INSPECTION

- 1. At the final inspection, a factory-trained representative of the manufacturer of the major equipment shall demonstrate that the system functions properly in every respect.
- 2. The fire department final shall not take place until a successful pretest with the design engineer and PSD electrician is complete. Treat the pretest with the design engineer as a "final inspection". The following close out documents will be required:
- 3. Graphic Maps framed and securely mounted (show duct detector test switch locations)
- 4. As-built documentation
- 5. Record of Completion
- 6. Voltage drop readings for all notification circuits. (Run devices for 10 minutes on battery power prior to taking readings.)

D. INSTRUCTION

- Instruction shall be provided as required for operating the system. Hands-on demonstrations of the operation of all system components and the entire system including program changes and functions shall be provided. A minimum of four hours shall be provided at a time and date acceptable to the owner.
- 2. Provide a typewritten "Sequence of Operation" in matrix format.

E. FIELD QUALITY CONTROL

- Notification of PSD Department of Operations & Maintenance is required two (2) weeks
 prior to request of scheduling of final interconnection and scheduling of final acceptance
 or temporary certificate of occupancy (TCO) final testing. Notify PSD Maintenance
 Manager and Electrician at 490-3333 a minimum of three working days prior to any
 interruption or modification of any existing fire alarm system for scheduling of work.
- 2. All wiring shall be installed by experienced personnel under supervision of manufacturer's representative. The fire alarm equipment supplier shall make a thorough inspection and test of the completed fire alarm system prior to final interconnection to the central station. All conduit shall be installed by a licensed electrician.

3. Acceptance Testing:

- i. Before final interconnection, perform a complete system check with the manufacturer's technician present. This test shall be completed without the involvement of the Owner and prior to scheduling the final test with the Owner. This test shall include setting every device into alarm individually, operating each pull station, operating all audible systems, operating all functions in the FACP, etc. The purpose of this test is to ensure that the entire system is functioning properly prior to the final test. This "preliminary" test shall be documented as to what was tested, the testing procedure used and all detector sensitivities. This test documentation shall be submitted to the Owner for review prior to scheduling a final test.
- ii. Each device/circuit shall be initially tested in accordance with the requirements of NFPA 72 and the PSD testing form. The fire alarm system equipment vendor must provide an accurate panel download in electronic format to the design engineer at least two days prior to preliminary testing. The engineer of record will complete a final form specific to the project prior to testing.
- iii. The fire alarm system vendor shall provide an electronic copy of the fire alarm system points (panel download) to the design engineer at least one week prior to testing. A detailed test form shall be prepared during testing.
- iv. The fire department "final" may not be scheduled until a successful pretest results are witnessed by the design engineer and PSD electrician.
- v. Final testing shall be performed in accordance to PSD Standards and all compliance forms including "NFPA Record of Completion Form", completely filled out.
- vi. A punch list will be developed during the 100% test. The final punch list will come within two weeks from the design engineer. Correct all items on the punch list and reschedule through the Project Manager re-testing of all devices to show compliance with the punch list (first retest). All costs incurred for all re-tests above and beyond the first retest shall be borne and paid for by the Contractor.
- vii. After all punch items have been corrected all parties shall sign the "Certificate of Completion". Turn this form over to the PSD Project Manager. The contract cannot be closed out without this form.

4. Installation Documentation for Final Acceptance:

i. Operating and maintenance manuals shall be furnished as specified herein. Two (2) manuals and two (2) sets of drawings for each fire alarm system shall be provided. One copy shall be turned over to the fire systems shop. All other copies shall be delivered with the final indexed copies of approved shop drawings and catalog data in a hard-back cover 3-ring binder which is clearly labeled to designate the building for which it is intended. Manuals shall be approved by the Engineer. The working field set with workman's notes shall be turned over to PSD electrician. All technical information shall include the manufacturer's logos.

5. As-Built Drawings:

- i. Provide four (4) sets of complete reproducible as-built drawings. Provide two sets of 11x17 as-built drawings. As-built drawings must be prepared in AutoCAD format (minimum release 2010) and be based on original field redlines which show conduit routing and number of conductors per conduit and free wire routing. Show all devices including known future devices and indicate as such. (See additional requirements below.)
- ii. Provide four CDs that include the AutoCAD release as-built files as well as the panel download reports and panel program file.

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iii. Provide as-built point-to-point wiring diagrams depicting every device. Provide revised schematic, wiring, and interconnection diagrams of all circuits, internal and external, for all equipment installed and exact locations for all devices. These schematics shall include the conductor color coding and terminal number identification system, location of all terminal boxes complete with numbering and each device address.

- iv. Complete, as-installed, riser diagrams indicating the wiring sequence of all alarm initiating devices, supervisory devices, and all signaling appliances on all signaling circuits.
- v. A complete description of the system operation, including a schedule of relay abbreviations, list of relay functions, and the sequence of relay operation during supervisory trouble and alarm conditions.
- vi. Complete wiring and control diagrams for control and shutdown circuits for fan systems.
- vii. Provide Record of Completion.
- viii. Provide original field notes/redlines.
- ix. The design engineer and PSD O&M representative shall walk through the building and spot check 5-10% of device locations against the as-builts. If devices are not as shown, the drawings shall be rejected for a redraw. Upon re-submittal, another spot check will be done. If deficiencies are still found, an independent audit to the system by the system manufacturer will be required and the cost of the audit will be the responsibility of the contractor.
- x. Spare Parts: Provide one smoke detector head, one smoke detector base, one monitor module (FMM-1) and one relay module (FRM-1).

6. Parts List:

- i. Recommended spare parts list shall be received with the as-built drawings, including:
- ii. Complete parts catalog of installed parts (include quantities).
- iii. Complete parts price list.
- iv. Recommended spare parts list.
- 7. General Operation and Maintenance Procedures:
 - i. Provide all software and keys needed to program all fire alarm, devices, and dialers to PSD.
 - ii. Provide four hours of training.
 - iii. Failure to comply with all contractual obligations resulting in costs incurred by the PSD shall result in those costs being transferred to the Contractor for payment.
 - iv. Contractor shall provide a fire watch when required by written guidelines.
 - v. Contractor shall be financially responsible for all fees assessed to the PSD by Fire Department.

F. FORMS

- 1. The following forms are to be used:
- 2. Fire Alarm System Unit Pricing
- 3. Fire Alarm System Check List

G. DEMOLITION

1. Remove existing fire alarm components that are not part of the new fire alarm system AFTER permission from the AHJ has been obtained. Safe disposal of all removed devices is required.

- 2. Cover plates shall be provided for back boxes of removed devices. The cover plates shall be stainless steel finished edge cover plates and shall be approved by Poudre School District prior to installation.
- 3. All existing fire alarm system wiring shall be removed. Existing conduit that is not reused for the new fire alarm system must also be removed.
- 4. Ceiling tiles damaged shall be replaced. Ceiling tiles required due to demolition of existing devices shall be provided by the school district. Provide a tile count to PSD. Install new ceiling tiles provided by PSD. Reuse existing tiles from a designated location at the school and place new tiles in the designated location.
- 5. Submit in writing the dates of transfer of function from the existing fire alarm system to the new fire alarm system and the associated system down time. Do not proceed with the transfer without written consent from PSD. Provide a fire watch during system transfer if required by the AHJ.

END OF SECTION 28 31 00

Exhibit C



CACHE LA POUDRE MIDDLE SCHOOL

Legend

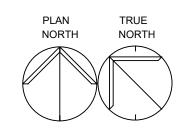
②- Smoke or heat detector

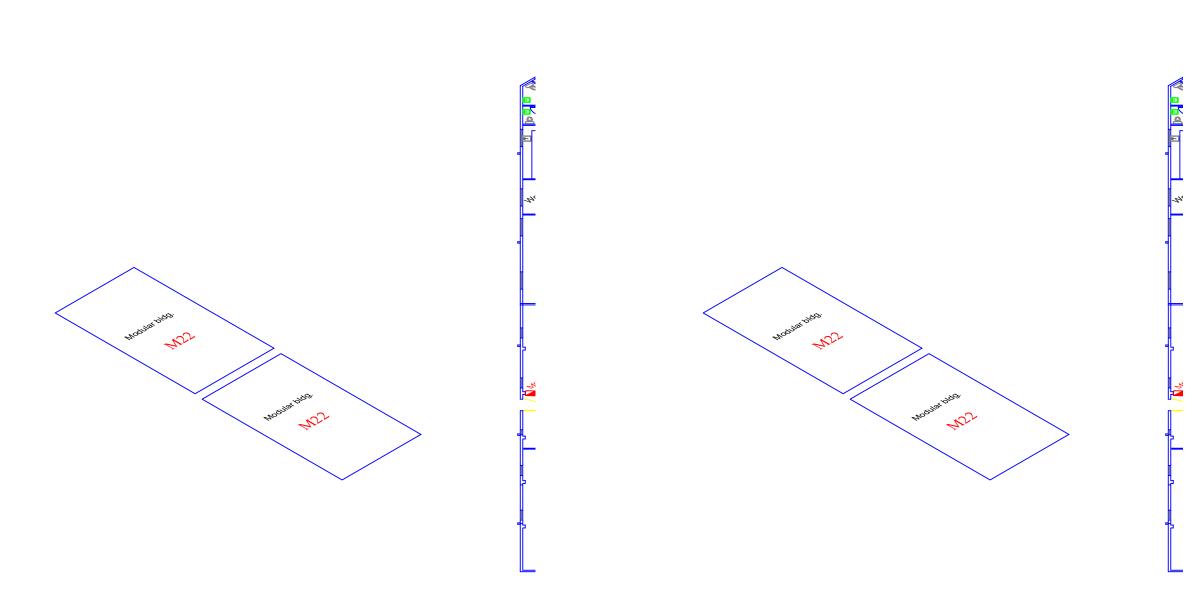
Pull station

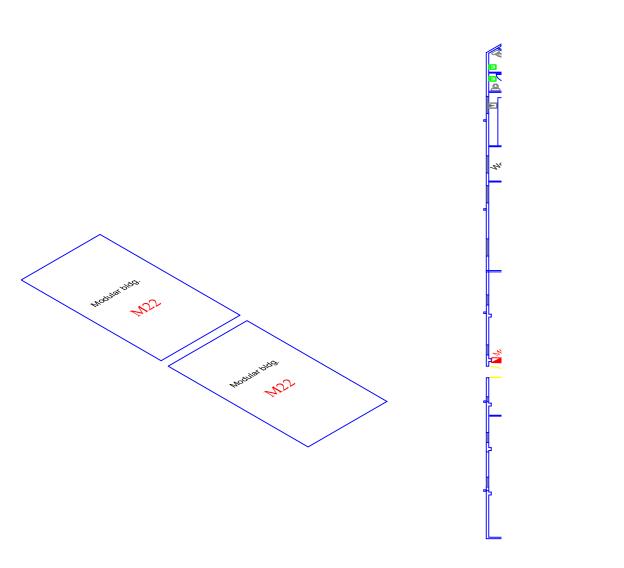
- Duct detector

H- Heat detector







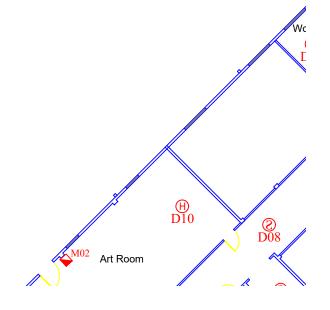


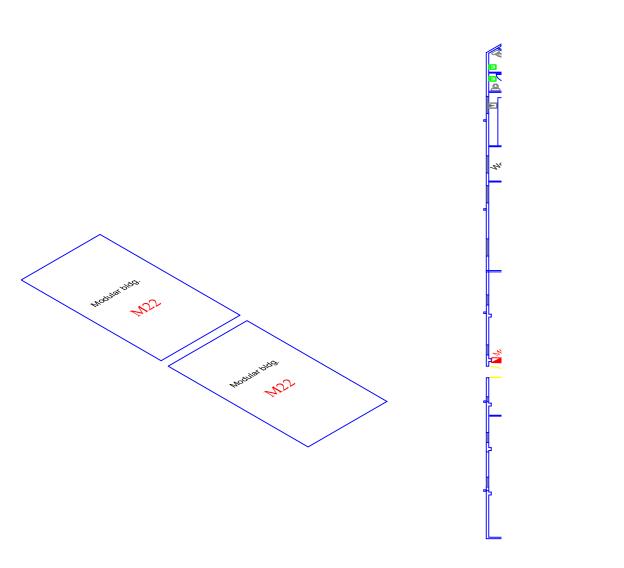
Modular bldg.

M22

Modular bldg.

M22



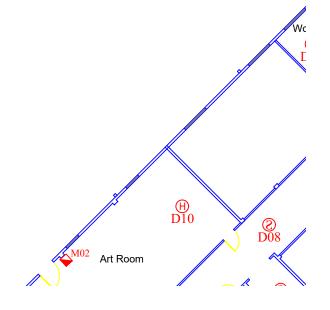


Modular bldg.

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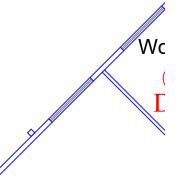
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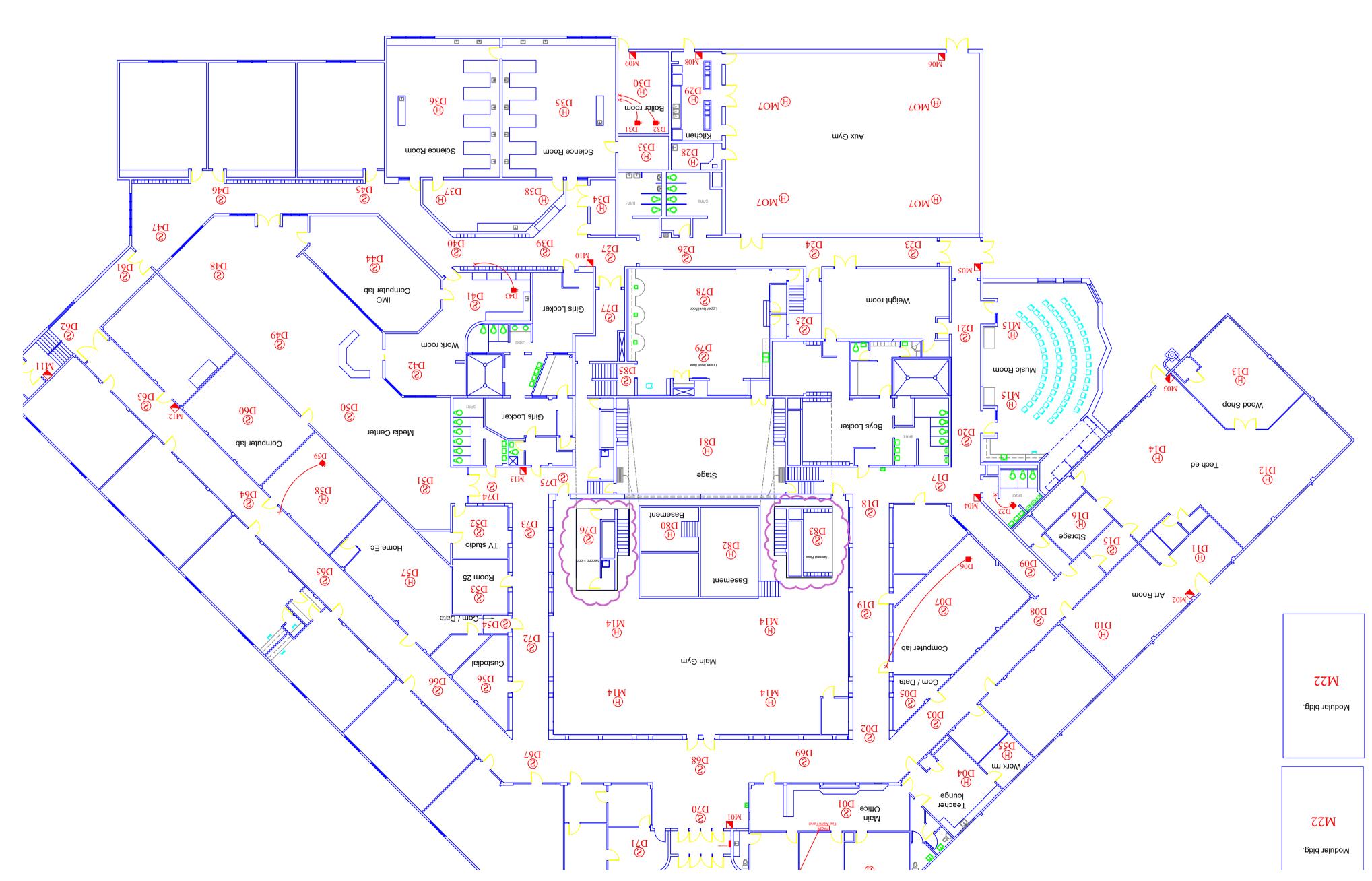
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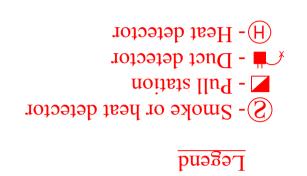
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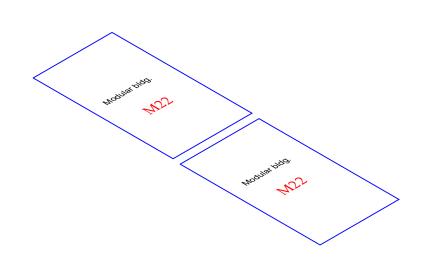




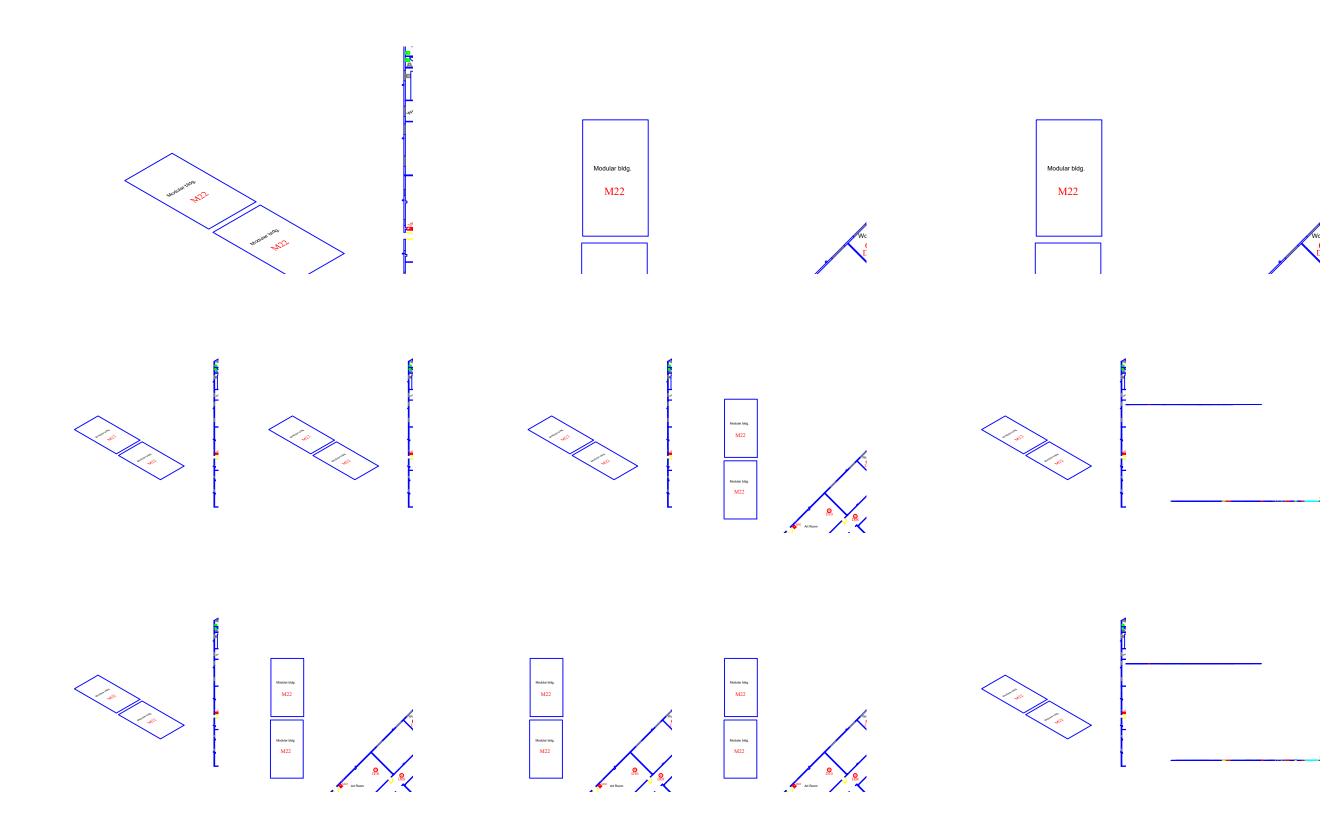
CACHE LA POUDRE MIDDLE SCHOOL

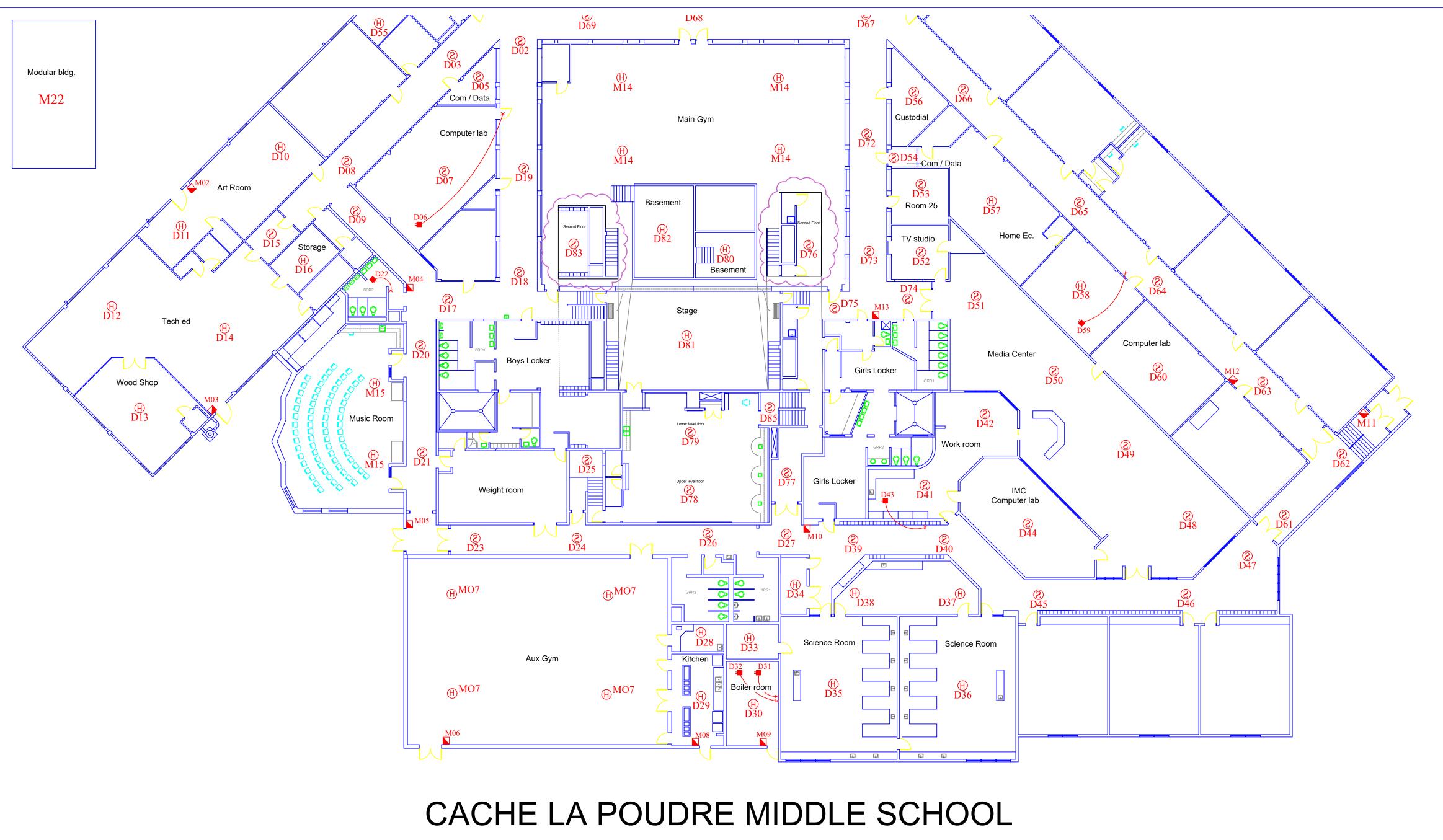












Legend

②- Smoke or heat detector

□ - Pull station

□ - Duct detector

□ - Heat detector

DATE: 1 - 31 - 00

DRAWN BY: MBK

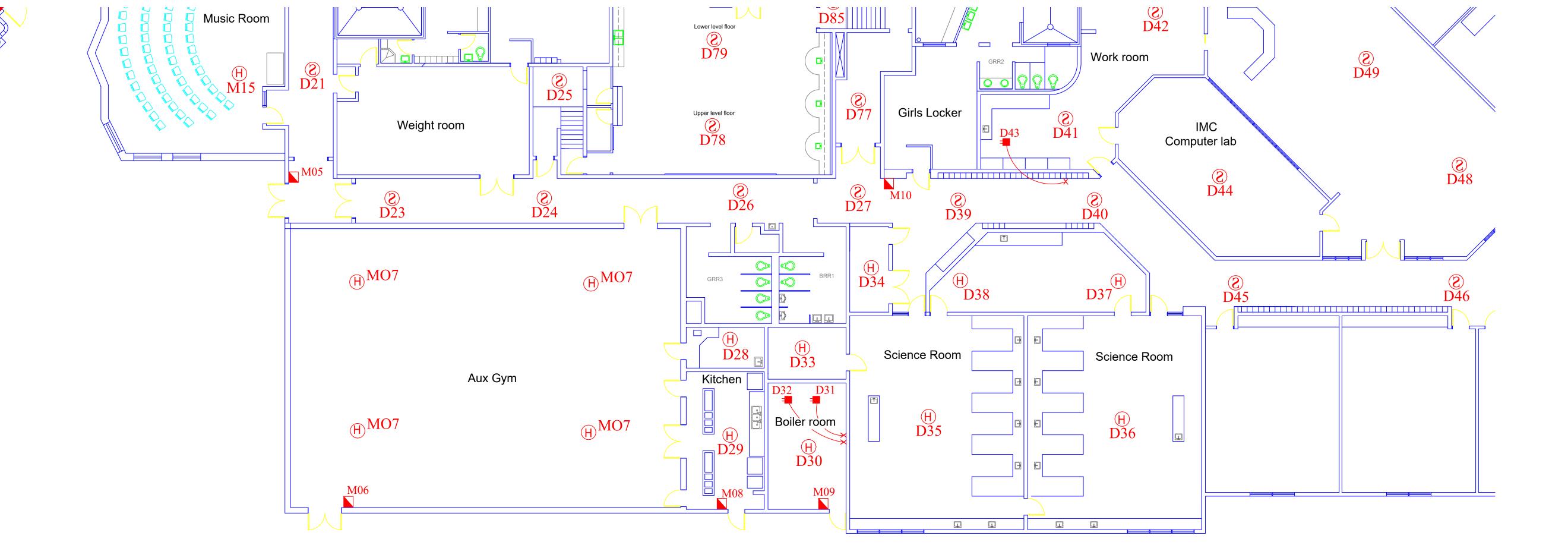
CHECKED BY:

REVISION:

3511 We: LaPorte,

SHEET DESCRIPTION
Floorplan

A.1



CACHE LA POUDRE MIDDLE SCHOOL

Legend

 $D\widetilde{1}3$

2 - Smoke or heat detector

Pull station

- Duct detector

H- Heat detector

FIRE ALARM PLAN
1/27/11 JN

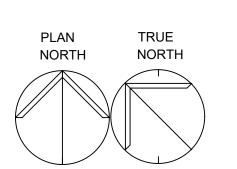


Exhibit D

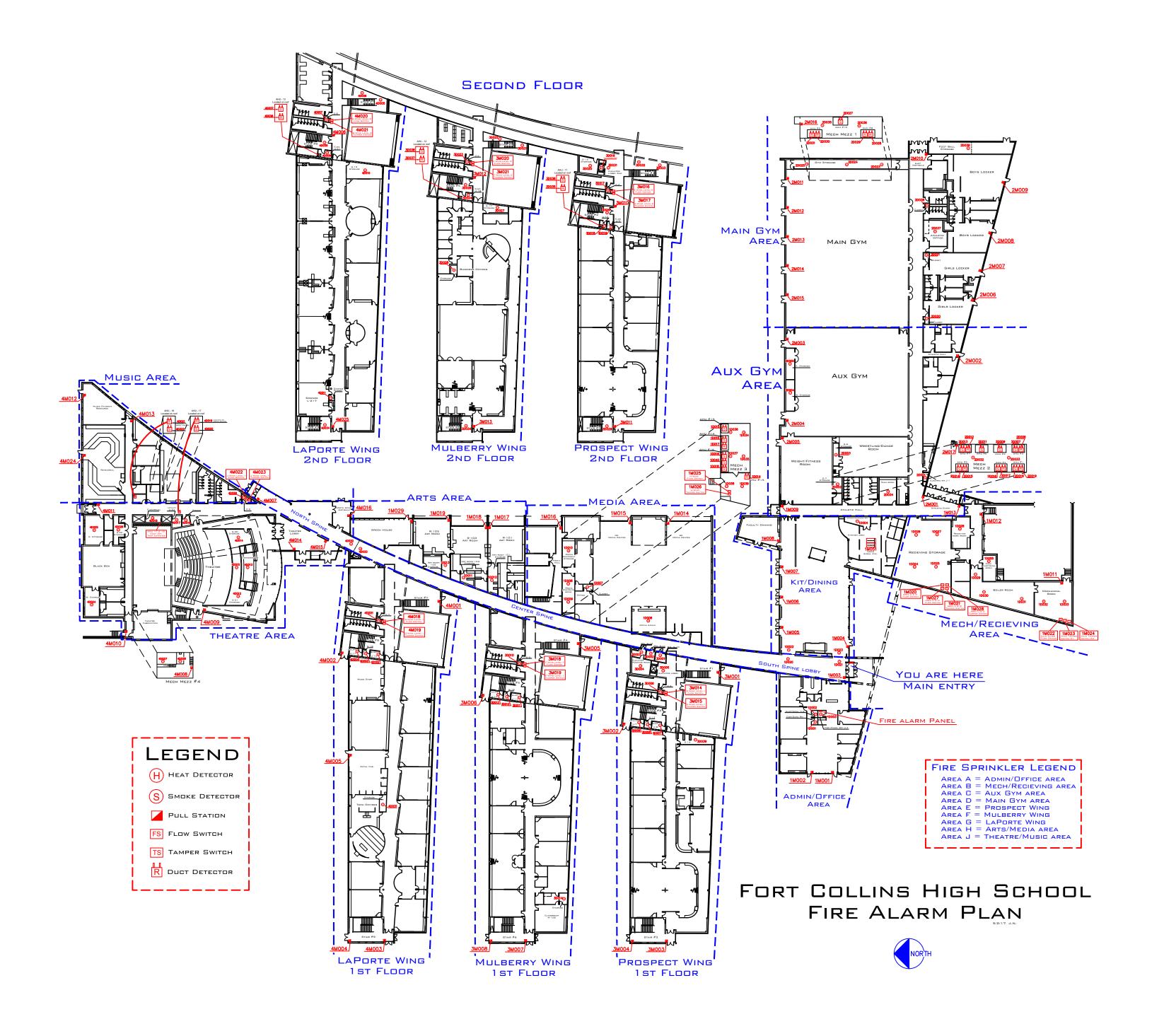
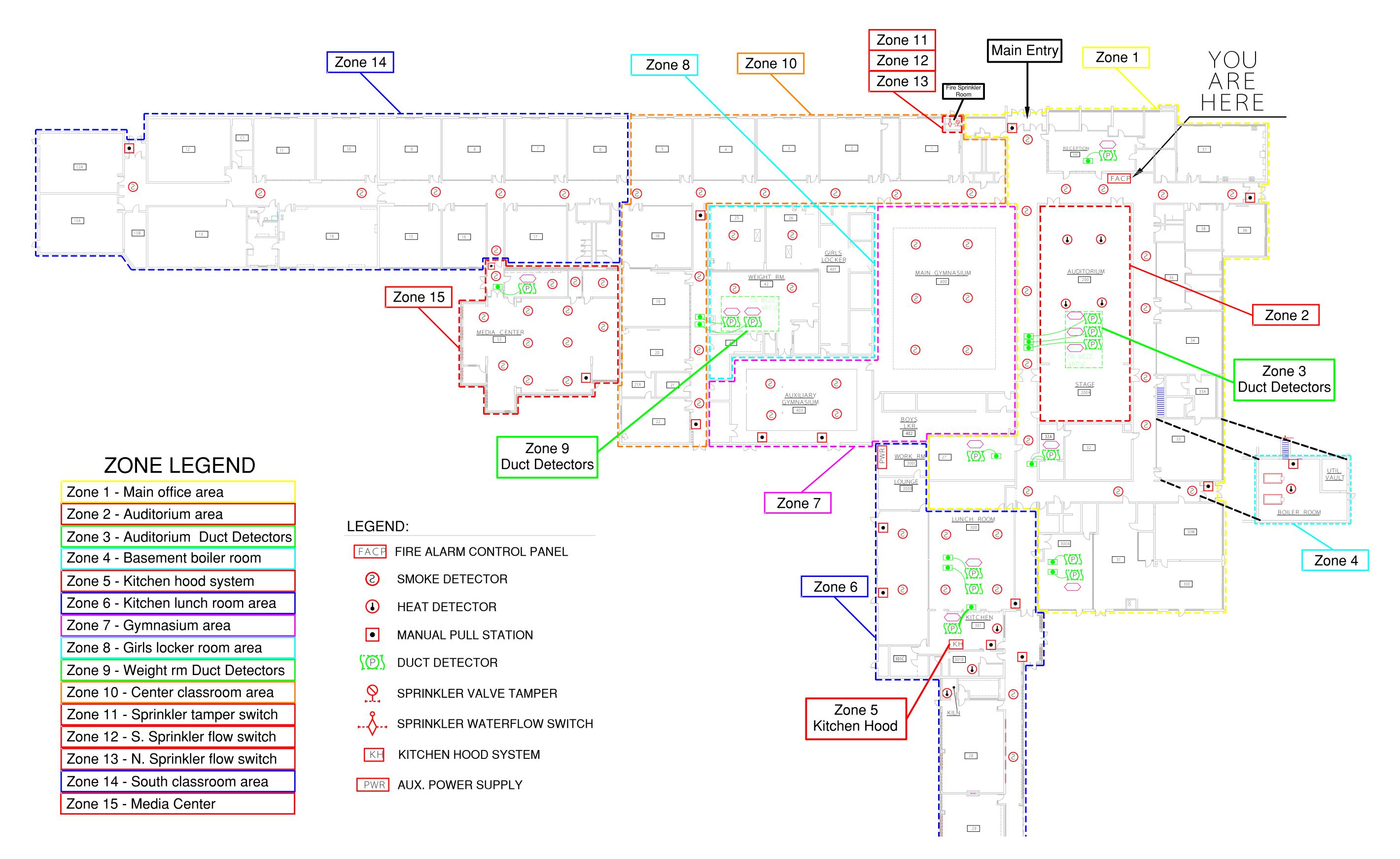
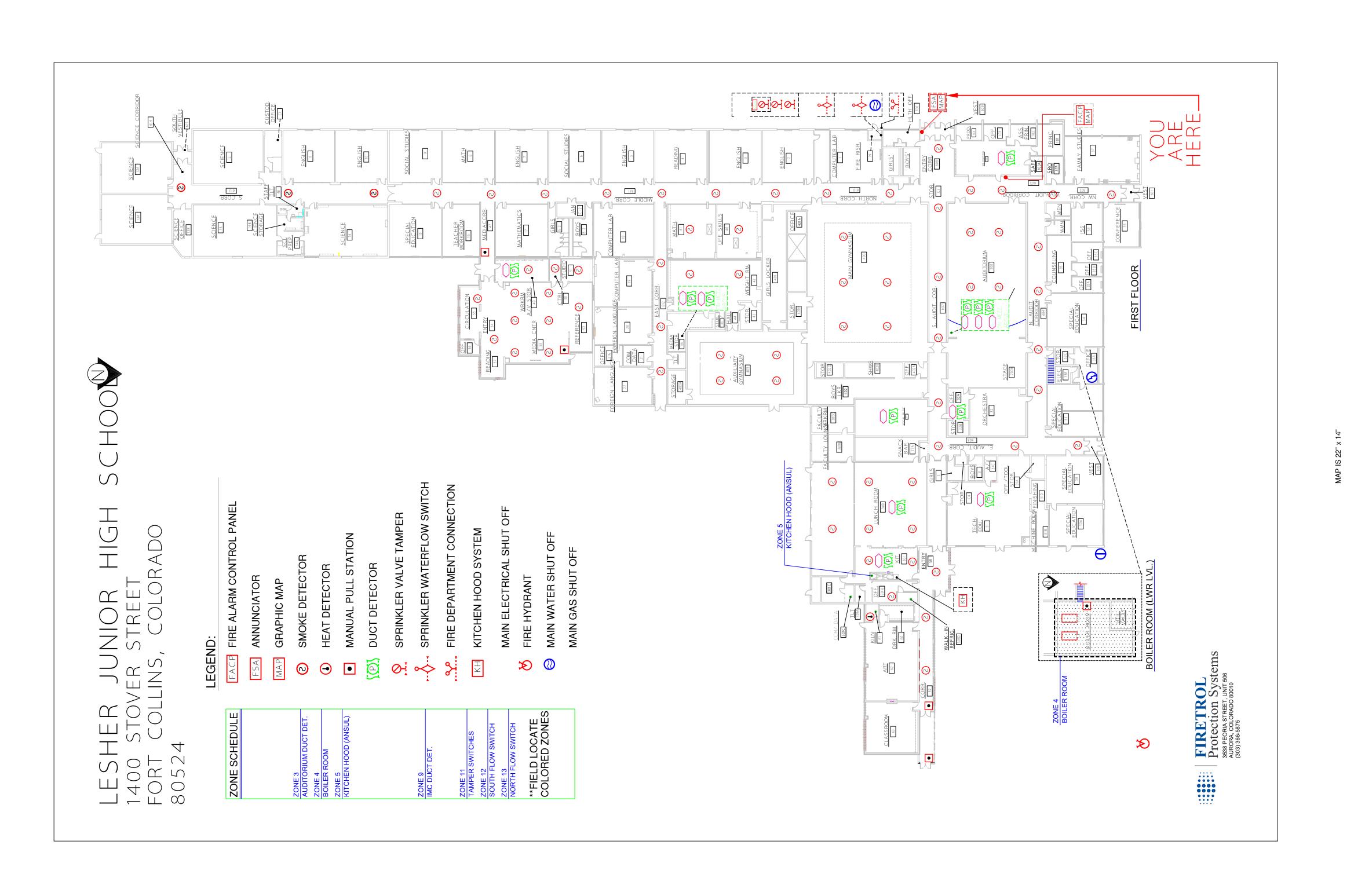


Exhibit E

LESHER MIDDLE SCHOOL







ESHER JUNIOR HIGH SCHOOL

1400 STOVER STREET
FORT COLLINS, COLORADO 80524
FIRE ALARM INTERCONNECT DRAWINGS

Firetrol
PROTECTION SYSTEMS, INC.
One Source fire Solutions

NOTIFIER

FIRE

CHOICE CITY ELECTRIC
1805 E. LINCOLN AVE. #A-3 FORT COLLINS, COLORADO 80524 970-493-4077

DRAWINGS PREPARED BY:

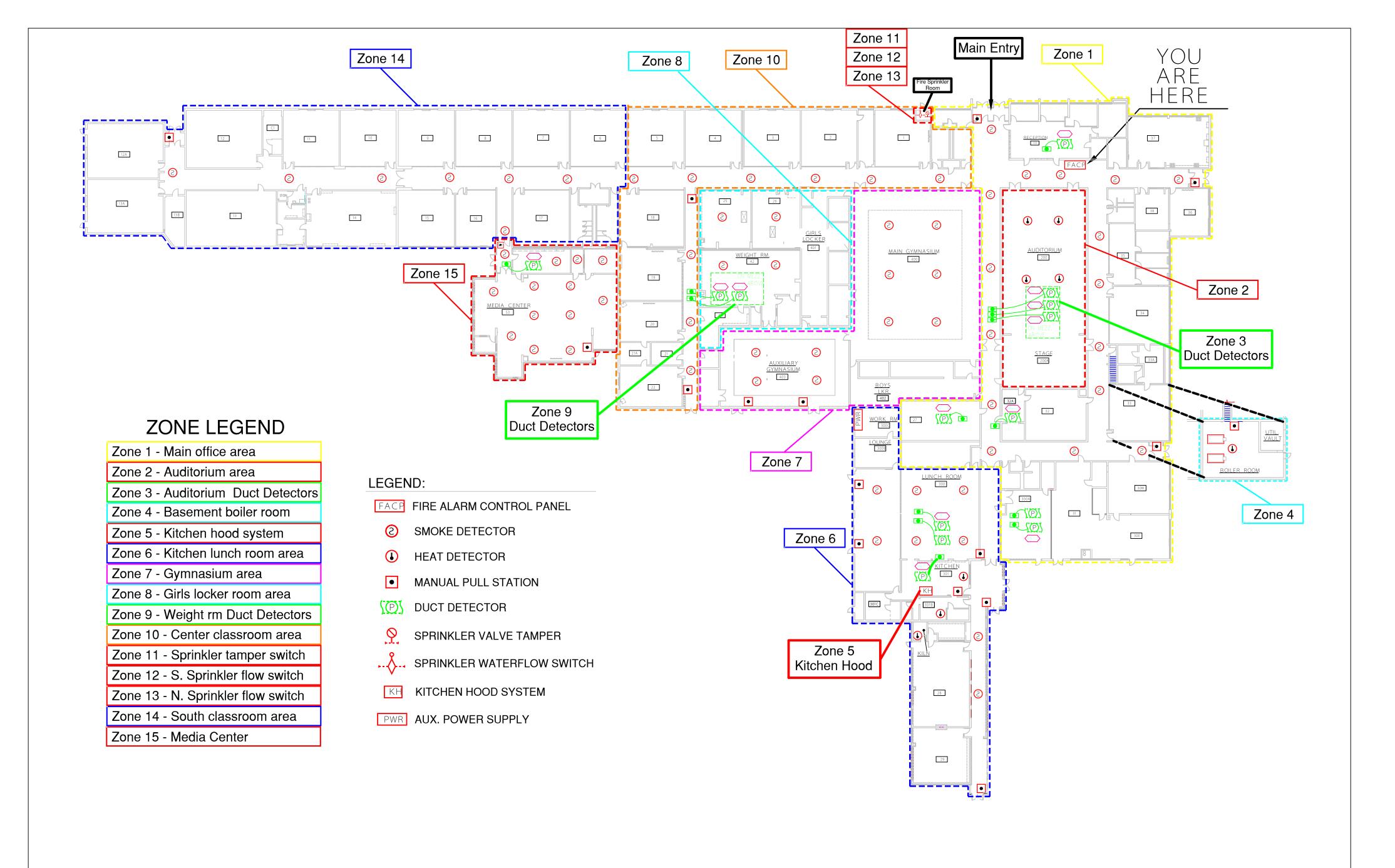
DRAWINGS REVIEWED BY:

AUTHORITY HAVING JURISDICTION POUDRE VALLEY FIRE AUTHORITY 505 PETERSON ST. FORT COLLINS, COLORADO 80524 970.221.6570

REVISIONS DATE DESCRIPTION BY 10-2-06 SCALED / ZONED MAP D.S.S.	070.221.0070	
	REVISIONS	
10-2-06 SCALED / ZONED MAP D.S.S.	DESCRIPTION	BY
	SCALED / ZONED MAP	D.S.S.
		DESCRIPTION

FIRETROL PROJECT # CMCA-0705 DRAWN BY DATE (of ORIGINAL) 11-9-05 DRAWING#

LESHER MIDDLE SCHOOL







FSA ANNUNCIATOR

FIRE DEPARTMENT CONNECTION

ZONE 3
AUDITORIUM DUCT DET.
ZONE 4
BOILER ROOM
ZONE 5
KITCHEN HOOD (ANSUL)

ZONE 9
IMC DUCT DET.

ZONE 11
TAMPER SWITCHES
ZONE 12
SOUTH FLOW SWITCH
ZONE 13
NORTH FLOW SWITCH
ZONE 14
SOUTH HALLWAY

MEDIA CENTER

LESHER JUNIOR HIGH SCHO

DRAWINGS PREPARED BY:

DRAWINGS REVIEWED BY:

ELECTRICAL CONTRACTOR

CHOICE CITY ELECTRIC
1805 E. LINCOLN AVE. #A-3

FORT COLLINS, COLORADO 80524 970-493-4077

970.221.6570

AUTHORITY HAVING JURISDICTION

POUDRE VALLEY FIRE AUTHORITY
505 PETERSON ST.
FORT COLLINS, COLORADO 80524

REVISIONS

DATE DESCRIPTION BY

10-2-06 SCALED / ZONED MAP D.S.S.

FIRETROL PROJECT # CMCA-0705

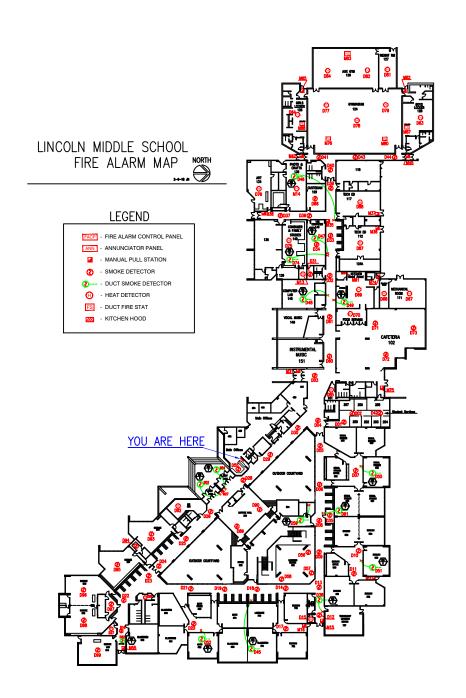
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DATE (of ORIGINAL) 11-9-05

DRAWING #

GM-1

Exhibit F



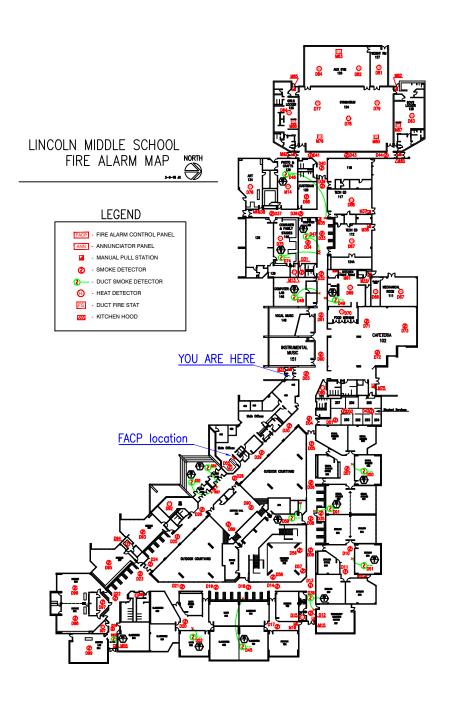
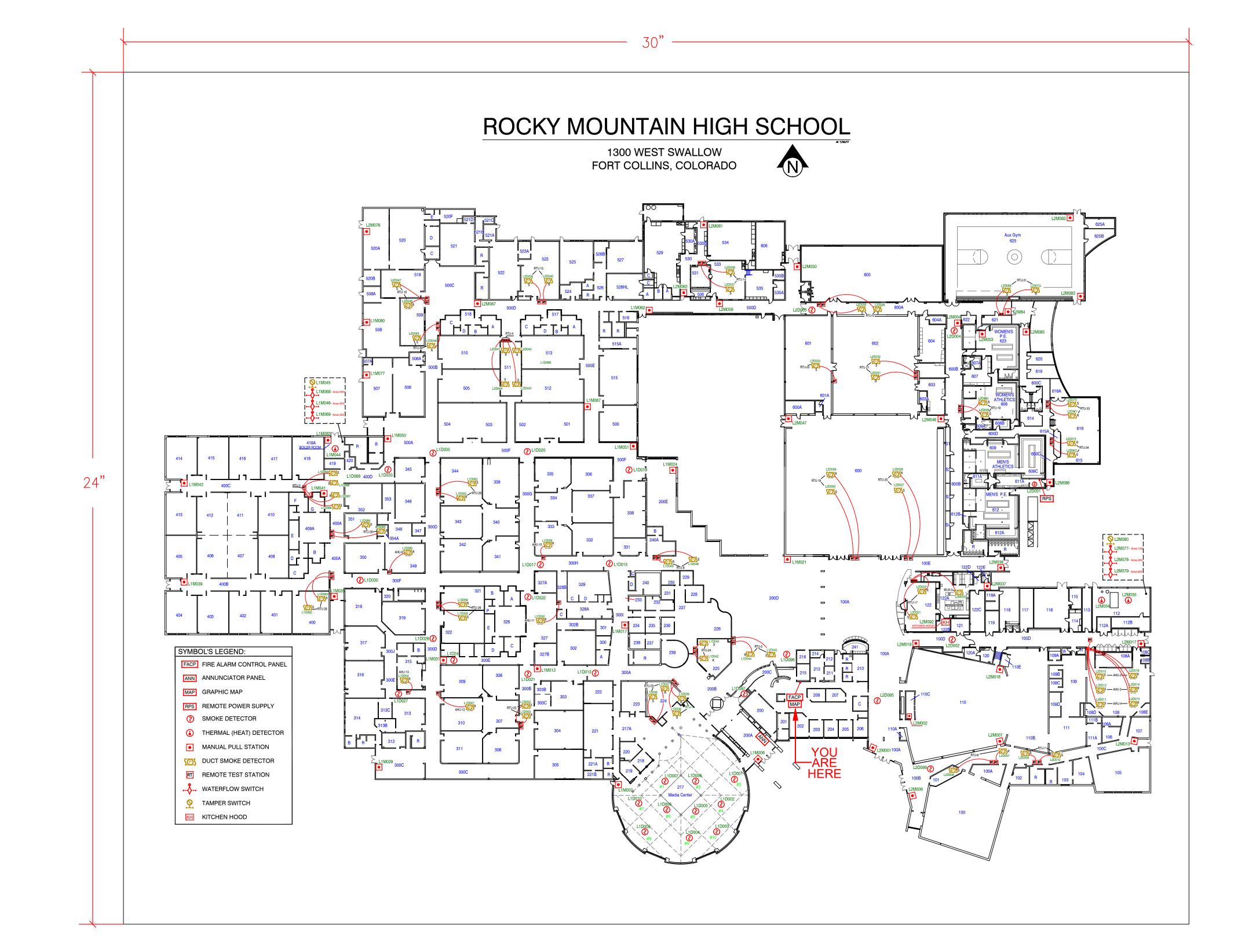


Exhibit G

Exhibit H



FIRE ALARM CONTROL PANEL
ANNUNCIATOR PANEL
GRAPHIC MAP
POWER SUPPLY
MANUAL PULL STATION
SMOKE DETECTOR

REMOTE TEST SWITCH
HEAT DETECTOR
WATERFLOW SWITCH
TAMPER SWITCH
KITCHEN HOOD

FIRE ALARM CONTROL PANEL

ANNUNCIATOR PANEL

GRAPHIC MAP

POWER SUPPLY

MANUAL PULL STATION

SMOKE DETECTOR

DUCT SMOKE DETECTOR

REMOTE TEST SWITCH

HEAT DETECTOR

WATERFLOW SWITCH

TAMPER SWITCH

FIRE HYDRANT

ELECTRICAL SHUTOFF

WATER SHUTOFF

MAIN GAS SHUTOFF

KITCHEN HOOD

FIRE DEPT. MAIN CONNECTION



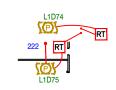
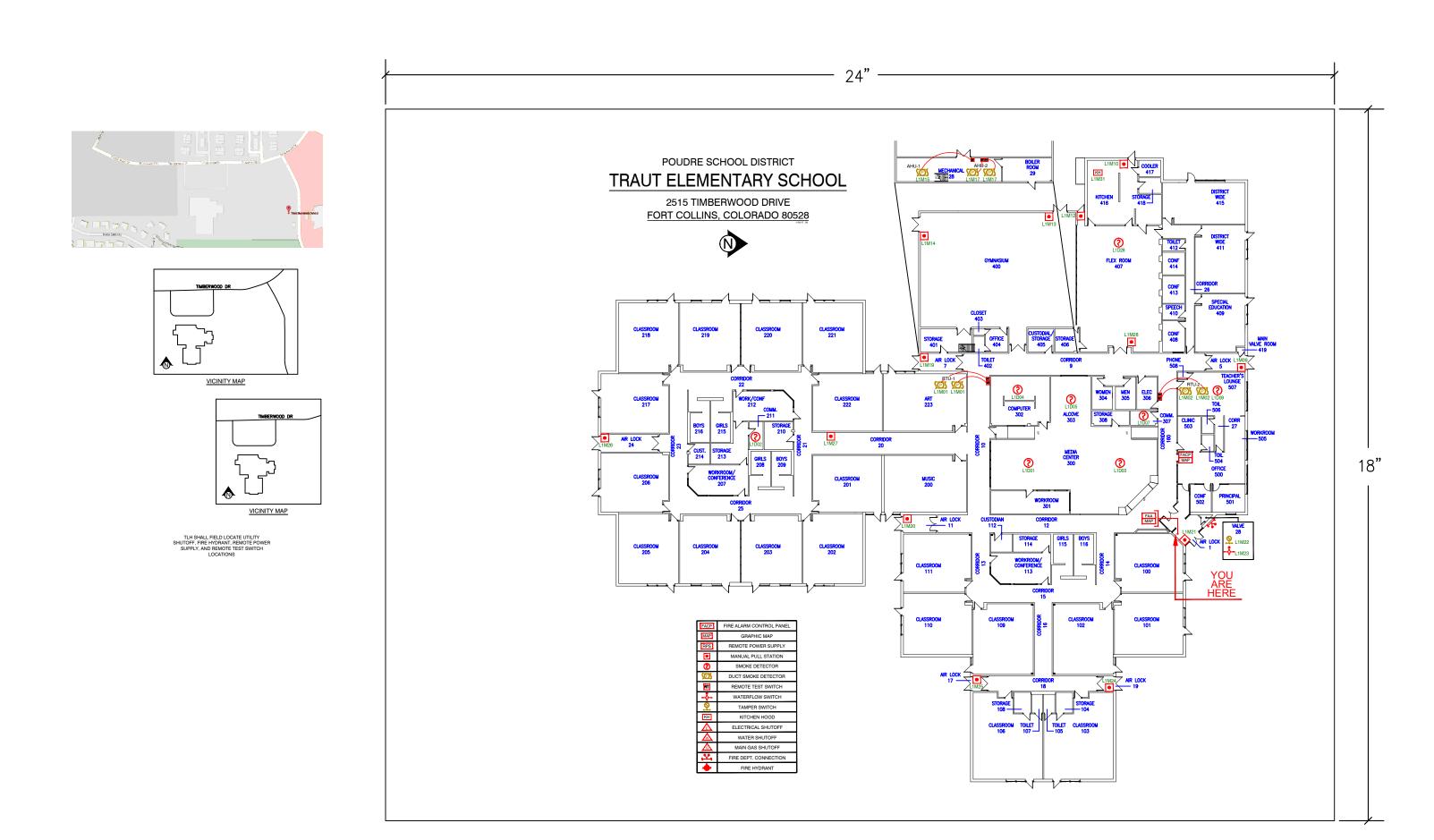


Exhibit I



Xref .\XREF\TLH Logo CAD.dwg

GMAP
LATEST UPDATE 10.15.2015

Exhibit J

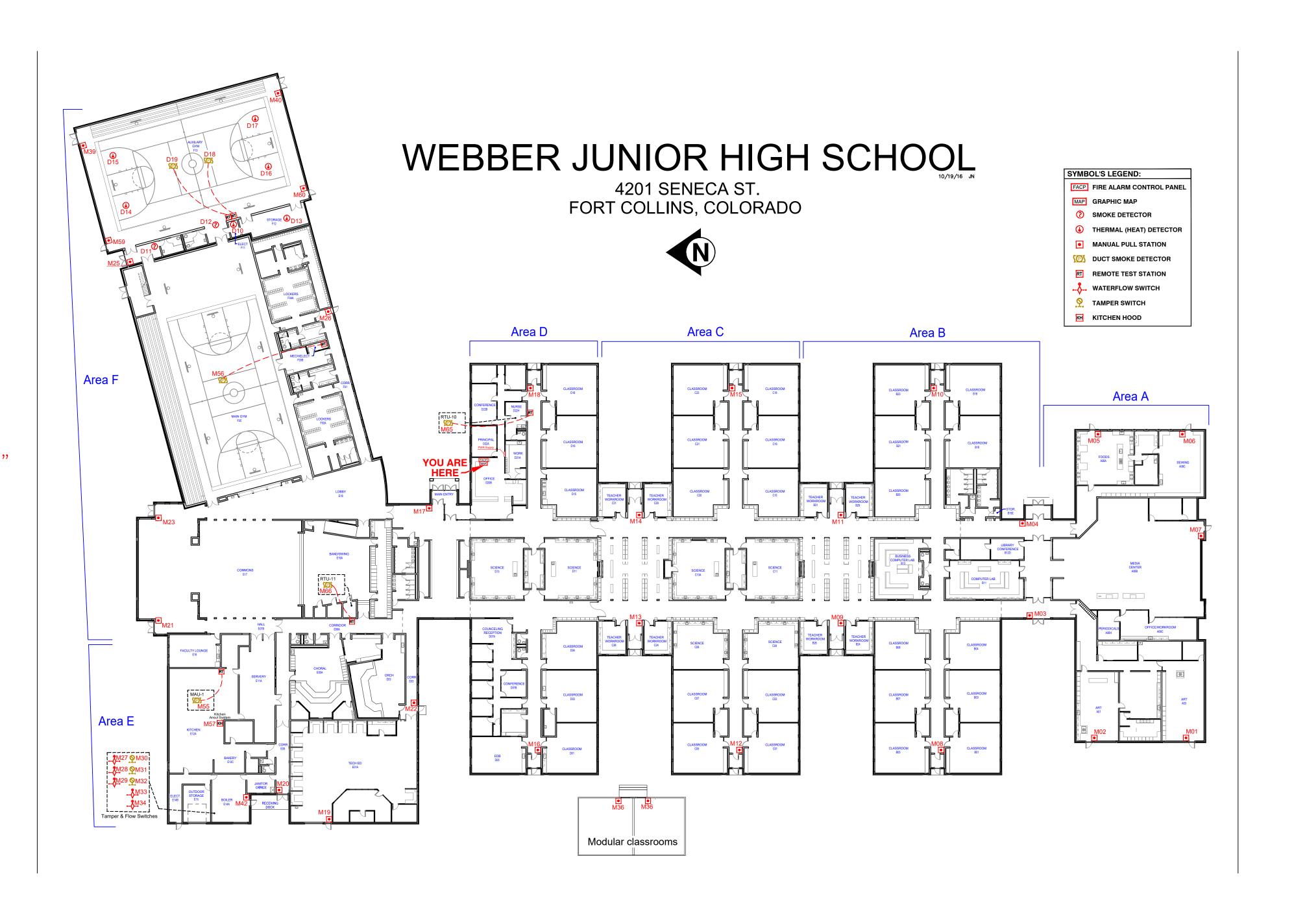


Exhibit K

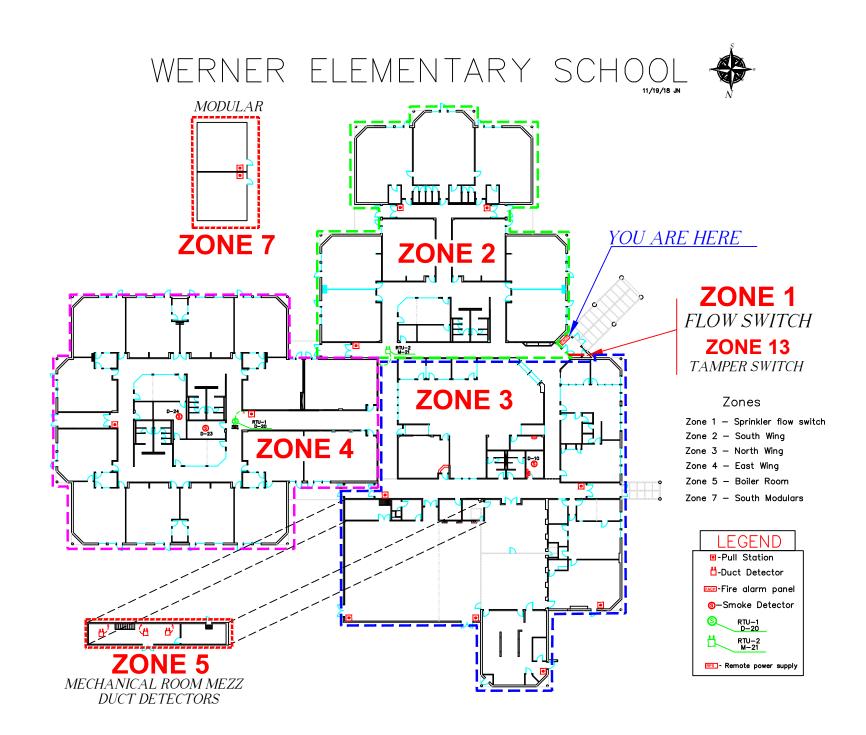


Exhibit L

RAFT AIA® Document B305™ - 1993

Architect's Qualification Statement

DATE: « » SUBMITTED TO: « » ADDRESS: « » NAME OF PROJECT (If Applicable): « » ADDITIONS AND DELETIONS: The author of this document has added information needed for 1 BASIC INFORMATION its completion. The author may also have revised the § 1.1 Architect: (Firm Name and Legal Status) text of the original AIA standard form. An Additions and Deletions Report that « »« » notes added information as well as revisions to the standard form text is § 1.2 Business Address: available from the author and should be reviewed. **«** » This document has important legal consequences. § 1.3 Telephone Number: Consultation with an attorney is encouraged with respect to its completion or modification. § 1.4 Person to Contact: **«** » § 1.5 Type of Organization: (Check one) [« »] Individual or Sole Proprietorship [« »] Professional Corporation/Association [« »] Corporation [« »] Partnership [« »] Joint Venture* [() Other* *If Joint Venture or Other, give details. **«** » 2 GENERAL STATEMENT OF QUALIFICATIONS **«** »

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§ 3.1 Names of Principals:

and listed in Article 8.)

3 GENERAL INFORMATION

« »

(This information may be provided via the Architect's brochure which may be attached

§ 3.2 Professional History:	
« »	
§ 3.3 Registration Status:	
« »	
§ 3.4 Professional Affiliations:	
« »	
§ 3.5 Key Personnel:	
« »	
§ 3.6 Total Number of Staff:	
« »	
§ 3.7 Number of Registered Architects:	
« »	
§ 3.8 Honors and Awards:	
« »	
§ 3.9 Professional and Civic Involvement:	
« »	
4 RELATED PROFESSIONAL SERVICES (List proposed consultants, if applicable.)	
« »	
§ 4.1 Structural:	
« »	
§ 4.2 Mechanical:	
« »	
§ 4.3 Electrical:	
« »	
§ 4.4 Interior Design:	
« »	
§ 4.5 Others:	
« »	

2

5 PROJECTS

(Projects for which personnel of this firm had responsible charge while associated with other firms are indicated by an asterisk.)

§ 5.1 The following projects are representative of the Architect's recent work. A brief description of each project is

attached.	
« »	
§ 5.2 Other representative projects with dates of completion:	
« »	
6 REFERENCES	
« »	
7 STATEMENT OF POTENTIAL CONFLICTS OF INTEREST	
« »	
8 ADDITIONAL INFORMATION (If attachments are provided, list them here.)	
« »	
ARCHITECT:	
Ву:	
I hereby certify that, as of the above date, the information provided and sufficiently complete so as not to be misleading.	in this Architect's Qualification Statement is true
(Signature)	
« »« » (Printed name and title)	

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Exhibit M

FEE SCHEDULE & HOURLY RATES

CONTRACT AMOUNT:

Clerical \$

Base Fee for Architec	tural, Structural, M	lechanical, and Electrical :		
\$967,000 (C	onstruction Budge	t) x percent		\$
		Subtotal of Base Archite	ctural Services	: \$
Additional Architectur	al Services:			
FF&E Assistance to	District		TBD	\$
Presentation Modeli	ng/Rendering		TBD	\$
Coordination of Add	itional Consultants	3	TBD	\$
	5	Subtotal of Additional Archited	ctural Services:	\$
Additional Consultant	s:			
Acoustical/ Audio			TBD	\$
Civil			TBD	\$
Cost Estimator			TBD	\$
Daylighting			TBD	\$
Energy Modelling			TBD	\$
Roofing			TBD	\$
		Subtotal of Addition	al Consultants:	\$
		TOTAL BASIC CO	OMPENSATION:	\$
Estimated Reimbursa	ble Expenses:			\$
Direct costs billed at	1.1 times not to e	xceed TBD)	\$
Printing		TBD)	\$
	Su	btotal of Estimated Reimburs	sable Expenses	\$
		TOTAL CO	OMPENSATION	:\$
JRLYRATES:				
Principal	\$	per hour		
Project Manager	\$	per hour		
Project Architect	\$	per hour		
CAD Technician	\$	per hour		
Interior Designer	\$	per hour		

per hour

Exhibit N

DRAFT AIA® Document B101™ - 2017

Standard Form of Agreement Between Owner and Architect

AGREEMENT made as of the « » day of « » in the year « » (In words, indicate day, month and year.)	
BETWEEN the Architect's client identified as the Owner: (Name, legal status, address and other information)	ADDITIONS AND DELETIONS: The author of this document has added information needed for
<pre>« » « »</pre>	its completion. The author may also have revised the text of the original AIA standard form. An Additions
and the Architect: (Name, legal status, address and other information)	<pre>and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and</pre>
« » « » « »	should be reviewed. This document has important legal consequences.
for the following Project: (Name, location and detailed description)	Consultation with an attorney is encouraged with respect to its completion or modification.
« » « »	
The Owner and Architect agree as follows.	

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TABLE OF ARTICLES INITIAL INFORMATION 2 **ARCHITECT'S RESPONSIBILITIES** 3 SCOPE OF ARCHITECT'S BASIC SERVICES SUPPLEMENTAL AND ADDITIONAL SERVICES 5 **OWNER'S RESPONSIBILITIES COST OF THE WORK** 6 **COPYRIGHTS AND LICENSES** 7 8 **CLAIMS AND DISPUTES** TERMINATION OR SUSPENSION 10 **MISCELLANEOUS PROVISIONS** 11 **COMPENSATION** 12 SPECIAL TERMS AND CONDITIONS **SCOPE OF THE AGREEMENT** 13 ARTICLE 1 INITIAL INFORMATION § 1.1 This Agreement is based on the Initial Information set forth in this Section 1.1. (For each item in this section, insert the information or a statement such as "not applicable" or "unknown at time of execution.") § 1.1.1 The Owner's program for the Project: (Insert the Owner's program, identify documentation that establishes the Owner's program, or state the manner in which the program will be developed.) « See Exhibit "A" » § 1.1.1 The Architect shall assist the Owner in the preparation of a facility program document that includes site data; spatial programs; and building architecture. This facility program document will act as a guide for the schematic, design development, and construction document phase of this project.

§ 1.1.2 The Project's physical characteristics:

(Identify or describe pertinent information about the Project's physical characteristics, such as size; location; dimensions; geotechnical reports; site boundaries; topographic surveys; traffic and utility studies; availability of public and private utilities and services; legal description of the site, etc.)

« See Exhibit "A" »

§ 1.1.3 The Owner's budget for the Cost of the Work, as defined in Section 6.1: (*Provide total and, if known, a line item breakdown.*)

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(()	See 1	$H(\mathbf{x})$	hıb	1t ''	A">	>

§ 1.1.4 The O	wner's anticipated design and construction milestone dates:
.1	Design phase milestone dates, if any:
	« »
.2	Construction commencement date:
	« »
.3	Substantial Completion date or dates: For the purpose of this Agreement, Substantial Completion shall be as defined in CRS §24-91-102(5) and shall include the issuance of a certificate of occupancy by the governing municipality, as applicable.
	« »
.4	Other milestone dates:
	« »
(Identify meth	wner intends the following procurement and delivery method for the Project: nod such as competitive bid or negotiated contract, as well as any requirements for accelerated or ign and construction, multiple bid packages, or phased construction.)
« Competitive	e Bid through pre-qualified General Contractors »
	wner's anticipated Sustainable Objective for the Project: describe the Owner's Sustainable Objective for the Project, if any.)
« As per the (3.2.5.1 »	Owner's Sustainable Design Guidelines and Sustainability Management Plan as identified in Section
	wner identifies the following representative in accordance with Section 5.3: ddress, and other contact information.)
<pre> « » « » « » « »</pre>	
submittals to	ersons or entities, in addition to the Owner's representative, who are required to review the Architect's the Owner are as follows: ddress, and other contact information.)
« N/A »	
	wner shall retain the following consultants and contractors: gal status, address, and other contact information.)
.1	Geotechnical Engineer:
	« » « »

		« » « »	
	2	Other, if any: (List any other consultants and contractors retained by the Owner.)	
		« »	
		Architect identifies the following representative in accordance with Section 2. Idress, and other contact information.)	3:
<pre> « » « » « » « » </pre>			
		Architect shall retain the consultants identified in Sections 1.1.11.1 and 1.1.11 gal status, address, and other contact information.)	.2:
	Con 1	sultants retained under Basic Services: Structural Engineer:	
		« » « » « » « »	
	2	Mechanical Engineer:	
		<pre> « » « » « » </pre>	
	3	Electrical Engineer:	
		<pre> « » « » « » « »</pre>	
	4	Civil Engineer:	
		« Firm Name » « Representatives Name » « Street Address City, State & Zip » « Phone »	
§ 1.1.11.2	Con	sultants retained under Supplemental Services:	
« See Exl	nibit '	"B" »	

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§ 1.1.12 Other Initial Information on which the Agreement is based:

« N/A »

- § 1.2 The Owner and Architect may rely on the Initial Information. Both parties, however, recognize that the Initial Information may materially change and, in that event, the Owner and the Architect shall appropriately adjust the Architect's services, schedule for the Architect's services, and the Architect's compensation. The Owner shall adjust the Owner's budget for the Cost of the Work and the Owner's anticipated design and construction milestones, as necessary, to accommodate material changes in the Initial Information.
- § 1.3 The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form.

ARTICLE 2 ARCHITECT'S RESPONSIBILITIES

- § 2.1 The Architect shall provide professional services as set forth in this Agreement. The Architect represents that it is properly licensed in the jurisdiction where the Project is located to provide the services required by this Agreement, or shall cause such services to be performed by appropriately licensed design professionals.
- § 2.2 The Architect shall perform its services consistent with the professional skill and care ordinarily provided by architects practicing in the same or similar locality under the same or similar circumstances. The Architect shall perform its services as expeditiously as is consistent with such professional skill and care and the orderly progress of the Project.
- § 2.3 The Architect shall identify a representative authorized to act on behalf of the Architect with respect to the Project.
- § 2.4 Except with the Owner's knowledge and consent, the Architect shall not engage in any activity, or accept any employment, interest or contribution that would reasonably appear to compromise the Architect's professional judgment with respect to this Project. Neither the Architect nor any of its employees or consultants shall have other interests which conflict with the interests of the Owner, including being connected with the sale or promotion of equipment or material which may be used on the Project, and the Architect shall make written inquiry of all of its consultants concerning the existence of or potential for such conflict. In unusual circumstances, and with full disclosure to the Owner of such conflict of interest, the Owner, in its sole discretion, may grant a written waiver for the Architect or particular consultant.

§ 2.5 INSURANCE REQUIREMENTS

- § 2.5.1 The Architect and consultants shall procure and maintain until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Architect, its agents, representative, employees or consultants. The insurance requirements herein are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.
- § 2.5.2 The Owner in no way warrants that the minimum limits contained herein are sufficient to protect the Architect from liabilities that might arise out of the performance of the work under this Agreement by the Architect, its agents, representatives, employees, or consultants. The Architect shall assess its own risks and if it deems appropriate and/or prudent, maintain higher limits and/or broader coverages. The Architect is not relieved of any liability or other obligations assumed or pursuant to this Agreement by reason of its failure to obtain or maintain insurance in sufficient amounts, duration, or types.
- § 2.5.3 Coverages and Limits of Insurance: The Architect shall provide coverage with limits of liability not less than those stated below. An excess liability policy or umbrella liability policy may be used to meet the minimum liability requirements provided that the coverage is written on a "following form" basis.
 - 1. Commercial General Liability Occurrence Form ISO CG 0001 or equivalent. Coverage to include:
 - Premises and Operations
 - Personal/Advertising Injury

- Products/Completed Operations
- Liability assumed under an Insured Contract (including defense costs assumed under contract)

General Aggregate	\$2,000,000
Products/Completed Operations Aggregate	\$2,000,000
Each Occurrence Limit	\$1,000,000
Personal/Advertising Injury	\$1,000,000
Fire Damage (Any One Fire)	\$50,000
Medical Payments (Any One Person)	\$5,000

- a. The policy shall be endorsed to include the following additional insured language: Poudre School District R-1, its elected officials, employees, agents, and volunteers are included as Additional Insureds (ISO Form CG 2010, or equivalent). Further, all policies of insurance shall:
 - 1. Include a Waiver of Subrogation Clause.
 - 2. Include a Separation of Insureds Clause (Cross Liability).
- b. Architect's consultants shall be subject to the same minimum requirements identified above.

2. Automobile Liability

Bodily injury and property damage for any owned, hired, and non-owned vehicles used in the performance of this Agreement.

Bodily Injury/Property Damage (Each Accident) \$1,000,000

Architect's consultants shall be subject to the same minimum requirements identified in this section.

3. Workers' Compensation and Employers' Liability

Coverage A (Workers' Compensation)

Coverage B (Employers Liability)

Each Accident

Disease – Policy Limit

Disease – Each Employee

Statutory

\$500,000

- Architect's consultants shall be subject to the same minimum requirements identified in this section.
- b. This requirement shall not apply if the Architect or consultant is exempt under Colorado Workers' Compensation Act AND if the Architect or consultant has a current Workers' Compensation Coverage Rejection on file with the Colorado Department of Labor and Employment, Division of Worker's Compensation.

4. Professional Liability (Errors and Omissions Liability)

Each Claim \$3,000,000

Annual Aggregate \$3,000,000 (for each project under \$10,000,000)
\$5,000,000 (for each project over \$10,000,000)

\$5,000,000 (for each project over \$10,000,000)

a. In the event that any professional liability insurance required by this Agreement is written on a claims-made basis, Architect warrants that any retroactive date under the policy shall precede the effective date of this Agreement; and that either continuous coverage will be maintained, or an extended discovery period will be exercised for a period of three (3) years beginning at the time work under this Agreement is completed.

b. Policy shall include a waiver of subrogation clause.

5. Professional Liability (Errors and Omissions Liability) for Consultants

In addition to the insurance requirements for the Architect, the Architect's registered consultants (including structural, civil, mechanical, plumbing, electrical engineering, landscape architecture, survey, geotechnical and materials testing) are required to carry Professional Liability insurance as follows:

Major Consultants (structural, mechanical, plumbing, electrical engineers)

Each Claim \$3,000,000

Annual Aggregate \$3,000,000 (for each project under \$10,000,000)

\$5,000,000 (for each project over \$10,000,000)

All other registered consultants not listed above will carry:

Each Claim \$1,000,000 Annual Aggregate \$1,000,000

- a. In the event that any professional liability insurance required by this Agreement is written on a claims-made basis, Architect warrants that any retroactive date under the policy shall precede the effective date of this Agreement; and that either continuous coverage will be maintained, or an extended discovery period will be exercised for a period of three (3) years beginning at the time work under this Agreement is completed.
- b. Policy shall include a waiver of subrogation clause.
- **§ 2.5.4 Additional Insured Requirements:** The policies shall include, or be endorsed to include, the following provisions:

On insurance policies where the Owner is named as an additional insured, the Owner shall be an additional insured to the full limits of liability purchased by the Architect even if those limits of liability are in excess of those required by this Agreement.

- § 2.5.5 Notice of Cancellation: Each insurance policy required under this Agreement shall provide the required coverage and shall not be suspended, voided or canceled except after thirty (30) days prior written notice has been given to the Owner, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. If the insurance carrier will not provide the required notice, the Architect and/or its insurance broker shall notify the Owner of any cancellation or non-renewal in coverage or limits of any insurance within seven (7) days of receipt of insurers' notification to that effect. Such notices shall be sent directly to the Owner's Director of Records & Risk Management.
- § 2.5.6 Verification of Coverage: Architect shall furnish the Owner with certificates of insurance (ACORD form or equivalent approved by the Owner's Director of Records & Risk Management) as required by this Agreement. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.
 - 1. All certificates and required endorsements are to be received and approved by the Owner's Director of Records & Risk Management before work commences. Each insurance policy required by this Agreement must be in effect at or prior to commencement of work under this Agreement and remain in effect for the duration of the project. Failure to maintain the insurance policies as required by this Agreement or to provide evidence of renewal is a material breach of contract.
 - 2. All certificates required by this Agreement shall be sent directly to the Owner's Director of Records & Risk Management at risk@psdschools.org. The Owner's project/contract number and project

description shall be noted on the certificate of insurance. The Owner reserves the right to require complete, certified copies of all insurance policies required by this Agreement at any time.

§ 2.5.7 Consultants: All required consultants' certificates and endorsements are to be received and approved by the Owner's Director of Records & Risk Management before work commences.

§ 2.5.8 Approval: Any modification or variation from the insurance requirements in this Agreement shall be made by the Owner's Director of Records & Risk Management, whose decision shall be final. Such action will not require a formal amendment but may be made by administrative action.

ARTICLE 3 SCOPE OF ARCHITECT'S BASIC SERVICES

- § 3.1 The Architect, as part of its Basic Services, shall retain professional engineering consultants for the structural, mechanical and electrical design of the Project. At the Owner's request, a copy of the Architect/Engineer agreement (s), if any, shall be forwarded to the Owner for approval or, if the consultants are members of the Architect's staff, their qualifications shall be forwarded to the Owner for approval. The approval required hereunder shall be obtained prior to any obligations relative to the Project being incurred regarding that consultant.
- **§ 3.1.1** The Architect shall manage the Architect's services, research applicable design criteria, attend Project meetings, communicate with members of the Project team, and report progress to the Owner.
- § 3.1.2 The Architect shall coordinate its services with those services provided by the Owner and the Owner's consultants. The Architect shall be entitled to rely on, and shall not be responsible for, the accuracy, completeness, and timeliness of, services and information furnished by the Owner and the Owner's consultants. The Architect shall provide prompt written notice to the Owner if the Architect becomes aware of any error, omission, or inconsistency in such services or information.
- § 3.1.3 As soon as practicable after the date of this Agreement, the Architect shall submit for the Owner's approval a schedule for the performance of the Architect's services. The schedule initially shall include anticipated dates for the commencement of construction and for Substantial Completion of the Work as set forth in the Initial Information. The schedule shall include allowances for periods of time required for the Owner's review, for the performance of the Owner's consultants, and for approval of submissions by authorities having jurisdiction over the Project. Once approved by the Owner, time limits established by the schedule shall not, except for reasonable cause, be exceeded by the Architect or Owner except by mutual agreement of the parties. Delays in the orderly progress of the Project caused by the Architect shall be the responsibility of the Architect. In the event of a delay caused by the Architect, the Architect shall accelerate to meet the time schedule without additional compensation. Time is of the essence of this Agreement.

§ 3.1.3.1 See Exhibit "C" for Project Schedule

- § 3.1.4 The Architect shall not be responsible for an Owner's directive or substitution, or for the Owner's acceptance of non-conforming Work, made or given without the Architect's written approval.
- § 3.1.5 The Architect shall contact governmental authorities required to approve the Construction Documents and entities providing utility services to the Project. The Architect shall respond to applicable design requirements imposed by those authorities and entities.
- § 3.1.6 The Architect shall assist the Owner in connection with the Owner's responsibility for filing documents required for the approval of governmental authorities having jurisdiction over the Project. The Architect shall meet with planning commissions, fire protection agencies, utility companies, affected street and traffic authorities, health departments, the State of Colorado, and any other government entities as often as reasonably necessary, and shall assist as reasonably necessary to obtain approvals before the start of construction, unless the Owner gives written instruction to proceed without such approval.

§ 3.2 Schematic Design Phase Services

§ 3.2.1 The Architect shall review the program and other information furnished by the Owner, and shall review laws, codes, and regulations applicable to the Architect's services.

- § 3.2.2 The Architect shall prepare a preliminary evaluation of the Owner's program, schedule, budget for the Cost of the Work, Project site, the proposed procurement and delivery method, and other Initial Information, each in terms of the other, to ascertain the requirements of the Project. The Architect shall notify the Owner of (1) any inconsistencies discovered in the information, and (2) other information or consulting services that may be reasonably needed for the Project.
- § 3.2.3 The Architect shall present its preliminary evaluation to the Owner and shall discuss with the Owner alternative approaches to design and construction of the Project. The Architect shall reach an understanding with the Owner regarding the requirements of the Project.
- § 3.2.4 Based on the Project requirements agreed upon with the Owner, the Architect shall prepare and present, for the Owner's approval, a preliminary design illustrating the scale and relationship of the Project components.
- § 3.2.5 The Architect shall prepare Schematic Design Documents for approval by the Owner consisting of drawings and other documents illustrating the scale and relationship of Project components. The Schematic Design Documents shall at a minimum contain, but not be limited to, the following:
 - 1. a recommended scope of site development;
 - 2. functional areas outlined (single line plans) indicating schematic spaces to meet program criteria;
 - 3. correlation of space with criteria;
 - **4.** gross square footage of additions and remodeled areas;
 - 5. net square footage; and
 - **6.** initial building code analysis.
- § 3.2.5.1 The Owner's current version of the "Technical Specification v6" dated November 2014, "Sustainable Design Guideline" dated June 2005, and "Sustainability Management Plan" dated 2017 will be provided to the Architect as part of this Agreement. These documents are intended to provide uniform and consistent quality standards for The Owner's facilities and are intended to communicate to the Architect the minimum acceptable standards for energy performance, occupant comfort requirements, products, materials and systems used in the Owner's facilities. The Architect shall make every effort to abide by the requirements of these documents and shall notify the Owner of any deviations.
- § 3.2.5.2 The Architect shall consider the value of alternative materials, building systems and equipment, together with other considerations based on program and aesthetics, in developing a design for the Project that is consistent with the Owner's program, schedule, and budget for the Cost of the Work.
- § 3.2.6 The Architect shall submit to the Owner an estimate of the Cost of the Work prepared in accordance with Section 6.3.
- § 3.2.7 The Architect shall submit the Schematic Design Documents to the Owner, and request the Owner's approval.
- § 3.2.8 The Architect shall attend and facilitate, with the Owner, public meetings about the project design.

§ 3.3 Design Development Phase Services

- § 3.3.1 Based on the approved Schematic Design Documents, the Architect shall prepare Design Development Documents for approval by the Owner. The Design Development Documents shall consist of drawings and other documents to fix and describe the size and character of the entire Project as to architectural, structural, mechanical and electrical systems, materials, and such other elements as may be appropriate. Without limiting the generality of the foregoing, the Design Development Documents shall include the following:
 - 1. outline of specifications;
 - **2.** architectural floor plans;
 - **3.** architectural elevations and building sections;
 - 4. a proposed finish schedule;
 - 5. tabulation of gross and net areas; and
 - 6. major structural, mechanical and electrical system components overlaid on architectural floor plans.
 - 7. major exterior improvements, including athletic fields and related seating areas.

8. code plan or study

- § 3.3.2 The Architect shall update the estimate of the Cost of the Work prepared in accordance with Section 6.3.
- § 3.3.3 The Architect shall submit the Design Development Documents to the Owner, advise the Owner of any adjustments to the estimate of the Cost of the Work, and request the Owner's approval.

§ 3.4 Construction Documents Phase Services

- § 3.4.1 Based on the Owner's approval of the Design Development Documents, and on the Owner's authorization of any adjustments in the Project requirements and the budget for the Cost of the Work, the Architect shall prepare Construction Documents for the Owner's approval. The Construction Documents shall illustrate and describe the further development of the approved Design Development Documents and shall consist of Drawings and Specifications setting forth in detail the quality levels and performance criteria of materials and systems and other requirements for the construction of the Work. The Owner and Architect acknowledge that, in order to perform the Work, the Contractor will provide additional information, including Shop Drawings, Product Data, Samples and other similar submittals, which the Architect shall review in accordance with Section 3.6.4.
- § 3.4.2 The Architect shall incorporate the design requirements of governmental authorities having jurisdiction over the Project into the Construction Documents.
- § 3.4.3 During the development of the Construction Documents, the Architect shall assist the Owner in the development and preparation of (1) procurement information that describes the time, place, and conditions of bidding, including bidding or proposal forms; (2) the form of agreement between the Owner and Contractor; and (3) the Conditions of the Contract for Construction (General, Supplementary and other Conditions). The Architect shall also compile a project manual that includes the Conditions of the Contract for Construction and Specifications, and may include bidding requirements and sample forms.
- § 3.4.4 The Architect shall update the estimate for the Cost of the Work prepared in accordance with Section 6.3.
- § 3.4.5 The Architect shall submit the Construction Documents to the Owner, advise the Owner of any adjustments to the estimate of the Cost of the Work, take any action required under Section 6.5, and request the Owner's approval.
- § 3.4.6 When the construction document phase is ninety percent (90%) complete and a minimum of ten (10) working days before construction documents are released for bid, the Architect shall submit to the Owner one (1) complete set of contract documents (drawings and specifications), and one (1) complete set of electronic documents in PDF format, for review and a current estimate of construction cost based on the ninety percent documents.

§ 3.5 Procurement Phase Services

§ 3.5.1 General

The Architect shall assist the Owner in establishing a list of prospective contractors. Following the Owner's approval of the Construction Documents, the Architect shall assist the Owner in (1) obtaining either competitive bids or negotiated proposals; (2) confirming responsiveness of bids or proposals; (3) determining the successful bid or proposal, if any; and, (4) awarding and preparing contracts for construction.

§ 3.5.2 Competitive Bidding

- § 3.5.2.1 Bidding Documents shall consist of bidding requirements and proposed Contract Documents.
- § 3.5.2.2 The Architect shall assist the Owner in bidding the Project by:
 - .1 facilitating the distribution of Bidding Documents to prospective bidders;
 - .2 organizing and conducting a pre-bid conference for prospective bidders;
 - .3 preparing responses to questions from prospective bidders and providing clarifications and interpretations of the Bidding Documents to the prospective bidders in the form of addenda; and,
 - .4 organizing and conducting the opening of the bids, and subsequently documenting and distributing the bidding results, as directed by the Owner.

§ 3.5.2.3 If the Bidding Documents permit substitutions, upon the Owner's written authorization, the Architect shall, as an Additional Service, consider requests for substitutions and prepare and distribute addenda identifying approved substitutions to all prospective bidders.

§	3.5.3	Negotiated	Proposals
2	252	1 Dropos	1 Doguma

§ 3.5.3.1 Proposal Documents shall consist of proposal requirements and proposed Contract Documents.

§ 3.5.3.2 The Architect shall assist the Owner in obtaining proposals by:

- .1 facilitating the distribution of Proposal Documents for distribution to prospective contractors and requesting their return upon completion of the negotiation process;
- .2 organizing and participating in selection interviews with prospective contractors;
- .3 preparing responses to questions from prospective contractors and providing clarifications and interpretations of the Proposal Documents to the prospective contractors in the form of addenda; and,
- .4 participating in negotiations with prospective contractors, and subsequently preparing a summary report of the negotiation results, as directed by the Owner.

§ 3.5.3.3 If the Proposal Documents permit substitutions, upon the Owner's written authorization, the Architect shall, as an Additional Service, consider requests for substitutions and prepare and distribute addenda identifying approved substitutions to all prospective contractors.

§ 3.6 Construction Phase Services

§ 3.6.1 General

§ 3.6.1.1 The Architect shall provide administration of the Contract between the Owner and the Contractor as set forth below and in AIA Document A201TM—2017, General Conditions of the Contract for Construction, as amended by the Owner.

§ 3.6.1.2 The Architect shall advise and consult with the Owner during the Construction Phase Services. The Architect shall have authority to act on behalf of the Owner only to the extent provided in this Agreement and the Architect shall not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, nor shall the Architect be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. Notwithstanding the preceding sentence, the Architect shall promptly report to the Owner known deviations from the Contract Documents and from the most recent approved construction schedule. If the Architect finds that the progress of the Project is not in compliance with the approved construction schedule then, in addition to reporting to the Owner as required above, the Architect shall request the Contractor to submit a recovery plan for approval. In addition to the foregoing obligations to notify Owner, the Architect shall notify Owner promptly if Architect becomes aware of any other failures to perform, acts or omissions of the Contractor that in the Architect's professional judgement will or may result in a detriment to the Owner. The Architect shall be responsible for the Architect's negligent acts or omissions and failure to comply with this Agreement, but shall not have control over or charge of, and shall not be responsible for, acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons or entities performing portions of the Work not employed by or retained by Architect.

§ 3.6.1.3 The Architect shall administer, and maintain record copies showing dates and signatures, of all construction phase documents, using standard AIA forms where applicable. This obligation includes but is not limited to the following, all of which shall be done in a prompt and timely manner:

- providing a standard Request for Information (RFI) form and responding to all RFIs;
- 2. issuing Architect's Supplemental Instructions (ASI) and Proposal Requests (PR) as needed;
- 3. providing a standard Change Order Request (COR) form and responding to all CORs;
- 4. issuing all Change Order (CO) drafts for the Owner's and Contractor's approval and signature;
- 5. issuing all Construction Change Directives (CCD);
- **6.** issuing all Notices of Nonconformance as required;
- 7. reviewing and responding to all Submittals; and
- **8.** reviewing and either certifying or rejecting Applications for Payment.

§ 3.6.1.4 Subject to Section 4.2 and except as provided in Section 3.6.6.5, the Architect's responsibility to provide Construction Phase Services commences with the award of the Contract for Construction and terminates on the date the Architect issues the final Certificate for Payment.

§ 3.6.2 Evaluations of the Work

§ 3.6.2.1 The Architect shall meet with the principal Contractor at the site at least once a week, or as mutually agreed to in writing by the Owner, Architect, and Contractor during the course of construction, or such further visits as shall be necessary, relative to the performance of the Contractor and all subcontractors in accordance with the final approved plans, specifications, and construction schedule. The Architect shall assist the Owner in reviewing the construction schedule for acceptability as outlined in the contract documents. Before the Contractor's first Application for Payment is processed, the Architect and Owner must agree and accept the Contractor's baseline documents and schedule of values. The Architect shall promptly prepare and distribute written minutes of the weekly meetings and distribute within three days of the meeting. The Architect shall request that any objections by the Contractor or the Owner to the content of such minutes shall promptly be made to the Architect in writing. On the basis of the site visits or any other information the Architect may have, the Architect shall keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work.

Any and all other of the Architect's consultants shall visit the site a minimum of once per week, or as mutually agreed to in writing by the Owner, Architect, and Contractor during construction of their consultants' respective portion of the projects, or as otherwise agreed upon, or more as shall be necessary, and as relative to the performance of the Contractor and all subcontractors in accordance with the final approved plans and specifications. The Architect and his consultants shall review the findings of such on-site observations with the Contractor prior to leaving the site, and such on-site observations shall continue beyond the time of substantial completion until all items of work are documented in writing by the Architect as fully completed. The Architect and his consultants shall prepare written reports to document all on-site observations and site meetings and shall promptly submit such written reports to the Owner and Contractor. The Architect's on-site observations shall include, but not be limited to, the following services by the Architect, structural, mechanical and electrical engineers, and other consultants retained by the Architect:

- observe that approved shop drawings, lab and testing reports, and updated as-built documents are being maintained at the site;
- 2. observe reinforcing steel after installation and before concrete is placed;
- 3. observe structural and architectural concrete before, during, and after pouring;
- 4. observe structural steel after erection and prior to the same being covered or enclosed;
- 5. observe mechanical work following its installation and prior to its being covered and /or enclosed;
- 6. observe electrical work following its installation and prior to its being covered and/or enclosed;
- 7. observe exposed surfaces for compliance with Construction Contract Documents;
- **8.** representation of Owner at preliminary and final observations;
- 9. assist the Owner in determining that all systems are properly working as per the Contract Documents.

§ 3.6.2.2 The Architect has the authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect shall have the authority to require inspection or testing of the Work in accordance with the provisions of the Contract Documents, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 3.6.2.3 The Architect shall interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests shall be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 3.6.2.4 Interpretations and decisions of the Architect shall be consistent with the intent of, and reasonably inferable from, the Contract Documents and shall be in writing or in the form of drawings. When making such interpretations and decisions, the Architect shall endeavor to secure faithful performance by both Owner and Contractor, shall not show partiality to either, and shall not be liable for results of interpretations or decisions rendered in good faith. The

Architect's decisions on matters relating to aesthetic effect shall be final if consistent with the intent expressed in the Contract Documents.

§ 3.6.2.5 Unless the Owner and Contractor designate another person to serve as an Initial Decision Maker, as that term is defined in AIA Document A201–2017, the Architect shall render initial decisions on Claims between the Owner and Contractor as provided in the Contract Documents.

§ 3.6.3 Certificates for Payment to Contractor

- § 3.6.3.1 The Architect shall review and certify the amounts due the Contractor and shall issue certificates in such amounts. The Architect's certification for payment shall constitute a representation to the Owner, based on the Architect's evaluation of the Work as provided in Section 3.6.2 and on the data comprising the Contractor's Application for Payment, that, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to (1) an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, (2) results of subsequent tests and inspections, (3) correction of minor deviations from the Contract Documents prior to completion, and (4) specific qualifications expressed by the Architect.
- § 3.6.3.2 The issuance of a Certificate for Payment shall not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment, or (4) ascertained how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.
- § 3.6.3.3 The Architect shall maintain a record of the Applications and Certificates for Payment.
- § 3.6.3.4 The Architect shall not execute the Contractor's monthly applications and Certificates for Payment and return to the Owner for action until Architect has made an observation of the construction to determine, to the best of his ability, that the said materials or services have been provided as indicated on the Contractor's Schedule of Values. If the Architect is aware of any legitimate basis upon which to dispute any sums payable, the Architect shall not issue a Certificate for Payment of such sums without first obtaining the Owner's written authorization.

§ 3.6.4 Submittals

- § 3.6.4.1 The Architect shall review the Contractor's submittal schedule and shall not unreasonably delay or withhold approval of the schedule. The Architect's action in reviewing submittals shall be taken in accordance with the approved submittal schedule or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time, in the Architect's professional judgment, to permit adequate review.
- § 3.6.4.2 The Architect shall review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Review of such submittals is not for the purpose of determining the accuracy and completeness of other information such as dimensions, quantities, and installation or performance of equipment or systems, which are the Contractor's responsibility. The Architect's review shall not constitute approval of safety precautions or construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component, but the Architect shall take reasonable measures to verify that such assembly is consistent with the design concept expressed in the Contract Documents.
- § 3.6.4.3 If the Contract Documents specifically require the Contractor to provide professional design services or certifications by a design professional related to systems, materials, or equipment, the Architect shall specify the appropriate performance and design criteria that such services must satisfy. The Architect shall review and take appropriate action on Shop Drawings and other submittals related to the Work designed or certified by the Contractor's design professional, provided the submittals bear such professional's seal and signature when submitted to the Architect. The Architect's review shall be for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect shall be entitled to rely upon, and

shall not be responsible for, the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals except that the Architect shall exercise reasonable professional judgement as to the apparent accuracy and/or completeness of such shop drawings and other submittals, and to notify the Owner if such accuracy and/or completeness is in question.

§ 3.6.4.4 Subject to Section 4.2, the Architect shall review and respond to requests for information about the Contract Documents. The Architect shall set forth, in the Contract Documents, the requirements for requests for information. Requests for information shall include, at a minimum, a detailed written statement that indicates the specific Drawings or Specifications in need of clarification and the nature of the clarification requested. The Architect's response to such requests shall be made in writing within any time limits agreed upon, or otherwise with reasonable promptness. If appropriate, the Architect shall prepare and issue supplemental Drawings and Specifications in response to the requests for information.

§ 3.6.4.5 The Architect shall maintain a record of submittals and copies of submittals supplied by the Contractor in accordance with the requirements of the Contract Documents.

§ 3.6.5 Changes in the Work

§ 3.6.5.1 The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. Subject to Section 4.2, the Architect shall prepare Change Orders and Construction Change Directives for the Owner's approval and execution in accordance with the Contract Documents.

§ 3.6.5.2 The Architect shall maintain records relative to changes in the Work, by Addenda, RFI, PR, CCD, CO's, and submittals, and will incorporate Contractor's as-built redlines and provide to the Owner as provided in Section 3.6.6.6.

§ 3.6.6 Project Completion

§ 3.6.6.1 The Architect shall:

- 1 conduct observations to determine the date or dates of Substantial Completion and the date of final completion;
- .2 issue Certificates of Substantial Completion;
- .3 forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract Documents and received from the Contractor; and,
- .4 issue a final Certificate for Payment based upon a final observation indicating that, to the best of the Architect's knowledge, information, and belief, the Work complies with the requirements of the Contract Documents.

§ 3.6.6.2 The Architect's observations shall be conducted with the Owner to check conformance of the Work with the requirements of the Contract Documents and to verify the accuracy and completeness of the list submitted by the Contractor of Work to be completed or corrected. The Architect shall require in the specifications that the Contractor shall provide complete and thorough start-up assistance, operating and maintaining instructions, manuals, and advice to the Owner. The Architect shall provide adequate engineering assistance to the Owner during this start-up period. The Architect shall coordinate and track the closeout of the Project including, but not limited to: systems demonstrations, spare parts inventory, equipment move-in, permanent key acceptance and verify that the Contractor has met all closeout requirements as outlined in the contract documents.

§ 3.6.6.3 When Substantial Completion has been achieved, the Architect shall inform the Owner about the balance of the Contract Sum remaining to be paid the Contractor, including the amount to be retained from the Contract Sum, if any, for final completion or correction of the Work.

§ 3.6.6.4 The Architect shall forward to the Owner the following information received from the Contractor: (1) consent of surety or sureties, if any, to reduction in or partial release of retainage or the making of final payment; (2) affidavits, receipts, releases and waivers of liens, or bonds indemnifying the Owner against liens; and (3) any other documentation required of the Contractor under the Contract Documents.

§ 3.6.6.5 The Architect and his consultants shall issue written notices to the Contractor to correct failed work, reported by the Owner, as warranty items during the warranty period following substantial completion.

- § 3.6.6.6 Within ninety (90) days after final acceptance by Owner of the Contractor's as-built documents, the Architect shall supply the Owner with copies of all final contract documents, plans, specifications, drawings, showing all significant changes incorporated in the Work as finally complete. The following items shall be transmitted to the Owner prior to Final Payment:
 - .1 One compact disk containing all electronic AutoCAD and/or Revit files including any necessary fonts, reference files, etc. that were used in preparing the final record documents.
 - .2 One compact disk containing all final record drawings and specifications printed in an Adobe .pdf file format.

§ 3.6.6.7 As part of the Architect's basic services under this Agreement, and notwithstanding any other provision in this Agreement, approximately eleven (11) months after substantial completion and issuance of certificate of occupancy and prior to the expiration of any one-year contractor's or manufacturers warranties, the Architect and its consultants shall re-examine the Project and report to the Owner the status of the contractor's completion of the work, including but not limited to "punch list" items, and identifying any deficiencies or defects in workmanship or materials for which a claim can be made under the contractor's warranty.

ARTICLE 4 SUPPLEMENTAL AND ADDITIONAL SERVICES

§ 4.1 Supplemental Services

§ 4.1.1 The services listed below are included in Basic Services and are required for the Project. The Architect shall provide the listed Supplemental Services only if specifically designated in the table below as the Architect's responsibility, and the Owner shall compensate the Architect as provided in Section 11.2. Unless otherwise specifically addressed in this Agreement, if neither the Owner nor the Architect is designated, the parties agree that the listed Supplemental Service is not being provided for the Project.

(Designate the Architect's Supplemental Services and the Owner's Supplemental Services required for the Project by indicating whether the Architect or Owner shall be responsible for providing the identified Supplemental Service. Insert a description of the Supplemental Services in Section 4.1.2 below or attach the description of services as an exhibit to this Agreement.)

Supplemental Services	Responsibility	
	(Architect, Owner, or not provided)	
§ 4.1.1.1 Programming	Architect	
§ 4.1.1.2 Multiple preliminary designs	Architect	
§ 4.1.1.3 Measured drawings	Not Provided	
§ 4.1.1.4 Existing facilities surveys	Not Provided	
§ 4.1.1.5 Site evaluation and planning	Not Provided	
§ 4.1.1.6 Building Information Model management responsibilities	Not Provided	
§ 4.1.1.7 Development of Building Information Models for post construction use	Not Provided	
§ 4.1.1.8 Civil engineering	Architect	
§ 4.1.1.9 Landscape design	Architect	
§ 4.1.1.10 Architectural interior design	Architect	
§ 4.1.1.11 Value analysis	Not Provided	
§ 4.1.1.12 Detailed cost estimating beyond that required in Section 6.3	Not Provided	
§ 4.1.1.13 On-site project representation	Not Provided	
§ 4.1.1.14 Conformed documents for construction	Architect	
§ 4.1.1.15 As-designed record drawings	Not Provided	
§ 4.1.1.16 As-constructed record drawings	Architect	
§ 4.1.1.17 Post-occupancy evaluation	Not Provided	

Supplemental Services	Responsibility
	(Architect, Owner, or not provided)
§ 4.1.1.18 Facility support services	Not Provided
§ 4.1.1.19 Tenant-related services	Not Provided
§ 4.1.1.20 Architect's coordination of the Owner's consultants	Architect
§ 4.1.1.21 Telecommunications/data design	Architect
§ 4.1.1.22 Security design	Architect
§ 4.1.1.23 Commissioning	Owner
§ 4.1.1.24 Sustainable Project Services	Not Provided
§ 4.1.1.25 Fast-track design services	Not Provided
§ 4.1.1.26 Multiple bid packages	Not Provided
§ 4.1.1.27 Historic preservation	Not Provided
§ 4.1.1.28 Furniture, furnishings, and equipment design	Not Provided
§ 4.1.1.29 Other services provided by specialty Consultants	Per Exhibit "B"
§ 4.1.1.30 Other Supplemental Services	N/A

§ 4.1.2 Description of Supplemental Services

§ 4.1.2.1 A description of each Supplemental Service identified in Section 4.1.1 as the Architect's responsibility is provided below.

(Describe in detail the Architect's Supplemental Services identified in Section 4.1.1 or, if set forth in an exhibit, identify the exhibit. The AIA publishes a number of Standard Form of Architect's Services documents that can be included as an exhibit to describe the Architect's Supplemental Services.)

« See Exhibit "B" »

§ 4.1.2.2 A description of each Supplemental Service identified in Section 4.1.1 as the Owner's responsibility is provided below.

(Describe in detail the Owner's Supplemental Services identified in Section 4.1.1 or, if set forth in an exhibit, identify the exhibit.)

$\ll N/A \gg$

§ 4.2 Architect's Additional Services

The Architect may provide Additional Services after execution of this Agreement without invalidating the Agreement. Except for services required due to the fault of the Architect, any Additional Services provided in accordance with this Section 4.2 shall entitle the Architect to compensation pursuant to Section 11.3 and an appropriate adjustment in the Architect's schedule.

- § 4.2.1 Upon recognizing the need to perform the following Additional Services, the Architect shall notify the Owner with reasonable promptness and explain the facts and circumstances giving rise to the need. The Architect shall not proceed to provide the following Additional Services until the Architect receives the Owner's written authorization:
 - .1 Services necessitated by a change in the Initial Information, previous instructions or approvals given by the Owner, or a material change in the Project including size, quality, complexity, the Owner's schedule or budget for Cost of the Work, or procurement or delivery method;
 - .2 Services necessitated by the enactment or revision of codes, laws, or regulations, including changing or editing previously prepared Instruments of Service;
 - Changing or editing previously prepared Instruments of Service necessitated by official interpretations of applicable codes, laws or regulations that are either (a) contrary to specific interpretations by the applicable authorities having jurisdiction made prior to the issuance of the building permit, or (b)

- contrary to requirements of the Instruments of Service when those Instruments of Service were prepared in accordance with the applicable standard of care;
- .4 Services necessitated by decisions of the Owner not rendered in a timely manner or any other failure of performance on the part of the Owner or the Owner's consultants or contractors (Architect shall give Owner timely notice of the due date of any such decision and reasonable reminders as the time approaches);
- .5 Preparing digital models or other design documentation for transmission to the Owner's consultants and contractors, or to other Owner-authorized recipients;
- .6 DELETED
- .7 DELETED
- **.8** Preparation for, and attendance at, a dispute resolution proceeding or legal proceeding, except where the Architect is party thereto;
- **.9** Evaluation of the qualifications of entities providing bids or proposals;
- .10 Consultation concerning replacement of Work resulting from fire or other cause during construction; or,
- .11 Assistance to the Initial Decision Maker, if other than the Architect.
- § 4.2.2 To avoid delay in the Construction Phase, the Architect shall provide the following Additional Services, notify the Owner with reasonable promptness, and explain the facts and circumstances giving rise to the need. If, upon receipt of the Architect's notice, the Owner determines that all or parts of the services are not required, the Owner shall give prompt written notice to the Architect of the Owner's determination. The Owner shall compensate the Architect for the services provided prior to the Architect's receipt of the Owner's notice.
 - .1 Reviewing a Contractor's submittal out of sequence from the submittal schedule approved by the Architect;
 - .2 Responding to the Contractor's requests for information that are not prepared in accordance with the Contract Documents or where such information is available to the Contractor from a careful study and comparison of the Contract Documents, field conditions, other Owner-provided information, Contractor-prepared coordination drawings, or prior Project correspondence or documentation;
 - .3 Preparing Change Orders and Construction Change Directives that require evaluation of Contractor's proposals and supporting data, or the preparation or revision of Instruments of Service;
 - .4 Evaluating an extensive number of Claims as the Initial Decision Maker; or,
 - .5 Evaluating substitutions proposed by the Owner or Contractor and making subsequent revisions to Instruments of Service resulting therefrom.
- § 4.2.3 The Architect shall provide Construction Phase Services exceeding the limits set forth below as Additional Services. When the limits below are reached, the Architect shall notify the Owner:
 - « Two » («2») reviews of each Shop Drawing, Product Data item, sample and similar submittals of the Contractor
 - .2 « Ninety-Six » (« 96 ») visits to the site by the Architect during construction or as required in Section 3.6.2.1, whichever is greater
 - .3 « Two » (« 2 ») observations for any portion of the Work to determine whether such portion of the Work is substantially complete in accordance with the requirements of the Contract Documents
 - .4 « One » (« 1 ») observation for any portion of the Work to determine final completion.
- § 4.2.4 Except for services required under Section 3.6.6.5 and those services that do not exceed the limits set forth in Section 4.2.3, Construction Phase Services provided more than 60 days after (1) the date of Substantial Completion of the Work or (2) the initial date of Substantial Completion identified in the agreement between the Owner and Contractor, whichever is earlier, shall be compensated as Additional Services to the extent the Architect incurs additional cost in providing those Construction Phase Services.
- § 4.2.5 If the services covered by this Agreement have not been completed within « » (« ») months of the date of this Agreement, through no fault of the Architect, extension of the Architect's services beyond that time shall be compensated as Additional Services.

ARTICLE 5 OWNER'S RESPONSIBILITIES

- § 5.1 Unless otherwise provided for under this Agreement, the Owner shall provide information in a timely manner regarding requirements for and limitations on the Project, including a written program, which shall set forth the Owner's objectives; schedule; constraints and criteria, including space requirements and relationships; flexibility; expandability; special equipment; systems; and site requirements. The Architect shall assist the Owner as requested with the obligations and responsibilities referenced in this Article 5.
- § 5.2 The Owner shall establish the Owner's budget for the Project, including (1) the budget for the Cost of the Work as defined in Section 6.1; (2) the Owner's other costs; and, (3) reasonable contingencies related to all of these costs. The Owner shall update the Owner's budget for the Project as necessary throughout the duration of the Project until final completion. If the Owner significantly increases or decreases the Owner's budget for the Cost of the Work, the Owner shall notify the Architect. The Owner and the Architect shall thereafter agree to a corresponding change in the Project's scope and quality.
- § 5.3 The Owner shall identify a representative authorized to act on the Owner's behalf with respect to the Project. The Owner shall render decisions and approve the Architect's submittals in a timely manner in order to avoid unreasonable delay in the orderly and sequential progress of the Architect's services. The Architect shall promptly notify the Owner in writing of any decision the Architect claims is not being done in a timely manner.
- § 5.4 The Owner shall furnish surveys to describe physical characteristics, legal limitations and utility locations for the site of the Project, and a written legal description of the site. The surveys and legal information shall include, as applicable, grades and lines of streets, alleys, pavements and adjoining property and structures; designated wetlands; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions, and other necessary data with respect to existing buildings, other improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths. All the information on the survey shall be referenced to a Project benchmark.
- § 5.5 The Owner shall furnish services of geotechnical engineers, which may include test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, seismic evaluation, ground corrosion tests and resistivity tests, including necessary operations for anticipating subsoil conditions, with written reports and appropriate recommendations.
- § 5.6 The Owner shall provide the Supplemental Services designated as the Owner's responsibility in Section 4.1.1.

§ 5.7 DELETED

- § 5.8 The Owner shall coordinate the services of its own consultants with those services provided by the Architect. Upon the Architect's written request, the Owner shall furnish copies of the scope of services in the contracts between the Owner and the Owner's consultants. The Owner shall furnish the services of consultants other than those designated as the responsibility of the Architect in this Agreement, or authorize the Architect to furnish them as an Additional Service, when the Architect requests such services and demonstrates to the Owner's satisfaction that they are reasonably required by the scope of the Project. The Owner shall require that its consultants and contractors maintain insurance, including professional liability insurance, as deemed by the Owner to be appropriate to the services or work provided.
- § 5.8.1 The Owner reserves the right to contract for commissioning services, construction management and/or inspection services, or other consultants in connection with the Work. In such event, the Architect agrees to cooperate fully, and the time set forth in Section 1.1.4 may be extended in writing by the Owner as reasonably necessary to allow for appropriate participation in the Work. In the event that the Architect's cooperation would require additional services by the Architect, such additional services will require prior written approval by the Owner.
- § 5.9 The Owner shall furnish tests, inspections and reports required by law or the Contract Documents, such as structural, mechanical, and chemical tests, tests for air and water pollution, and tests for hazardous materials.

- § 5.10 The Owner shall furnish all legal, insurance and accounting services, including auditing services, that may be reasonably necessary at any time for the Project to meet the Owner's needs and interests.
- § 5.11 The Owner shall provide prompt written notice to the Architect if the Owner becomes aware of any fault or defect in the Project, including errors, omissions or inconsistencies in the Architect's Instruments of Service. Subparagraph 5.11 shall not be construed to impose a duty upon the Owner to inspect or to observe the Project, or to become aware of any fault or defect in the Project or of any nonconformance with the Contract Documents, nor is the Owner required to give written notice if it is the Architect who is the source of the Owner's knowledge about any fault, defect or discrepancy. Moreover, failure to deliver notice required in this Section 5.11 shall not relieve the Architect of responsibility for the professional quality, technical accuracy, timely completion and the coordination of all designs, plans, reports, specifications drawings and other services rendered by the Architect and the Architect shall without additional compensation, promptly remedy and correct any errors, omissions, or other deficiencies in Architects work product that the Architect is responsible for, which may occur.
- § 5.12 The Owner shall include the Architect in all communications with the Contractor that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Contractor otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect.
- § 5.13 Before executing the Contract for Construction, the Owner shall coordinate the Architect's duties and responsibilities set forth in the Contract for Construction with the Architect's services set forth in this Agreement. The Owner shall provide the Architect a copy of the executed agreement between the Owner and Contractor, including the General Conditions of the Contract for Construction.
- § 5.14 The Owner shall provide the Architect access to the Project site prior to commencement of the Work and shall obligate the Contractor to provide the Architect access to the Work wherever it is in preparation or progress.
- § 5.15 Within 15 days after receipt of a written request from the Architect, the Owner shall furnish the requested information as necessary and relevant for the Architect to evaluate, give notice of, or enforce lien rights.

ARTICLE 6 COST OF THE WORK

- § 6.1 For purposes of this Agreement, the Cost of the Work shall be the total cost to the Owner to construct all elements of the Project designed or specified by the Architect and shall include contractors' general conditions costs, overhead and profit. The Cost of the Work also includes the reasonable value of labor, materials, and equipment, donated to, or otherwise furnished by, the Owner. The Cost of the Work does not include the compensation of the Architect; the costs of the land, rights-of-way, financing, or contingencies for changes in the Work; or other costs that are the responsibility of the Owner.
- § 6.2 The Owner's budget for the Cost of the Work is provided in Initial Information, and shall be adjusted throughout the Project as required under Sections 5.2, 6.4 and 6.5. Evaluations of the Owner's budget for the Cost of the Work, and the preliminary estimate of the Cost of the Work and updated estimates of the Cost of the Work, prepared by the Architect, represent the Architect's judgment as a design professional. It is recognized, however, that neither the Architect nor the Owner has control over the cost of labor, materials, or equipment; the Contractor's methods of determining bid prices; or competitive bidding, market, or negotiating conditions. Accordingly, the Architect cannot and does not warrant or represent that bids or negotiated prices will not vary from the Owner's budget for the Cost of the Work, or from any estimate of the Cost of the Work, or evaluation, prepared or agreed to by the Architect.
- § 6.3 In preparing estimates of the Cost of Work, the Architect shall be permitted to include contingencies for design, bidding, and price escalation; to determine what materials, equipment, component systems, and types of construction are to be included in the Contract Documents; to recommend reasonable adjustments in the program and scope of the Project; and to include design alternates as may be necessary to adjust the estimated Cost of the Work to meet the Owner's budget. The Architect's estimate of the Cost of the Work shall be based on current area, volume or similar conceptual estimating techniques. If the Owner requires a detailed estimate of the Cost of the Work, the Architect shall provide such an estimate, if identified as the Architect's responsibility in Section 4.1.1, as a Supplemental Service.

- § 6.4 If, through no fault of the Architect, the Procurement Phase has not commenced within 90 days after the Architect submits the Construction Documents to the Owner, the Owner's budget for the Cost of the Work shall be adjusted to reflect changes in the general level of prices in the applicable construction market.
- § 6.5 If at any time the Architect's estimate of the Cost of the Work exceeds the Owner's budget for the Cost of the Work, the Architect shall make appropriate recommendations to the Owner to adjust the Project's size, quality, or budget for the Cost of the Work, and the Owner shall cooperate with the Architect in making such adjustments.
- § 6.6 If the Owner's budget for the Cost of the Work at the conclusion of the Construction Documents Phase Services is exceeded by the lowest bona fide bid or negotiated proposal, the Owner shall
 - .1 give written approval of an increase in the budget for the Cost of the Work;
 - .2 authorize rebidding or renegotiating of the Project within a reasonable time;
 - .3 terminate in accordance with Section 9.5;
 - .4 in consultation with the Architect, revise the Project program, scope, or quality as required to reduce the Cost of the Work; or,
 - .5 implement any other mutually acceptable alternative.
- § 6.7 Regardless of which alternative the Owner chooses under Section 6.6 the Architect, the Architect's consultants and other planning professionals, without additional charge, shall modify the Contract Documents as necessary to ensure that the Cost of Work does not exceed the lesser amount of the Owner's Project Budget or the fixed limit of Construction Costs. The Architect's and/or consultants' and/or other planning professionals' modification of the Construction Documents shall be the limit of the Architect's responsibility under this Article 6.

ARTICLE 7 COPYRIGHTS AND LICENSES

- § 7.1 The Architect and the Owner warrant that in transmitting Instruments of Service, or any other information, the transmitting party is the copyright owner of such information or has permission from the copyright owner to transmit such information for its use on the Project.
- § 7.2 The drawings, specifications, and other documents or data prepared by the Architect and the Architect's consultants for the Project, or any component of the Project, are Instruments of Service. Upon payment of all amounts due under this Agreement for that portion of drawings, specifications or other documents prepared or furnished, the Owner shall be deemed the owner of the Instruments of Service. The Architect and its consultants retain nonexclusive licenses to the Instruments of Service, provided that the completed Project represented by the Instrument of Service shall not be duplicated for any other client without the prior written consent of the Owner. The Architect and its consultants do not convey to the Owner their unique or proprietary design techniques or concepts as may be employed in the final Instruments of Service. To the extent that work, design, process, or product which is patented, copyrighted, or otherwise protected by an intellectual property right (whether common law, statutory, contractual or reserved), is incorporated into the Instruments of Service or the Work performed under this Agreement by the Architect, the Architect shall pay royalties and/or license fees for such patented or copyrighted designs, process or products. Architect shall at its sole cost and expense indemnify, defend, and hold harmless the Owner against any claims by third parties of infringement of any copyrights or other common law, statutory, contractual or reserved rights incorporated into the Instruments of Service or the Work.
- §7.2.1 Electronic Media: The information contained on or in the Architect's electronic media, or retrieved/downloaded from the Architect's ftp site, is provided as a convenience to the users and is provided in "as is" condition. In the event of a conflict in their content, the Architect's printed hard copy shall take precedence over the electronic media.
- **§7.2.1.1** Use of the Architect's electronic media shall be without liability to the Architect, its insurers, employees and consultants. It is expressly understood and agreed the Architect retains ownership of the printed hard copy drawings and/or specifications until completion of the project in accordance with Section 7.2, subject to the provisions of Section 9.3.
- §7.2.1.2 It is understood and agreed that the information contained on or in the Architect's electronic media or retrieved/downloaded from the Architect's ftp site may have been or be altered intentionally or unintentionally by user or others and the user agrees to indemnify and hold harmless the Architect, its insurers, employees and consultants

from any claims, liabilities, damages, loss and costs, including, but not limited to cost of legal defense for the use of such media.

- § 7.3 The Owner has the right to reproduce and/or use, and to create derivative works based upon, the Instruments of Service for other projects at its discretion; provided, however, that if the Owner reproduces or uses the Instruments of Service for another project, or creates (or causes others to create) a derivative work based upon the Instruments of Service, the Owner shall remove or completely obliterate the original professional seals, logos, and other indications of the identity of the Architect and the Architect's consultants on the Instruments of Service. The Owner shall not assign the Instruments of Service to any third party for use on projects unrelated to the Owner, unless the Owner first obtains written consent from the Architect. The use by the Owner or its successors in interest in title, or assigns, which incorporates the Instruments of Service or any derivatives thereof, shall be at the Owner's sole risk and without any liability or responsibility whatsoever by Architect or its consultants.
- § 7.4 Except for the licenses granted in this Article 7, no other license or right shall be deemed granted or implied under this Agreement. The Owner shall not assign, delegate, sublicense, pledge or otherwise transfer any license granted herein to another party without the prior written agreement of the Architect. Any unauthorized use of the Instruments of Service shall be at the Owner's sole risk and without liability to the Architect and the Architect's consultants.
- § 7.5 Except as otherwise stated in Section 7.3, the provisions of this Article 7 shall survive the termination of this Agreement.

ARTICLE 8 CLAIMS AND DISPUTES

- § 8.1 In the event of any dispute or claim arising under or related to this Agreement, the parties shall use their best efforts to settle such dispute or claim through good faith negotiations with each other. If such dispute or claim is not settled through negotiations within 30 days after the earliest date on which one party notifies the other party in writing of its desire to attempt to resolve such dispute or claim through negotiations, then the parties agree to attempt in good faith to settle such dispute or claim by mediation conducted under the auspices of a recognized established mediation service within the State of Colorado. Such mediation shall be conducted within 60 days following either party's written request therefore. If such dispute or claim is not settled through mediation, then either party may initiate a civil action in the state courts of Larimer County, Colorado. No such action shall be removed to any other court or jurisdiction. The prevailing party in such court action shall be entitled to collect, as part of any judgment entered, its reasonable expert witness and attorneys' fees and costs.
- § 8.1.1 The Architect and Owner waive consequential damages for claims, disputes or other matters in question arising out of or relating to this Agreement. This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination of this Agreement. The term "consequential damages" shall not include the cost of any structural repair, demolition, dismantling, replacement, or construction waste that is reasonably related to the Architect's negligence.
- § 8.2 To the fullest extent permitted by law, Architect shall indemnify, defend and hold the Owner harmless from and against all liability, claims, and demands, on account of injury, loss, or damage, including, without limitation, claims arising from bodily injury, personal injury, sickness, disease, death, property loss or damage, or any other loss of any kind whatsoever, that arise out of or are in any manner connected with this Agreement, to the extent that such injury, loss, or damage is caused by:
 - 1. the negligent, intentional, or willful wrongful act of Architect, or any officer, employee, representative, agent, consultant of Architect, or other person for whom Architect is responsible under this Agreement; or
 - **2.** Architect's breach of this Agreement.

except to the extent such liability, claim, or demand arises through the negligent, intentional, or willful wrongful act of the Owner, its officers, employees, or agents, or Owner's breach of this Agreement.

This indemnity provision is to be interpreted to require Architect to indemnify, defend, and hold the Owner harmless only to the extent of the proportionate share of negligence or fault attributable to Architect or a person for whom Architect is responsible under this Section. To the extent indemnification is required under this Agreement, Architect

shall investigate, handle, respond to, and to provide defense for and defend against (with counsel acceptable to Owner), any such liability, claims, or demands at its expense, and to bear all other costs and expenses related thereto, including court costs and attorney fees. This Section shall survive the completion or termination of this Agreement and shall be fully enforceable thereafter until all of the requirements of this Section are performed

§ 8.3 For Change Orders resulting in an increase in the Cost of the Work that are a result of negligent errors, omissions, or discrepancies in the plans, specifications, or other of the Contract Documents prepared by the Architect, its employees, agents, or consultants, the Architect agrees to reimburse the Owner for the cost premium associated with the increase in the Cost of the Work, the cost premium being the difference between the Cost of the Work in the Change Order had the negligence not occurred and the cost to remedy the negligence by Change Order. Reimbursement calculations shall be determined by the Architect and submitted to the Owner for negotiation and acceptance. Additionally, the Architect shall bear all costs associated with redesign efforts pertaining to such Change Orders, including third party cost estimating.

ARTICLE 9 TERMINATION OR SUSPENSION

- § 9.1 This Agreement may be terminated by either party upon five (5) days' written notice should either party fail to substantially perform in accordance with its terms through no fault of the other. In addition, the Owner may terminate this Agreement whenever it becomes reasonably apparent that the Architect is or will be unable or unwilling to substantially perform this Agreement in accordance with its terms or without resulting in interference with or disruption of the Project. In the event of termination of this Agreement, the Architect shall be paid the specified compensation for its services performed to the termination date, including reimbursable expenses then due.
- § 9.2 If the Owner suspends the Project, the Architect shall be compensated for services performed prior to notice of such suspension. When the Project is resumed, the Architect shall be compensated for expenses incurred in the interruption and resumption of the Architect's services. The Architect's fee for the remaining services and the time schedules shall be equitably adjusted.
- § 9.3 In the event of a termination, the Architect shall deliver to the Owner all copies of all drawings, plans, and similar materials relating to the Project and for which it has received compensation, and all other documents delivered to Architect by Owner with respect to this Project, subject to the provisions of Article 7.
- **§ 9.4** The party properly terminating this Agreement under this Article 9 shall be entitled, in addition to any other amounts due under this Agreement, or as set off against amounts otherwise owed under this Agreement, to the reasonable costs, expenses, and damages occasioned by the termination of this Agreement.

ARTICLE 10 MISCELLANEOUS PROVISIONS

- § 10.1 This Agreement shall be governed by and construed in accordance with the laws of Colorado. Exclusive venue for litigation over any issues pursuant to this Agreement shall be in the District Court of Larimer County, Colorado, and such litigation shall not be removed to any other court or jurisdiction.
- § 10.2 Unless otherwise defined in the Agreement, the Terms in this Agreement shall have the same meaning as those in AIA Document A201–2017, General Conditions of the Contract for Construction as amended by the Owner.
- § 10.3 The Owner and Architect, respectively, bind themselves, their agents, successors, assigns, and legal representatives to this Agreement. Neither the Owner nor the Architect shall assign this Agreement without the written consent of the other, except that the Owner may assign this Agreement to a lender providing financing for the Project if the lender agrees to assume the Owner's rights and obligations under this Agreement. Further, the Owner may assign its rights under this Agreement to satisfy any governmental or financing requirements without the consent of Architect.
- § 10.4 If the Owner requests the Architect to execute certificates, the proposed language of such certificates shall be submitted to the Architect for review at least 14 days prior to the requested dates of execution. If the Owner requests the Architect to execute consents reasonably required to facilitate assignment to a lender, the Architect shall execute all such consents that are consistent with this Agreement, provided the proposed consent is submitted to the Architect for review at least 14 days prior to execution. The Architect shall not be required to execute certificates or consents that would require knowledge, services, or responsibilities beyond the scope of this Agreement.

- § 10.5 Nothing contained in this Agreement shall create a contractual relationship with, or a cause of action in favor of, a third party against either the Owner or Architect, and no third party is entitled to rely on the terms of this Agreement. Notwithstanding the preceding sentence, the Architect is not prohibited from incorporating this Agreement into its agreements with its consultants, provided that the Architect shall not thereby create (i) a contractual relationship between any consultant and the Owner, or (ii) any cause of action in favor of any consultant against the Owner.
- § 10.6 Unless otherwise provided in this Agreement, the Architect shall have no responsibility for the presence, handling, removal, disposal or detection of hazardous materials in any form at the Project site including, but not limited to, asbestos, asbestos products, polychlorinated biphenyl (PCB) or other hazardous materials. If the Architect in the conduct of his duties and obligations as provided in this Agreement shall become aware or shall reasonably suspect the presence of hazardous materials at the Project site, the Architect shall provide written notice to the Owner of the presence, and the general location, amount and condition of the known or suspected hazardous materials at the Project site. Such notice shall be in writing and shall be submitted no more than 24 hours after the presence of such materials reasonably become known or suspected by the Architect.
- § 10.6.1 In the event hazardous materials become known or suspected by the Architect as described in Section 10.6 of this Agreement, the Architect shall take all steps reasonably necessary to assist the Owner to ensure that work on the Project does not proceed or continue until the Architect and the Contractor have received written authorization from the Owner to proceed.
- § 10.6.2 In the event hazardous materials are identified or encountered during the course of the Project the Owner, at its expense, shall take reasonable actions to properly and safely deal with such materials. With respect to new construction, the Owner accepts the above-mentioned responsibility for the real property which is involved in the Project and not with any hazardous substances or materials which may be brought onto the property by others, including subcontractors.
- § 10.6.3 The Architect acknowledges that it and its employees, Consultants and agents have the responsibility of being fully informed of the Owner's Management Plan as it relates to the buildings located at the Project site and shall consult with the Owner about how such Plan addresses suspected or active asbestos-containing material areas within such buildings.
- § 10.7 The Architect shall have the right to include photographic or artistic representations of the design of the Project among the Architect's promotional and professional materials. The Architect shall be given reasonable access to the completed Project to make such representations. However, the Architect's materials shall not include the Owner's confidential or proprietary information if the Owner has previously advised the Architect in writing of the specific information considered by the Owner to be confidential or proprietary. The Owner shall provide professional credit for the Architect in the Owner's promotional materials for the Project. This Section 10.7 shall survive the termination of this Agreement unless the Owner terminates this Agreement for cause pursuant to Section 9.4.
- § 10.8 If the Architect or Owner receives information specifically designated as "confidential" or "business proprietary," the receiving party shall keep such information strictly confidential and shall not disclose it to any other person except as set forth in Section 10.8.1, and except as required under the Colorado Open Records Act (C.R.S.§ 24-72-201 et. seq.), as amended and applicable. This Section 10.8 shall survive the termination of this Agreement.
- § 10.8.1 The receiving party may disclose "confidential" or "business proprietary" information after 7 days' notice to the other party, when required by law, arbitrator's order, or court order, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or to the extent such information is reasonably necessary for the receiving party to defend itself in any dispute. The receiving party may also disclose such information to its employees, consultants, or contractors in order to perform services or work solely and exclusively for the Project, provided those employees, consultants and contractors are subject to the restrictions on the disclosure and use of such information as set forth in this Section 10.8.
- § 10.9 The invalidity of any provision of the Agreement shall not invalidate the Agreement or its remaining provisions. If it is determined that any provision of the Agreement violates any law, or is otherwise invalid or

unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Agreement shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Agreement.

§ 10.10 Notwithstanding any provisions herein, this Agreement shall be deemed to include and be subject to all applicable requirements and provisions of all governing federal, state and local laws.

§ 10.11 The parties hereto understand and agree that Owner is relying on, and does not waive or intend to waive by any provision of this Agreement, the monetary limitations (presently \$387,000 per person and \$1,093,000 per occurrence) or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, Section 24-10-101 *et seq.*, C.R.S. as from time to time amended, or any other limitation, right, immunity or protection otherwise available to Owner its officers, or its employees.

§ 10.12 The Architect shall perform all work under this Agreement as an independent contractor and not as an agent or an employee of Owner. The Architect shall be free from the control and direction of the Owner in the performance of the services, both under the terms of this Agreement and in fact. The Owner and Architect further stipulate and agree that Architect is customarily engaged in an independent trade, occupation, profession or business related to the performance of the services required by this Agreement. Architect understands that: (i) Owner will not pay or withhold any sum for income tax, unemployment insurance, Social Security or any other withholding pursuant to any law or requirement of any governmental body; (ii) Architect is obligated to pay federal and state tax on any moneys earned pursuant to this Agreement; (iii) Architect's employees are not entitled to workers' compensation benefits from the Owner or the Owner's workers' compensation insurance carrier; and (iv) Architect's employees are not entitled to unemployment insurance benefits unless unemployment compensation coverage is provided by Architect or some other entity. Architect agrees to indemnify and hold Owner harmless from any liability resulting from Architect's failure to pay or withhold state or federal taxes on the compensation paid hereunder.

§ 10.13 In connection with work to be performed under this Agreement, and without limiting the generality of any provision of this Agreement, Architect hereby agrees that it: (i) will not discriminate against any employee or applicant for employment because of race, color, creed, sex, sexual orientation, religion, national origin, or disability; (ii) will insure that applicants are employed and that employees are treated during employment without regard to their race, color, creed, sex, sexual orientation, religion, national origin, or disability; and (iii) will in all solicitations or advertisements for employees to be engaged in the performance of work under this Agreement state that all qualified applicants will receive consideration for employment without regard to race, color, creed, sex, sexual orientation, religion, national origin, or disability. Architect shall further comply with all applicable federal, state, and local laws, rules and regulations. Without limiting the generality of the foregoing, Architect shall comply with all applicable provisions of the Americans With Disabilities Act, 42 U.S.C. §12101, et seq. (Public Law 101-336), and all applicable regulations and rules promulgated thereunder by any regulatory agency. The Architect shall/indemnify the Owner from any and all liability arising from Architect's failure to comply with all applicable laws or regulations.

ARTICLE 11 COMPENSATION

§ 11.1 For the Architect's Basic Services described under Article 3, the Owner shall compensate the Architect as follows:

.1 Stipulated Sum (Insert amount)



.2 Percentage Basis (Insert percentage value)

(()) % of the Owner's budget for the Cost of the Work, as calculated in accordance with Section 11.6.

.3 Other (Describe the method of compensation)

<<	>>

§ 11.2 For the Architect's Supplemental Services designated in Section 4.1.1.29 and 4.1.1.30, the Owner shall compensate the Architect as follows:

(Insert amount of, or basis for, compensation. If necessary, list specific services to which particular methods of compensation apply.)

« As negotiated in a future Fee Adjustment AIA Document G802»

§ 11.3 For Additional Services that may arise during the course of the Project, including those under Section 4.2, the Owner shall compensate the Architect as follows: (Insert amount of, or basis for, compensation.)

« As negotiated in a future Fee Adjustment AIA Document G802 »

§ 11.4 Compensation for Supplemental and Additional Services of the Architect's consultants when not included in Section 11.2 or 11.3, shall be the amount invoiced to the Architect plus « Ten » percent (« 10 » %), or as follows: (Insert amount of, or basis for computing, Architect's consultants' compensation for Supplemental or Additional Services.)

« N/A »

§ 11.5 When compensation for Basic Services is based on a stipulated sum or a percentage basis, the proportion of compensation for each phase of services shall be as follows:

Schematic Design Phase	« Twenty »	percent (« 20 » %)
Design Development Phase	« Twenty »	percent (« 20 »
Construction Documents	« Twenty-Five »	percent (« 25 » %)
Phase			
Procurement Phase	« Five »	percent (« 5 »
Construction Phase	« Twenty-Five »	percent (« 25 »
Record Documents	Five	percent (5 %)
Total Basic Compensation	one hundred	percent (100 %)

- § 11.6 When compensation identified in Section 11.1 is on a percentage basis, progress payments for each phase of Basic Services shall be calculated by multiplying the percentages identified in this Article by the Owner's most recent budget for the Cost of the Work. Compensation paid in previous progress payments shall not be adjusted based on subsequent updates to the Owner's budget for the Cost of the Work.
- § 11.6.1 When compensation is on a percentage basis and any portions of the Project are deleted or otherwise not constructed, compensation for those portions of the Project shall be payable to the extent services are performed on those portions. The Architect shall be entitled to compensation in accordance with this Agreement for all services performed whether or not the Construction Phase is commenced.
- § 11.7 The hourly billing rates for services of the Architect and the Architect's consultants are set forth below. The rates shall be adjusted in accordance with the Architect's and Architect's consultants' normal review practices. (If applicable, attach an exhibit of hourly billing rates or insert them below.)

« See Exhibit "B" »			\
Employee or Category	Rate (\$0.00)		
See Exhibit "B"			

§	11.8 C	Compensation 1	for Reimbursable	Expenses
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§ 11.8.1 Reimbursable Expenses are in addition to compensation for Basic, Supplemental, and Additional Services and include expenses incurred by the Architect and the Architect's consultants directly related to the Project, as follows: (All reimbursable expenses in excess of those identified in Exhibit "B" must be authorized in advance and in writing by the Owner)

- .1 Transportation and authorized out-of-town travel and subsistence;
- .2 Long distance services, dedicated data and communication services, teleconferences, Project web sites, and extranets:
- .3 Permitting and other fees required by authorities having jurisdiction over the Project;
- .4 Printing, reproductions, plots, and standard form documents;
- .5 Postage, handling, and delivery;
- .6 Expense of overtime work requiring higher than regular rates, if authorized in advance by the Owner except that no overtime will be paid for Basic Services:
- .7 Renderings, physical models, mock-ups, professional photography, and presentation materials requested by the Owner or required for the Project;
- **8** DELETED:
- .9 All taxes levied on professional services and on reimbursable expenses;
- .10 Site office expenses;
- Registration fees and any other fees charged by the Certifying Authority or by other entities as necessary to achieve the Sustainable Objective; and,
- 12 Other similar Project-related expenditures as approved by the Owner.

§ 11.8.2 For Reimbursable Expenses the compensation shall be the expenses incurred by the Architect and the Architect's consultants plus « Zero » percent (« 0 » %) of the expenses incurred.

§ 11.8.3 The Architect shall not incur reimbursable expenses pursuant to Article 11 in excess of those identified in Exhibit "B" for the entire Project, without prior written approval of the Owner. However, in no event shall any single reimbursable expense exceed Five Hundred Dollars (\$500.00) without the prior approval of the Owner.

§ 11.9 DELETED

§ 11.10 Payments to the Architect

§ 11.10.1 Initial Payments

§ 11.10.1.1 An initial payment of « Zero Dollars and Zero Cents » (\$ « 0.00 ») shall be made upon execution of this Agreement and is the minimum payment under this Agreement. It shall be credited to the Owner's account in the final invoice.

§ 11.10.2 Progress Payments

§ 11.10.2.1 Unless otherwise agreed, payments for services shall be made monthly in proportion to services performed. Payments are due and payable upon presentation of the Architect's invoice. Amounts unpaid « Forty-Five » (« 45 ») days after the invoice date shall bear interest at the rate entered below, or in the absence thereof at the legal rate prevailing from time to time at the principal place of business of the Architect. (Insert rate of monthly or annual interest agreed upon.)

« 1.00 » % « Monthly »

§ 11.10.2.2 The Owner shall not withhold amounts from the Architect's compensation to impose a penalty or liquidated damages on the Architect, or to offset sums requested by or paid to contractors for the cost of changes in the Work, unless the Architect agrees or has been found liable for the amounts in a binding dispute resolution proceeding.

§ 11.10.2.3 Records of Reimbursable Expenses, expenses pertaining to Supplemental and Additional Services, and services performed on the basis of hourly rates shall be available to the Owner at mutually convenient times.

§ 11.11 BILLING THE OWNER

The Architect's billing shall be in such form as may be prescribed by the Owner.

§ 11.12 OTHER

The Architect agrees that his services performed under this Agreement are considered labor performed or materials furnished for public works and as such the Architect agrees for himself and his consultants to waive any rights to claim a mechanic's or materialman's lien on the Project. Architect further agrees that all funds disbursed to him for services performed by consultants under this Agreement shall be held in trust for those consultants, and Architect guarantees to pay those consultants in a timely manner using those funds. The Architect agrees to look solely to the Owner for payment for their services. Further, the Architect agrees to advise and obtain the consent of its consultants with respect to this arrangement.

ARTICLE 12 SPECIAL TERMS AND CONDITIONS

Special terms and conditions that modify this Agreement are as follows: (Include other terms and conditions applicable to this Agreement.)

 $\ll N/A \gg$

§ 12.1 ILLEGAL ALIENS

§ 12.1.1 In accordance with the mandatory provisions of Colo. Rev. Stat. § 8-17.5-101 et. seq., Architect certifies that it has not knowingly employed or contracted with an illegal alien to perform work under this Contract, and that Architect will participate in the E-Verify Program or the Department Program [as defined in Colo. Rev. Stat. § 8-17.5-101(3.3)] in order to confirm the employment eligibility of all employees who are newly hired to perform work under this Contract. Architect further certifies that it will not enter into a contract with a consultant who fails to certify to Architect that the consultant shall not knowingly employ or contract with an illegal alien to perform work under this Contract.

§ 12.1.2 Architect has confirmed the employment eligibility of all employees who are newly hired to perform work under this Contract through participation in either the E-Verify Program or the Department Program. Architect shall not use the E-Verify Program or the Department Program to undertake pre-employment screening of job applicants while the Contract is being performed.

§ 12.1.3 If Architect obtains actual knowledge that a consultant performing work under this Contract knowingly employs or contracts with an illegal alien, Architect shall:

- 1. Notify the consultant and the Owner within three days that Architect has actual knowledge that the consultant is employing or contracting with an illegal alien; and
- 2. Terminate the contract if within three days of receiving actual notice the consultant does not stop employing or contracting with the illegal alien, except that Architect shall not terminate the consultant if during such three days the consultant provides information to establish that the consultant has not knowingly employed or contracted with an illegal alien.

§ 12.1.4 Architect shall comply with any reasonable request by the Department of Labor and Employment (hereinafter referred to as the "Department") made in the course of an investigation that the Department is undertaking pursuant to C.R.S. § 8-17.5-102(5).

§ 12.1.5 If Architect violates the provisions of this paragraph, the Owner may terminate this Agreement for breach and Architect shall be liable for actual and consequential damages.

§12.2 OTHER SPECIAL PROVISIONS

§12.2.1 It is anticipated that Architect will engage other professionals to perform portions of its services. Such professionals shall be employed at Architect's sole cost and expense, unless otherwise agreed in writing by the Owner. The Architect shall obtain from each such professional a written acknowledgment of understanding that the Architect is not a "contractor" as defined by Section 38-26-101, C.R.S., and a waiver of any claim to entitlement of benefits under a public works bond furnished to the Owner by the Contractor, or subcontractors. All contracts entered into by the Architect with such professionals shall contain a provision acknowledging the terms of this subsection 12.2.1. The Architect shall forward the Owner a signed copy of each such acknowledgment and waiver along with a copy of each such agreement entered into between the Architect and a professional engaged by the Architect to perform a portion of the services.

§12.2.2 The Owner and the Architect acknowledge and agree that nothing in this Agreement implies any undertaking by the Architect for the benefit of or which may be enforced by the Contractor, its subcontractors, or the surety of any of them; it being understood that the Architect's obligations are to the Owner. Conversely, in performing such obligations, the Architect may not and shall not increase the burdens and exposure of the Contractor, its subcontractors, or the surety of any of them.

§12.2.3 Architect will comply with the terms of Section 8-17-101, et seq., C.R.S., which states:

Whenever any public works financed in whole or in part by funds of the state, counties, school districts, or municipalities of the state of Colorado are undertaken in this state, Colorado labor shall be employed to perform the work to the extent of not less than 80% of each type or class of labor in the several classifications of skilled and common labor employed on such project or public works.

'Colorado labor' as used in this Agreement means any person who is a resident of the state of Colorado, at the time of the employment, without discrimination as to race, color, creed, sex, sexual orientation, marital status, national origin, ancestry, age, or religion except when sex or age is a bona fide occupational qualification.

Architect shall, in all respects, comply with the requirements of the above statute.

§12.2.4 Fiscal Funding: In accordance with Article X, Section 20(4)(b) of the Colorado Constitution, this Agreement shall neither create nor be construed to create any multiple-fiscal year direct or indirect Owner debt or other financial obligation whatsoever. The parties recognize that this Agreement is dependent upon the continuing availability and appropriation of funds beyond the term of the Owner's current fiscal period ending upon the next succeeding June 30, and that financial obligations of the Owner payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted, and otherwise made available. Notwithstanding any other provision of this Agreement, the Owner and the Architect understand and agree that the Owner may terminate this Agreement at or before the end of any Owner's fiscal year upon thirty (30) days' prior written notice to Architect with or without cause and without any liability, penalty or other obligation, except that Architect shall be paid the specified compensation for its services performed to the termination date, including reimbursable expenses then due.

§12.2.5 Condition Precedent: The parties acknowledge and agree that the Owner is currently involved in litigation that bears upon its ability to proceed with Project within the time contemplated herein, and further agree that all of the Owner's obligations hereunder are subject to and conditioned upon the Owner's receipt of all final judicial judgments, decisions, and orders as are necessary, in the Owner's sole and absolute judgment and discretion, before proceeding with the Project. Notwithstanding the foregoing, the Owner may by separate addendum hereto authorize the Architect to proceed with preliminary work on the Project as specified in such addendum, with compensation to be based upon sources not subject to the aforementioned litigation.

SCOPE OF THE AGREEMENT ARTICLE 13

§ 13.1 This Agreement represents the entire and integrated agreement between the Owner and the Architect and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both the Owner and Architect.

§ 13.2 This Agreement is comprised of the following documents identified below:

- AIA Document B101TM_2017, Standard Form Agreement Between Owner and Architect, as amended .1 by the Owner
- .2 **DELETED**
- .3 Exhibits:

(Check the appropriate box for any exhibits incorporated into this Agreement.)

Other Exhibits incorporated into this Agreement:

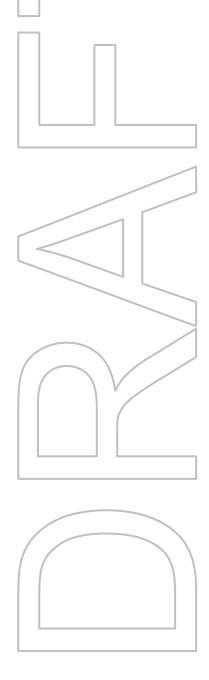
(Clearly identify any other exhibits incorporated into this Agreement, including any exhibits and scopes of services identified as exhibits in Section 4.1.2.)



.4 Other documents:

(List other documents, if any, forming part of the Agreement.)

- 1. Exhibit "A" Scope of Work (? pages attached)
- 2. Exhibit "B" Fee Schedule & Hourly Rates (? pages attached)
- 3. Exhibit "C" Project Schedule (? pages attached)
- **4.** AIA Document A201 2017, General Conditions of the Contract for Construction as amended by the Owner, dated December 5, 2017 (49 page draft attached)
- 5. Technical Specifications v6, dated November 2014 (584 pages by reference)
- **6.** Sustainable Design Guidelines, dated June 2005 (90 pages by reference)
- 7. Sustainability Management Plan, dated 2017 (39 pages by reference)



This Agreement entered into as of the day and year first written above.

OWNER (Signature)	ARCHITECT (Signature)	
« »« »	« »« »	
(Printed name and title)	(Printed name, title, and license number, if required)	
Poudre School District Policy DJA requires all contract Contracts up to \$250,000 must be approved by either the and Materials Manager, or authorized delegate. This authorized person. Contractor is not authorized to performing prior thereto, Poudre School District is not de-	ROVED PER DISTRICT POLICY DJA Its in excess of \$250,000 have Board of Education approval. E Superintendent, Executive Director of Finance, Purchasing S Contract is not valid until signed and dated below by an begin performance until such time. If Contractor begins obligated to pay Contractor for such performance or for any ces provided hereunder.	
APPROVED:		
(Signature)		
(Printed name, title, and date)		
Approved at the Board of Education Meeting on		