

Badger ISD #676 - Renovations

Design Development Submittal Booklet

July 1st, 2026



Better For Badger

Today's Plan, Tomorrow's Future



PROJECT DESCRIPTION / PROJECT SCOPE

PROJECT DESCRIPTION

The architectural scope of the Badger Public School renovation project consists of the following:

The restroom cluster near the gymnasium will be completely remodeled to provide modern finishes and to meet accessibility standards. The intent of the remodel is to replace plumbing fixtures like for like and to also add a family or assisted-use restroom in this area. MN Accessibility Code requires that Group E occupancies with an assembly space needing a combination of six or more male and female water closets must also provide a family or assisted-use restroom that incorporates an adult-sized changing station.

The locker rooms will be completely remodeled to provide modern finishes and to meet accessibility standards.

Ceiling work associated with mechanical system upgrades will occur within the eastern half of the school. The extent, locations of ceiling work and if ceilings are being salvaged or replaced are not yet determined.

The walk-in cooler/freezer is being removed to provide more dry storage within the kitchen area and a new walk-in cooler/freezer is being provided elsewhere in the building. The location of the removed walk-in cooler/freezer and the new location will be remodeled to accommodate this change.

The renovation project includes the replacement of all the exterior doors and windows except for at the music room and boiler room. Windows and doors will be replaced with thermally-broken aluminum storefront framing systems. Interior vestibule doors will also be replaced with aluminum storefront doors and frames. The depth of the south vestibule will need to be increased to meet life safety and accessibility requirements, due to the vestibule remodel the adjacent classroom door will also need to be relocated.

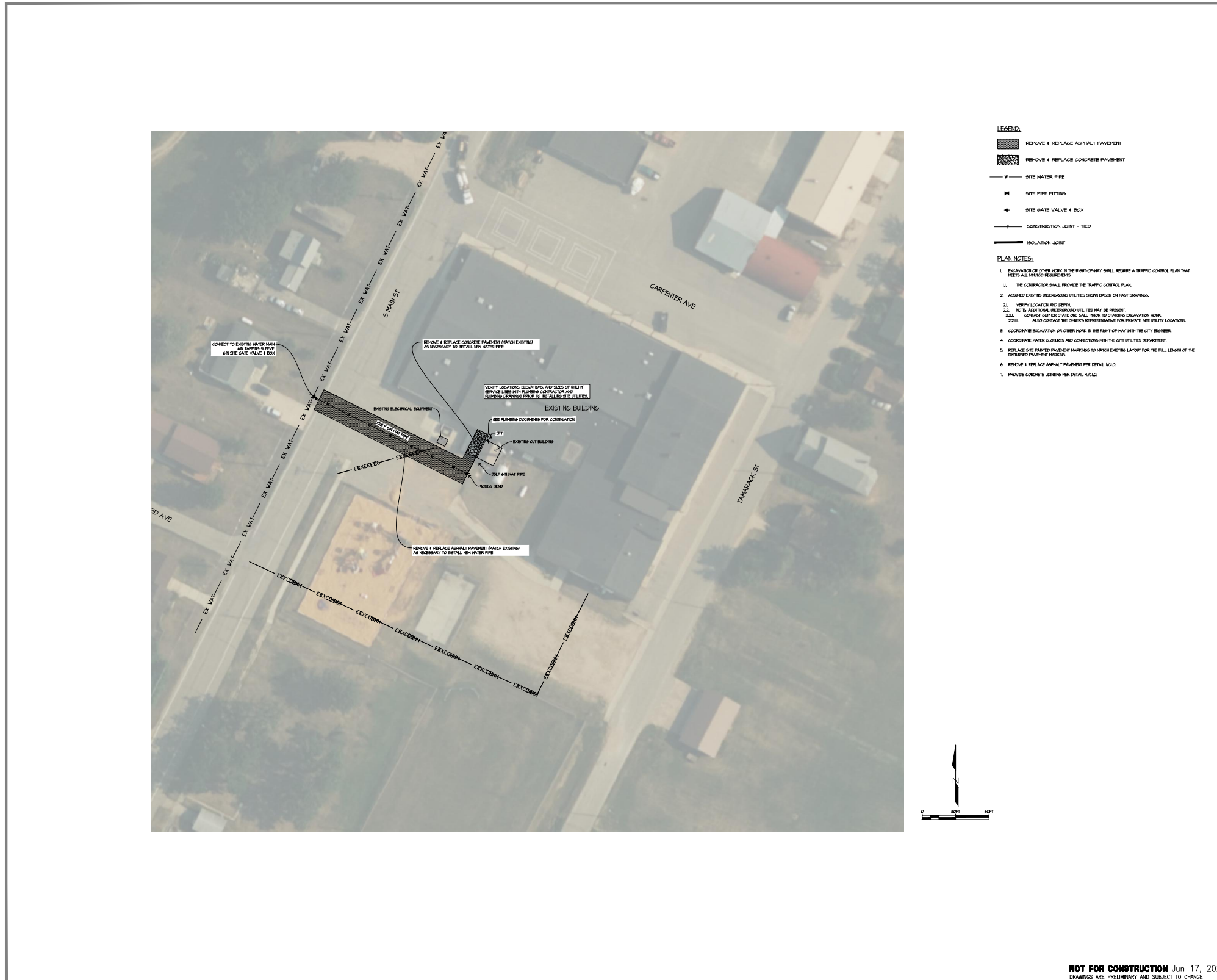
ARCHITECTURAL DRAWINGS

Within this Schematic Design booklet is a small scale floor plan of the school that highlights the locations of the proposed architectural remodel work for this project, also included with this submission are the large scale architectural schematic design drawings for the Badger Public School renovation project.

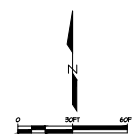
Reference the drawings for the preliminary code study and life safety plan, floor plans and building elevations.

SPACE SUMMARY

	Schematic Design
	<u>Area (sf)</u>
<u>Existing Building</u>	46,312
<u>Remodel Areas</u>	2,395
Locker Rooms	1,260
Tech. Office	110
Restrooms	715
Relocate Walk-in Cooler/Freezer	115
Expanded Dry Storage	115
South Vestibule	80



- LEGEND:**
- REMOVE & REPLACE ASPHALT PAVEMENT
 - REMOVE & REPLACE CONCRETE PAVEMENT
 - SITE WATER PIPE
 - SITE PIPE FITTING
 - SITE GATE VALVE & BOX
 - CONSTRUCTION JOINT - TIED
 - ISOLATION JOINT
- PLAN NOTES:**
1. EXCAVATION OR OTHER WORK IN THE RIGHT-OF-WAY SHALL REQUIRE A TRAFFIC CONTROL PLAN THAT MEETS ALL MN/DOT REQUIREMENTS.
 2. THE CONTRACTOR SHALL PROVIDE THE TRAFFIC CONTROL PLAN.
 3. ASSUMED EXISTING UNDERGROUND UTILITIES SHOWN BASED ON PAST DRAWINGS.
 - 3.1. VERIFY LOCATION AND DEPTH.
 - 3.2. NOTE: ADDITIONAL UNDERGROUND UTILITIES MAY BE PRESENT.
 - 3.2.1. CONTACT SPOKES STATE ONE CALL PRIOR TO STARTING EXCAVATION WORK.
 - 3.2.2. ALSO CONTACT THE OWNERS REPRESENTATIVE FOR PRIVATE USE UTILITY LOCATIONS.
 4. COORDINATE EXCAVATION OR OTHER WORK IN THE RIGHT-OF-WAY WITH THE CITY ENGINEER.
 - 4.1. COORDINATE WATER CLOSURES AND CONNECTIONS WITH THE CITY UTILITIES DEPARTMENT.
 5. REPLACE SITE PAINTED PAVEMENT MARKINGS TO MATCH EXISTING LAYOUT FOR THE FULL LENGTH OF THE DISTURBED PAVEMENT PATCHES.
 6. REMOVE & REPLACE ASPHALT PAVEMENT PER DETAIL 4UG.1.
 7. PROVIDE CONCRETE JOINTING PER DETAIL 4UG.2.



**BADGER ISD #676
RENOVATIONS
BADGER, MN**

**DESIGN DEVELOPMENT
SUBMITTAL
6/17/2026**

REVISIONS:

NO.	DATE	DESCRIPTION

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PROJECT NUMBER: 2342
SCALE: AS NOTED
DATE: 06/17/2026
DRAWN: CU

SITE UTILITY PLAN

SHEET:
C100

NOT FOR CONSTRUCTION Jun. 17, 2026
DRAWINGS ARE PRELIMINARY AND SUBJECT TO CHANGE

PRELIMINARY CODE ANALYSIS

CODE INFORMATION:

CURRENT APPLICABLE BUILDING CODES

2009 MINNESOTA STATE BUILDING CODE	2020 MINNESOTA STATE PLUMBING CODE
2020 MINNESOTA CONSTRUCTION CODE FOR EXISTING BUILDINGS	2020 MINNESOTA STATE FIRE CODE
2020 MINNESOTA CONSTRUCTION CODE FOR NEW BUILDINGS	2020 MINNESOTA STATE ELECTRICAL CODE
2020 MINNESOTA CONSTRUCTION CODE FOR RENOVATIONS	2020 MINNESOTA STATE MECHANICAL CODE
2020 MINNESOTA CONSTRUCTION CODE FOR ALTERATION - LEVEL 2	2020 MINNESOTA STATE ACCESSIBILITY CODE
2020 MINNESOTA CONSTRUCTION CODE FOR ALTERATION - LEVEL 2	2020 MINNESOTA STATE ACCESSIBILITY CODE
2020 MINNESOTA CONSTRUCTION CODE FOR ALTERATION - LEVEL 2	2020 MINNESOTA STATE ACCESSIBILITY CODE

A. PROJECT INFORMATION

PROJECT TITLE: BADGER INDEPENDENT SCHOOL DISTRICT #676
 ADDRESS: 118 CARPENTER AVE, BADGER, MN 56714
 OWNER: MR. DAN CARPENTER - SUPERINTENDENT
 PROJECT DESCRIPTION: PARTIAL INTERIOR RENOVATION TO AN EXISTING SINGLE STORY K-12 SCHOOL. REPLACEMENT OF EXISTING WINDOW AND DOORS, MECH UPDATES AND MODIFICATIONS TO THE BUILDING'S MECHANICAL SYSTEM AS WELL AS A HEATING SYSTEM MODIFICATION FOR PART OF THE BUILDING. A NEW FIRE SUPPRESSION SYSTEM IS BEING PROVIDED THROUGHOUT THE BUILDING.

B. TYPE OF CONSTRUCTION

1987 SCHOOL BUILDING EXISTING TYPE V-B (OCCURS AT BUILDING 1)
 INDICATED AS PER TYPE V-B IN THE CONSTRUCTION DOCUMENTS. TYPE B-4 CONSTRUCTION THROUGHOUT ORIGINAL 1987 SCHOOL BUILDING CONSTRUCTION, MASONRY WALLS AND PARTITIONS WITH ROOF JOIST AND PLASTER CEILING. HOWEVER, NOTE THAT ORIGINAL TYPE B-4 CONSTRUCTION EXISTING EXISTING TYPE B-4 IN THE FACILITY WITHOUT A FIRE RATED SEPARATION. AS A WHOLE "BUILDING 1" DOES NOT COMPLY WITH TYPE B-4 OR TYPE B-4 REQUIREMENTS AND IS NOW BEING CLASSIFIED AS TYPE V-B.

1987 ADDITIONS: EXISTING TYPE B-8 (OCCURS AT BUILDING 2)
 INDICATED AS PER TYPE B-8 IN THE CONSTRUCTION DOCUMENTS. TYPE B-8 CONSTRUCTION THROUGHOUT 1987 CONSTRUCTION, MASONRY WALLS AND PARTITIONS WITH STEEL ROOF FRAMING AND CEILING.

C. OCCUPANCY:

EDUCATIONAL GROUP E (PRIMARY OCCUPANCY) - ASSEMBLY GROUPS A-3 (SECONDARY OCCUPANCY)

D. GROSS SQUARE FEET:

EXISTING: 44,312 SF
 HEIGHT: 25' STORIES: 1'

E. OCCUPANT LOAD:

MAINTAIN FLOOR AREA ALLOWANCES PER OCCUPANT (TABLE 1004.5)
 SEE CODE PLAN FOR OCCUPANT LOADS

GENERAL BUILDING HEIGHT AND AREA LIMITATIONS (CHAPTER 5)

BUILDING 1

TABLES 504.4 & 504.2 ALLOWABLE BUILDING HEIGHTS & AREA

ONE STORY / FULLY SPRINKLERED
 OCCUPANCY: E WITH A-3 ACCESSORY USE
 CONSTRUCTION TYPE: V-B

E GROUP: ALLOWABLE HEIGHTS: 60 FT
 ALLOWABLE STORIES: 2 STORIES
 TABULAR ALLOWABLE AREA: 38,000 SF

AREA INCREASE FORMULA: $A_0 = M + (N \times I)$
 $M = 38,000$
 $N = 3,000$
 $I = .51 (5468/7168 - .25) \times 30/30$
 $A_0 = 38,000 + (3,000 \times .51)$
 TOTAL ALLOWABLE AREA (TAA) = 42,285 SF
 ACTUAL BUILDING AREA = 24,896 SF

BUILDING 2

TABLES 504.4 & 504.2 ALLOWABLE BUILDING HEIGHTS & AREA

ONE STORY / FULLY SPRINKLERED
 OCCUPANCY: E
 CONSTRUCTION TYPE: B-8

E GROUP: ALLOWABLE HEIGHTS: 75 FT
 ALLOWABLE STORIES: 3 STORIES
 TABULAR ALLOWABLE AREA: 50,000 SF

AREA INCREASE FORMULA: $A_0 = M + (N \times I)$
 $M = 38,000$
 $N = 3,000$
 $I = .51 (4620/6048 - .25) \times 30/30$
 $A_0 = 38,000 + (3,000 \times .51)$
 TOTAL ALLOWABLE AREA (TAA) = 62,285 SF
 ACTUAL BUILDING AREA = 21,816 SF

SECTION 508.4 SEPARATED OCCUPANCIES:

SEPARATION BETWEEN A-3 & E OCCUPANCIES: ZERO (0) HOURS

SECTION 509 INCENDIAL USE:

FOR A FIREHOLD ROOM WHERE ANY PIECE OF EQUIPMENT IS OVER 40,000 BTU PER HOUR INPUT, A 1 HOUR SEPARATION OR AN AUTOMATIC SPRINKLER SYSTEM MUST BE PROVIDED.
 FOR LABORATORIES AND VOCATIONAL SHOPS LOCATED IN GROUP E OCCUPANCY, A 1 HOUR SEPARATION OR AN AUTOMATIC SPRINKLER SYSTEM MUST BE PROVIDED.
 WHERE A SPRINKLER SYSTEM IS USED FOR PROTECTION, THESE SPACES SHALL BE SEPARATED FROM THE REMAINDER OF THE BUILDING BY CONSTRUCTION CAPABLE OF RESISTING THE PROGRESS OF SMOKE.

TYPES OF CONSTRUCTION - RATING REQUIREMENTS (CHAPTER 6)

TABLE 601: FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)	TYPE I-B	TYPE V-B
PRIMARY STRUCTURE FRAMING	0 HR	0 HR
BEARING WALLS - EXTERIOR (10 ≤ X FT FIRE SEPARATION DIST.)	0 HR	0 HR
NONBEARING WALLS - EXTERIOR (10 ≤ X FT FIRE SEPARATION DIST.)	0 HR	0 HR
NONBEARING WALLS - INTERIOR	0 HR	0 HR
FLOOR CONSTRUCTION & ASSOCIATED SECONDARY MEMBERS	0 HR	0 HR
ROOF CONSTR. & ASSOCIATED SECONDARY MEMBERS (10 ≤ X FT FIRE SEPARATION DIST.)	0 HR	0 HR

FIRE AND SMOKE PROTECTION FEATURES (CHAPTER 7)

SECTION 706 FIRE WALLS

TABLE 706.4 FIRE WALL FIRE-RESISTANCE RATINGS

GROUP E - 3 HOUR
 A, M TYPE I, V CONSTRUCTION WALLS SHALL BE PERMITTED TO HAVE A 2-HR FIRE-RESISTANCE RATING

STRUCTURAL STABILITY (SECT. 706.2)
 FIRE WALLS SHALL BE DESIGNED AND CONSTRUCTED TO ALLOW COLLAPSE OF THE STRUCTURE ON EITHER SIDE WITHOUT COLLAPSE OF THE WALL UNDER FIRE CONDITIONS.
 AN ASD DETAILER SHALL PROVIDE EXISTING AREA SEPARATION WALLS AND NEW FIRE WALLS INSTALLED WITHIN EXISTING BUILDINGS SHALL NOT BE REQUIRED TO MEET IBC SECTION 706.2.

INTERIOR FINISHES (CHAPTER 8)

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY, SPRINKLERED BUILDING (BOLL)
 INTERIOR EXISTING FINISHES AND EXISTING PROGRAMS: A-3 OCCUPANCY: CLASS B
 IN BUILDINGS LIT FROM THESE ZONES ABOVE SHOCK PLANE, CLASS C INTERIOR FINISH FOR SPRINKLERED BUILDINGS SHALL BE PERMITTED
 IN INTERIOR EXISTING FINISHES
 CORRIDORS & ENCLOSURE FOR EXIT ACCESS STAIRWAYS & RAMP: A-3 OCCUPANCY: CLASS B E OCCUPANCY: CLASS C
 ROOMS AND ENCLOSED SPACES: A-3 OCCUPANCY: CLASS C E OCCUPANCY: CLASS C

FIRE PROTECTION & LIFE SAFETY SYSTEMS (CHAPTER 9)

SECTION 903.3.1 & 903.3.2 GROUP A-3/GROUP E
 AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED THROUGHOUT THE BUILDING BECAUSE THE FOLLOWING CONDITIONS EXIST: 1. THE FIRE AREA EXCEEDS 12,000 SF & 2. THE FIRE AREA HAS AN OCCUPANT LOAD OF 300 OR MORE.

FIRE SAFETY SYSTEM

TYPE: AUTOMATIC FIRE SPRINKLER SYSTEM
 BUILDING SPRINKLERED THROUGHOUT UNDER THIS PROJECT - NFPA 13

SECTION 906 PORTABLE FIRE EXTINGUISHERS

TABLE 906.1(1) FIRE EXTINGUISHERS FOR CLASS A FIRE HAZARDS
 MINIMUM TRAVEL DISTANCE TO EXTINGUISHER = 75 FEET

FIRE ALARM, DETECTION SYSTEM & EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM SHALL BE PROVIDED PER SECTION 907.

MEANS OF EGRESS (CHAPTER 10)

SEE CODE PLAN FOR OCCUPANT LOAD CALCULATIONS PER TABLE 1004.5

SECTION 1005 MEANS OF EGRESS SIZING

TABLES 1005.1 OTHER EGRESS COMPONENTS, THE CAPACITY, IN INCHES OF MEANS OF EGRESS COMPONENTS OTHER THAN STAIRWAYS SHALL BE CALCULATED BY MULTIPLYING THE OCCUPANT LOAD SERVED BY SUCH COMPONENTS BY A MEANS OF EGRESS CAPACITY FACTOR OF 0.20 INCH PER OCCUPANT

SECTION 1006 EXIT ACCESS

TABLE 1006.2.1 SPACES WITH ONE EXIT - E OCCUPANCY 40 MIN. OCCUPANT LOAD
 TABLE 1006.2.2 COMMON FLOOR OF EGRESS TRAVEL - E OCCUPANCY WITH SPRINKLER SYSTEM 75 FEET

SECTION 1007 EXIT AND EXIT ACCESS DOORWAY CONFIGURATION

1007.1.1 TWO EXITS OR EXIT ACCESS DOORWAYS, EXCEPTION 2: WHERE A BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM THE SEPARATION DISTANCE OF THE EXIT DOORS OR EXIT ACCESS DOORWAYS SHALL NOT BE LESS THAN ONE-THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED.

SECTION 1007.2 EXIT ACCESS TRAVEL DISTANCE

TABLE 1007.2.2 EXIT ACCESS TRAVEL DISTANCE IN E OCCUPANCY WITH SPRINKLER SYSTEM 250 FEET

SECTION 1008 CORRIDORS

TABLE 1008.1 CORRIDOR FIRE-RESISTANCE RATING IN E OCCUPANCY WITH SPRINKLER SYSTEM 0 HOURS
 TABLE 1008.2 MINIMUM CORRIDOR WIDTH - TYPICAL CORRIDORS 44 INCHES GROUP E OCCUPANCY OCCUPANT LOAD OF 100 OR MORE 72 INCHES 1000+ GROSS INCHES, EXCEPTION 2: IN OCCUPANCIES IN GROUPS A, E, F, G, H, I, J, K, R-1, R-2, R-4, S AND U, MAKE THE BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM, THE LENGTH OF THE DEAD END CORRIDORS SHALL NOT EXCEED 50 FEET.

SECTION 1009 ASSEMBLY

1009.2 ASSEMBLY MAIN EXITS IN A BUILDING, A ROOM OR SPACES USED FOR ASSEMBLY PURPOSES THAT HAVE AN OCCUPANT LOAD OF GREATER THAN 300 AND IS PROVIDED WITH A MAIN EXIT, THE MAIN EXIT SHALL BE OF SUFFICIENT WIDTH TO ACCOMMODATE NOT LESS THAN ONE-HALF OF THE OCCUPANT LOAD, BUT SUCH WIDTH SHALL NOT BE LESS THAN THE TOTAL REQUIRED WIDTH OF ALL MEANS OF EGRESS LEADING TO THE EXIT.

2024 MINNESOTA ENERGY CODE W/ ASHRAE 90.1-2019

THIS PROJECT'S NEW WINDOW AND DOORS SHALL MEET THESE MINIMUM THERMAL ENVELOPE REQUIREMENTS

FOR REGIONAL COUNTY (ZONE 7)
 BUILDING ENVELOPE (ENVELOPE U-FACTOR AND SHGC REQUIREMENTS)
 WINDOW U-FACTOR: 0.29
 WINDOW SHGC: 0.36
 FIXED FENESTRATION: 0.29
 OPERABLE FENESTRATION: 0.36
 EXTERIOR WALLS: 0.03
 FLOOR: 0.03
 CEILING: 0.03
 ROOF: 0.03

PLUMBING SYSTEMS (CHAPTER 29)

SECTION 2902 MINIMUM PLUMBING FACILITIES

CLASSIFICATION ASSEMBLY - OCCUPANCY A-3 CHANGEROOMS
 -WATER CLOSURES: 1 PER 20 MALE & 1 PER 45 FEMALE
 -LAVATORIES: 1 PER 200
 -DRINKING FOUNTAINS: 1 PER 500
 -OTHER (SERVICE SINKS): 1 PER FACILITY

CLASSIFICATION EDUCATIONAL - OCCUPANCY E EDUCATIONAL FACILITIES
 -WATER CLOSURES: 1 PER 20 MALE & 1 PER 50 FEMALE
 -LAVATORIES: 1 PER 50
 -DRINKING FOUNTAINS: 1 PER 100
 -OTHER (SERVICE SINKS): 1 PER FACILITY

PER 424.2 OF THE 2018 IPC, URINALS SHALL NOT BE SUBSTITUTED FOR MORE THAN 67 PERCENT OF THE REQUIRED WATER CLOSURES.

NOTE: IT IS ASSUMED THAT PLUMBING FEATURES WILL EITHER SERVE THE EDUCATIONAL OCCUPANCY OR THE ASSEMBLY OCCUPANCY BUT NOT BOTH AT THE SAME TIME. THE ASSEMBLY OCCUPANT LOAD HAS BEEN USED TO CALCULATE THE MEANS OF EGRESS SIZING.

PLUMBING SYSTEMS (CHAPTER 29)

CLASSIFICATION	TOTAL OCCS.	OCCUPANT TYPE	FAVORABLE/OCCUPANT	TOTAL REQUIRED	EXISTING	NEW	TOTAL PROVIDED
E OCCUPANCY	1,217	609 M	WC 150	11	4	6	10
		609 W	WC 150	11	2	8	10
		609 M	WC 150	11	2	8	10
		609 W	WC 150	11	2	8	10
A OCCUPANCY	772	361 M	WC 150	2	2	0	2
		361 W	WC 150	2	2	0	2
		361 M	WC 150	2	2	0	2
		361 W	WC 150	2	2	0	2

REQUEST THAT THE AUTHORITY HAVING JURISDICTION (AHJ) ALLOW FOR REDUCED PLUMBING FIXTURE COUNTS FOR WATER CLOSURES, LAVATORIES & DRINKING FOUNTAINS THAN THOSE REQUIRED BY IBCS 2902.1. THE ACTUAL SCHOOL POPULATION (INCLUDING STUDENTS AND STAFF) IS 288 OCCUPANTS. BASED ON SCHOOL POPULATION AND THE 6 NON-GENDER SINGLE USER RESTROOMS PROVIDED THROUGHOUT THE FACILITY THE REQUIRED PLUMBING FIXTURES IS SATISFIED BASED ON ACTUAL OCCUPANCY.

FIRE RATING LEGEND

DECOMMISSION OF EXISTING 1-HR FIRE RATED CORRIDOR WALL
 DECOMMISSION EXISTING 1-HR FIRE RATED WALL
 DECOMMISSION EXISTING 2-HR FIRE RATED WALL
 EXISTING FIRE RATED WALL TO BE DECOMMISSIONED UNDER THIS PROJECT DUE TO INSTALLATION OF NEW AUTOMATIC SPRINKLER SYSTEM. CONTRACTORS SHALL STRIKE OUT ANY LETTERING/LABELING INDICATING WALL MARKING. EXISTING EXIST FIRE DAMPERS SHALL BE PERMANENTLY LOCKED IN THE OPEN POSITION AND AFTER THE PROPER MARKING TAG/LABEL TO THE DAMPER INDICATING THEY ARE PERMANENTLY LOCKED OPEN.

EXISTING 2-HR FIRE WALL
 NOTED IN 1987 CONSTRUCTION DRAWINGS AS A 4-HR SEPARATION WALL (PER USC = FIRE WALL SEC.). RATING IS ALLOWED TO BE REDUCED TO A 2-HR RATING PER SEC. TABLE 706.4

EXISTING SMOKE RESISTIVE CONSTRUCTION

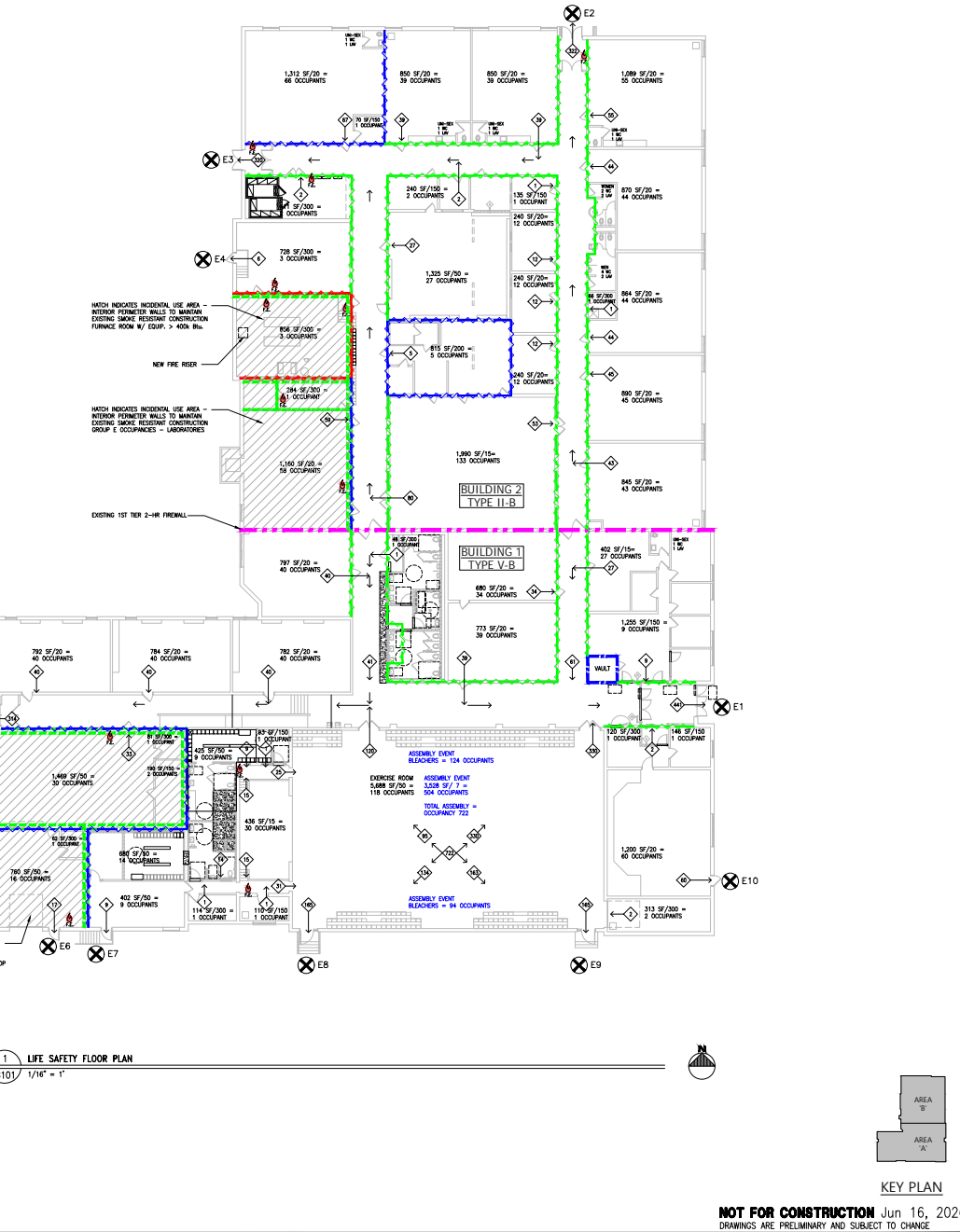
HATCH INDICATES INCIDENTAL USE AREA
 INTERIOR PERIMETER WALLS TO MAINTAIN EXISTING SMOKE RESISTIVE CONSTRUCTION GROUP E OCCUPANCIES - VOCATIONAL SHOP

HORIZONTAL EXIT NUMBER E1
 DIRECTION AND NUMBER OF PERSONS EXITING AREA
 FIRE EXTINGUISHER

EXIT WIDTH CALCULATIONS (2020 IBCS - SEC. 1006.1)

EXIT NO.	EXISTING OCC.	EXIT FACTOR	WIDTH REQUIRED	ACTUAL WIDTH
E1	441	2	882"	88"
E2	330	2	660"	66"
E3	330	2	660"	66"
E4	117	2	234"	33"
E5	314	2	628"	66"
E6	117	2	234"	33"
E7	9	2	18"	33"
E8	189	2	378"	33"
E9	189	2	378"	33"
E10	49	2	98"	33"

1 LIFE SAFETY FLOOR PLAN
 G101 1/16" = 1'



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DESIGN DEVELOPMENT SUBMITTAL 6/17/2026

REVISIONS:

NO.	DATE	DESCRIPTION

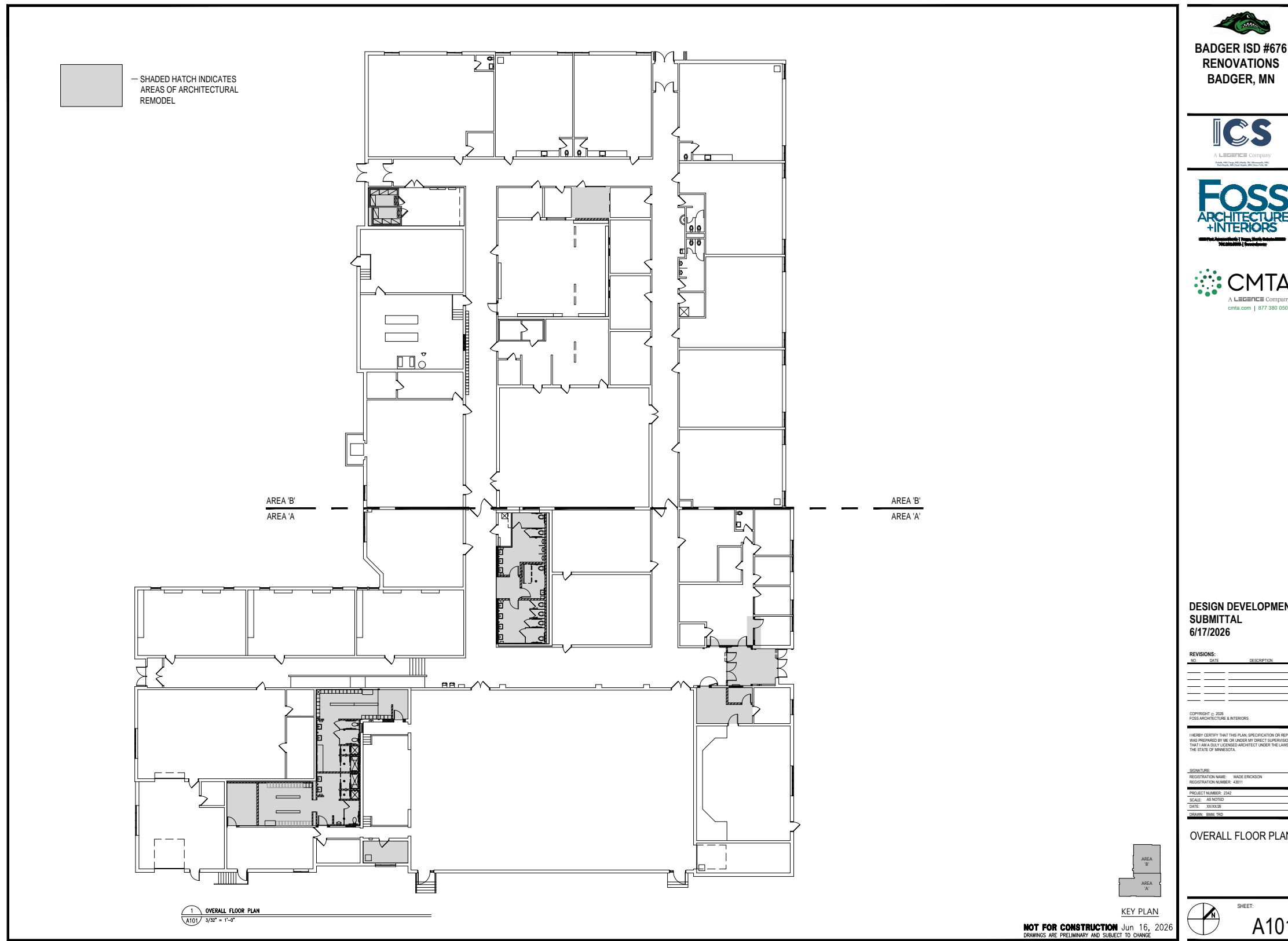
REGISTERED PROFESSIONAL ARCHITECT
 STATE OF MINNESOTA
 PROJECT NUMBER: 2242
 SCALE: AS NOTED
 DATE: XXXXXX
 DRAWN: BMB TRD

CODE INFORMATION & LIFE SAFETY PLAN

KEY PLAN

SHEET: G101

MASTER PLAN/OVERALL FLOOR PLAN




**BADGER ISD #676
RENOVATIONS
BADGER, MN**



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SUBMITTAL
6/17/2026**

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NO.	DATE	DESCRIPTION

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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

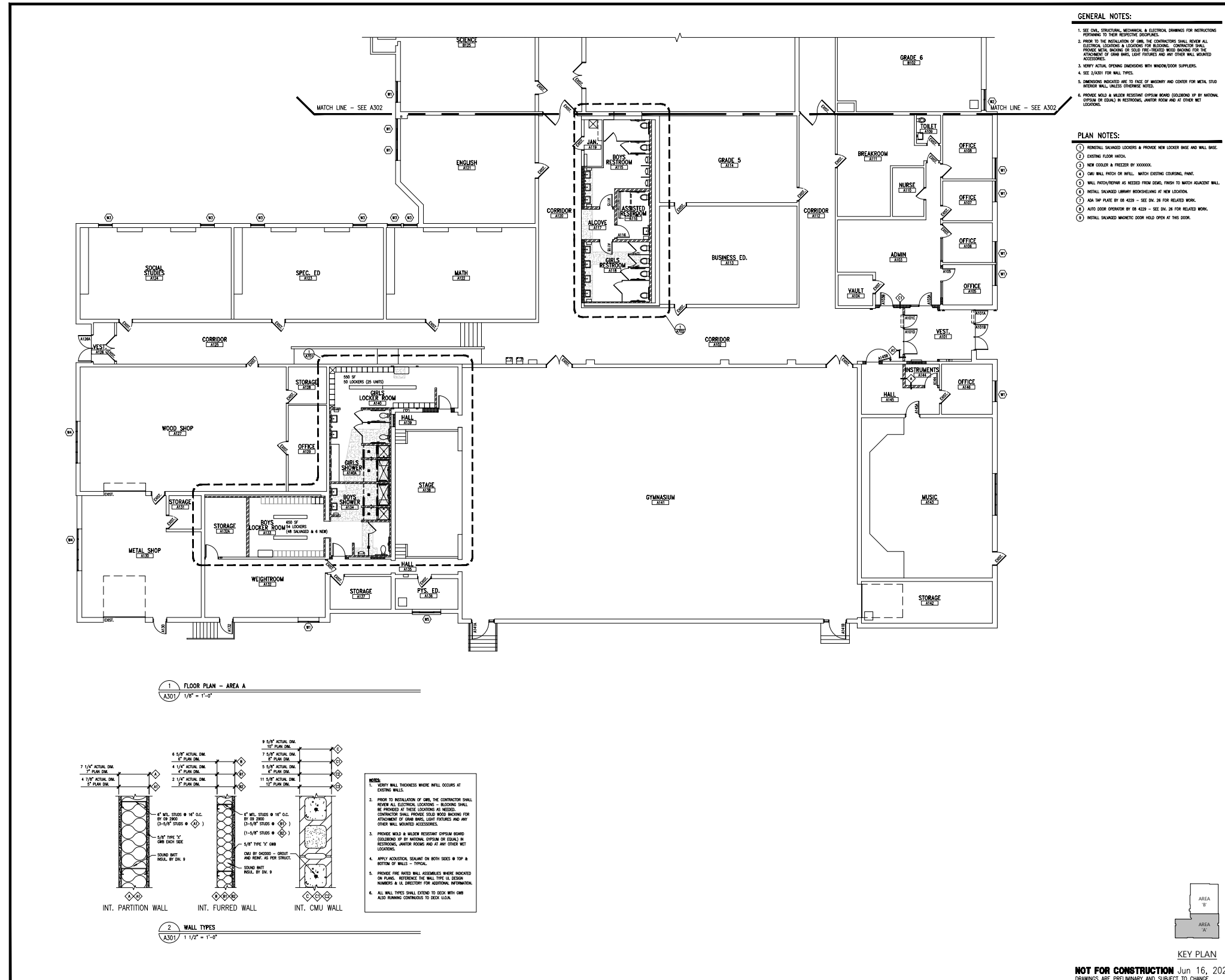
SIGNATURE: _____
 REGISTRATION NAME: WADE ERICKSON
 REGISTRATION NUMBER: 43011
 PROJECT NUMBER: 2026
 SCALE: AS NOTED
 DATE: XX/XX/26
 DRAWN: BMG/TED

OVERALL FLOOR PLAN

SHEET: A101



ARCHITECTURAL ENLARGED FLOOR PLAN - AREA A



BADGER ISD #676
RENOVATIONS
BADGER, MN



DESIGN DEVELOPMENT
SUBMITTAL
6/17/2026

NO.	DATE	DESCRIPTION

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SIGNATURE: _____
 REGISTRATION NAME: WADE EROKSON
 REGISTRATION NUMBER: 42811
 PROJECT NUMBER: 2342
 SCALE: AS SHOWN
 DATE: XXXXX
 DRAWN: 8844 1/20

FLOOR PLAN
AREA A

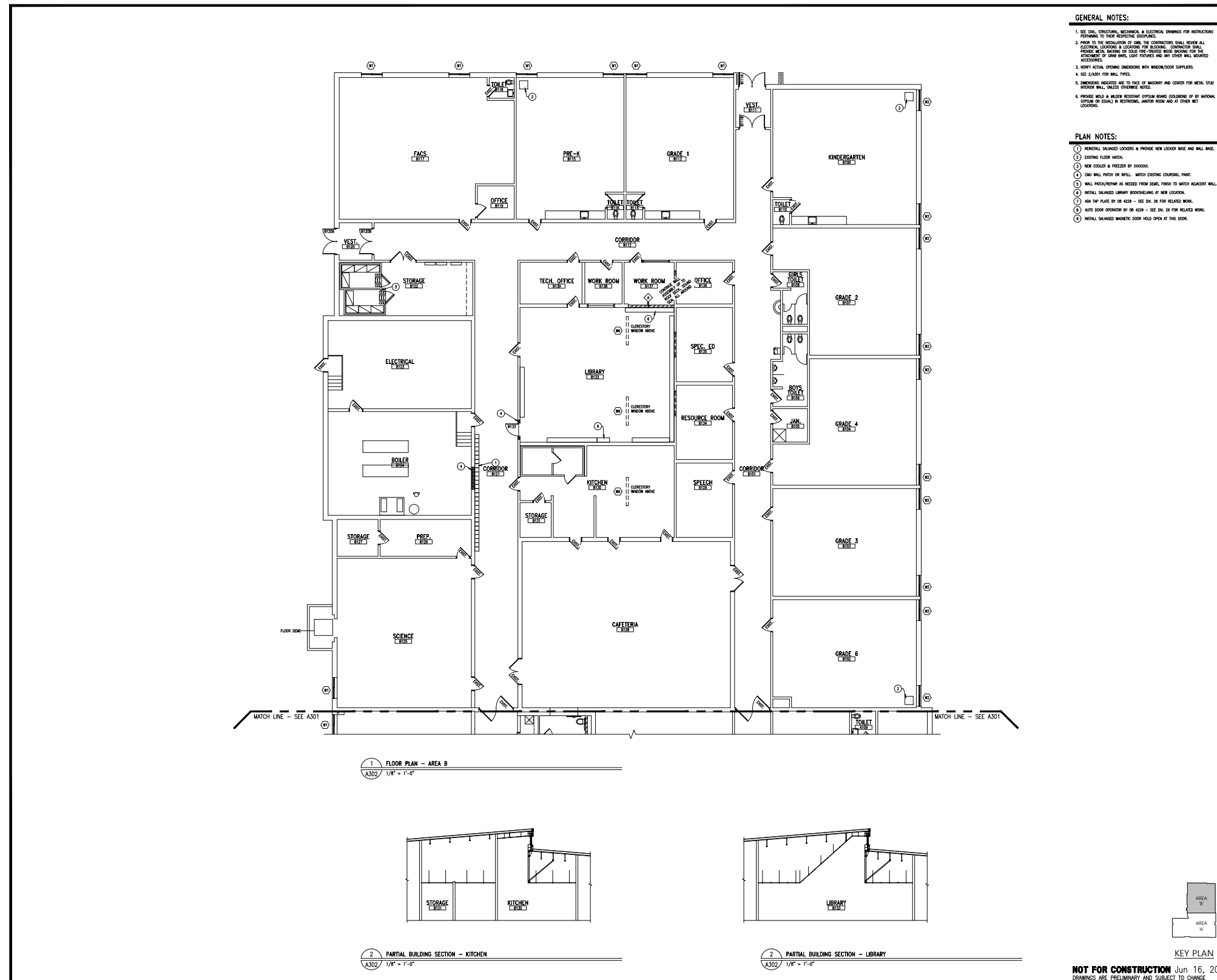
SHEET:
A301



NOT FOR CONSTRUCTION Jun 16, 2026
DRAWINGS ARE PRELIMINARY AND SUBJECT TO CHANGE



ARCHITECTURAL ENLARGED FLOOR PLAN - AREA B




**BADGER ISD #676
RENOVATIONS
BADGER, MN**



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WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND
THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF
THE STATE OF MINNESOTA.

SIGNATURE:
REGISTRATION NAME: WADE ERIKSSON
REGISTRATION NUMBER: 42011

PROJECT NUMBER: 2342
SCALE: AS NOTED
DATE: 06/17/2026
DRAWN: BMM, TDC

**FLOOR PLAN
AREA B**

KEY PLAN

SHEET: A302



EXTERIOR ELEVATIONS

1 SOUTH ELEVATION - EXISTING/DEMO
AZ05 / 1/8" = 1'-0"

2 EAST ELEVATION - EXISTING/DEMO
AZ05 / 1/8" = 1'-0"

3 NORTH ELEVATION - EXISTING/DEMO
AZ05 / 1/8" = 1'-0"

4 WEST ELEVATION - EXISTING/DEMO
AZ05 / 1/8" = 1'-0"

5 WEST ELEVATION - EXISTING/DEMO
AZ05 / 1/8" = 1'-0"

GENERAL DEMOLITION NOTES:

- SEE CIVIL, MECHANICAL, ELECTRICAL & STRUCTURAL DRAWINGS, SPECIFICATIONS FOR DEMOLITION INSTRUCTIONS PERTAINING TO THEIR RESPECTIVE DISCIPLINES.
- DEMOLITION ITEMS SHALL INCLUDE, BUT NOT BE LIMITED TO ITEMS IDENTIFIED ON THESE DRAWINGS. USE SEE BEFORE DEMOLITION AND REMOVE THROUGH WITH WORK REQUIRED.
- ALL FURNISHINGS, APPLIANCES, STORAGE & OTHER EQUIPMENT TO BE REMOVED PRIOR TO DEMOLITION. IF SUCH ITEMS REMAIN THEIR REMOVE & SALVAGE FOR OWNER'S USE AS DIRECTED BY ARCHITECT OR OWNER'S REPRESENTATIVE.
- PROTECT ALL STRUCTURAL ELEMENTS DURING DEMOLITION. REMOVE TEMPORARY SHORING AS REQUIRED IF DEMOLITION IS REQUIRED ON STRUCTURAL ELEMENTS.
- THE OWNER RESERVES THE RIGHT OF FIRST REFUSAL ON ALL ITEMS TO BE REMOVED.
- REMOVE FLOORING AS REQUIRED IN REMOVED WALLS. CASING ON 4th FLOORING TO RECEIVE NEW FINISHES.
- PROTECT/REMOVE WALLS AS REQUIRED IN LOCATIONS WHERE LEFT EXPOSED BY REMOVED FLOOR OR IF REMOVAL PROCESS CHANGES DRAINAGE. FINISH TO MATCH EXISTING ADJACENT FINISH.
- REMOVAL OF ASBESTOS CONTAINING MATERIALS IS BY OWNER'S A/C/M AMBIENT CONTRACTOR. VERIFY LOCATIONS OF ASBESTOS WORK. A WHO IS RESPONSIBLE FOR RELATED NON-ASBESTOS IMPACTS BY AMBIENT - COORDINATE WITH OWNER.

DEMOLITION ELEVATION NOTES:

- REMOVE WINDOW SYSTEM ENTIRELY - PREP. OPENING FOR NEW ALUMINUM STOREFRONT WINDOW SYSTEM.
- REMOVE EXTERIOR DOOR SYSTEM ENTIRELY - PREP. OPENING FOR NEW ALUMINUM STOREFRONT ENTRY SYSTEM.

NOT FOR CONSTRUCTION Jun 16, 2026
DRAWINGS ARE PRELIMINARY AND SUBJECT TO CHANGE

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RENOVATIONS
BADGER, MN



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REGISTRATION NUMBER: 43011

PROJECT NUMBER: 2342
SCALE: AS NOTED
DATE: 6/17/2026
DRAWN: BMH, TRD

DEMOLITION
EXTERIOR ELEVATIONS

SHEET:
A205



EXECUTIVE SUMMARY – M01

Date	03/24/26
Project #	2026033
Project Name	Badger School Renovations
Project Location	Badger, MN
Description	Mechanical Schematic Design Narrative

PART 1. MECHANICAL GENERAL INFORMATION

- A. The K-12 school located in Badger, MN, is looking to upgrade existing fire protection and HVAC systems within the campus. For fire protection, work is to include installing a new fire sprinkler system per NFPA 13. The entire building will be sprinkled as part of the project. HVAC upgrades will include a steam to HW boiler conversion, replacing existing air handler heating coils in the 1987 addition, replacing all air handlers and terminal devices in the original 1951 building, replacing all classroom unit ventilators, and installing a rooftop unit with energy recovery to serve the science room. In addition, the existing pneumatic controls in the school will be updated with new digital controls.

PART 2. SPRINKLER SYSTEMS

2.1 SPRINKLER SERVICE

- A. The design process will include Investigation into whether a new water service is needed for the implementation of fire protection. A 6" utility cold water line will be required to serve the building.
- B. The building sprinkler riser will be situated in the main mechanical room and will have one sprinkler zone.
- C. A fire department connection will be located along the exterior of the building, in a location coordinated with the local fire department.
- D. As part of this narrative, it is assumed a fire pump will not be required for this project. A flow test will be required to determine water pressure at the site and verify that a fire pump is not required. However, if the utility water pressure is in question to adequately serve a new fire protection system and meet the current NFPA and Local Fire Codes a fire pump will be provided.
- E. Portions of the building include concealed wood construction that will require a dry sprinkler zone to be installed as part of the riser. These roof areas shall be identified to determine coverage.

2.2 SPRINKLER PIPING:

- A. Fire sprinkler system piping shall be a minimum wall thickness of Schedule 40 for pipe up to 8 inches in diameter. Where approved by NFPA, State Fire Marshall, and local authorities, Schedule 10 pipe may be used for main piping only.

2.3 SPRINKLER HEADS

- A. Sprinkler heads shall be upright in exposed spaces and concealed in spaces with a ceiling. All sprinkler heads in the boiler room shall be high temperature rated.

PART 3. PLUMBING SYSTEMS

- A. The existing 2" that serves the building plumbing fixtures will be reconnected to the new water service required for fire protection.
- B. Above ground piping - Tubing 1-1/2" size and smaller shall be Type L hard drawn copper. Tubing 2" size and larger shall be Type L hard drawn copper. Soft drawn copper tubing in small sizes may be used adjacent to fixtures and equipment.
- C. All water piping will be insulated with a minimum of 1" fiberglass insulation.
- D. There will be remodeling planned for the restrooms adjacent to the cafeteria and locker rooms by the gym where plumbing fixtures/connections will need to be updated.

PART 4. HVAC (DIVISION 23)

4.1 HEATING WATER PIPING

- A. All piping for hot water and chilled water system shall be run level or pitch up toward the end of the piping so that air in the system will move in the direction of water flow. Pitch of mains, where possible, shall be at least 1/4" in 25 feet. Pitch of lines shall be uniform and shall be installed so that entire system can be drained. Eccentric reducers shall be installed wherever pipe size is reduced in direction of flow. Reducers shall be installed with openings up, on top side of pipe to allow air to pass through. Radiation branches and mains fed by overhead mains shall be connected at the supply side through a plugged tee in place of an elbow to permit draining of radiation, branches or mains. Upfeed risers supplying radiators above the supply main shall come off main either from top or side. Downfeed risers supplying radiation below the supply main shall come off the bottom of the supply main.
- B. All piping for the hot water heating system shall be black mild steel pipe, ASA Schedule 40 thickness. Fittings shall be banded black cast iron 125-pound fittings. Grooved piping will be allowed.
- C. All hot and piping may be Type L hard drawn copper tubing at Contractor's option. Fittings for copper tubing shall be cast bronze or wrought copper solder fittings. All connections shall be made using 95-5 solder. Press fit fittings will be allowed
- D. All existing steam/condensate piping serving the building will be demoed and replaced with new piping to support the conversion to hot water. This includes routing new hot water piping in the existing tunnels below the 1951 building to serve that part of the building.
- E. It is believed that the current hot water system is glycol free. The entire hot water piping system will have 35% ethylene glycol installed in it for freeze protection. This includes all new and



existing piping. Glycol shall be added to the existing hot water system to boost the total system glycol percentage to 35 %.

4.2 SUPPLEMENTAL HEATING EQUIPMENT

- A. Existing finned-tube radiation/convectors in the 1987 building addition that are served with hot water will be provided with new controls. M.C. to replace existing pneumatic control valves with new DDC valves.
- B. Cabinet/suspended unit heaters in the 1987 building addition currently served with hot water will be provided with new controls. M.C. to replace existing pneumatic control valves with new DDC valves.
- C. All fin radiation, unit heaters, and convectors currently served by steam in the 1951 wing will be replaced with hot water units and will be provided with new DDC controls/valves.

4.3 BOILER PLANT

- A. The existing fuel oil-fired steam boilers will be demo 'ed and replaced with two dual fuel (fuel oil/propane) hot water boilers. With the conversion, the existing steam to hot water heat exchangers and hot water pumps will be demoed and removed.
- B. The new hot water boiler plant will include new primary pumps (to serve boilers) and secondary pumps to account for updated equipment. The pumps shall have VFDs to provide a variable primary heating water-pumping loop to maximize efficiency. Where possible, existing zone piping will be reconnected to the hot water loop in the boiler room following the secondary pumps. New zone branches will be installed to feed new HW equipment.

4.4 ROOFTOP AIR HANDLING UNITS

- A. A new rooftop unit, which includes an energy recovery wheel, will be installed to serve the science room. This unit will provide the space with adequate ventilation and exhaust air. The unit is to be served with hot water from the updated boiler plant.

4.5 AIR HANDLING/FAN COIL UNITS

- A. In the 1951 building, all fan coil units / classroom ventilators will be replaced with new units. This includes the air handlers in the 1987 shop and music spaces. The new units will now include hot water coils. The new units will reconnect to existing outside air ductwork to provide ventilation for the spaces.

4.6 1987 AIR HANDLING UNITS

- A. All air handling units in the 1987 addition (AHU-1 through AHU-4) are currently equipped with steam heating coils. These coils will be replaced with hot water coils and DDC control.

4.7 DUCTWORK & DISTRIBUTION

- A. Ductwork and fittings shall be constructed and supported in accordance with SMACNA HVAC Duct Construction Standards - Metal and Flexible, 1995 Edition with 1997 Addendum except as modified herein.

- B. Ductwork and fittings shall be fabricated from G60 galvanized steel sheets complying with ASTM A527.
- C. All supply, mixed air, and relief ductwork in spaces with ceilings will be insulated with 2" fiberglass insulation. All outdoor air duct shall be insulated with 3" fiberglass insulation. Ductwork that is required to be insulated in mechanical room shall be insulated with rigid board insulation.
- D. All ductwork shall be built to 4" pressure class prior to VAV boxes, and 2" pressure class in all other instances.
- E. New ductwork will be installed where required in the 1951 wing where fan coils/air handlers are being replaced and ceilings are being updated. Ductwork to coordinate with updated ceilings and building layout.

4.8 EXISTING SYSTEM DUCT CLEANING

- A. The existing supply and return ductwork in the building shall be cleaned. The cleaning contractor shall be National Air Duct Cleaners Association (NADCA) certified with sufficient experience of documented successful projects of similar type.
- B. The facility is occupied and operational 5 days a week. Prior to entering into a contract for performing the work, the cleaning contractor shall perform a site analysis and report to the owner possible issues that may arise, including but not limited to.
 - 1. Scheduling/operation disruptions.
 - 2. Duct liner likely exists, provide suggestions for proper cleaning/protection.

4.9 TESTING AND BALANCING

- A. All water and air systems will be tested by a 3rd part Testing And Balancing (TAB) agency. The TAB contractor will be either NEBB or AABC certified for balancing commercial HVAC and Plumbing systems.
- B. Balancing work shall include:
 - 1. New boiler plant including new and existing pumps and all system flow meters.
 - 2. Pressure testing of new ductwork.
 - 3. All new air handlers, terminal devices, fan coils, rooftop units.
 - 4. Existing air handlers where coils are being replaced.

PART 5. AUTOMATIC TEMPERATURE CONTROLS (DIVISION 25)

5.1 AUTOMATIC TEMPERATURE CONTROLS

- A. A direct digital control (DDC) system will be installed on all HVAC equipment throughout the building.
- B. The DDC system will control all heating and air conditioning equipment to allow for automatic temperature control, seasonal adjustments, and maximize HVAC system efficiencies. In addition to controlling HVAC equipment, monitoring of critical air and water temperatures and system



operations (fan/pump status), the system shall also alarm all equipment so maintenance personnel can maintain and troubleshoot all equipment.

- C. Equipment to be controlled and monitored includes:
1. Rooftop Air Handling Units
 2. Air Handling Units
 3. All terminal devices including: fan coils, unit heaters, etc.
 4. All Pumps
 5. Boiler Plant
 6. Supplemental Perimeter Heating Equipment (including upgrades of existing terminal units/thermostats in building)
 7. HVAC Hot Water Temperatures
 8. All thermostats and humidity sensors
 9. All VFD for pumps and fans.

Respectfully,
CMTA, Inc.

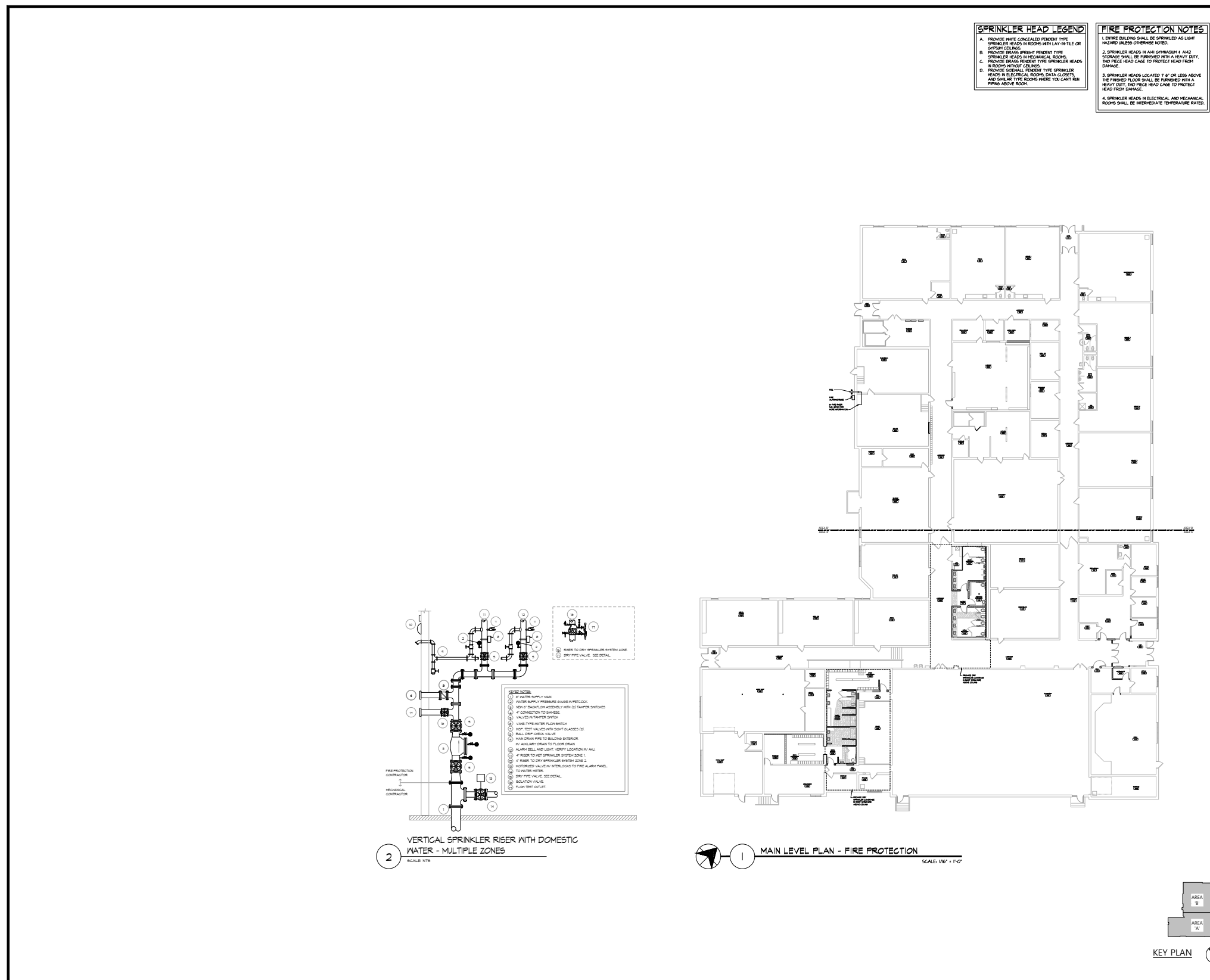


Joel Peck, P.E.

Cc: file



FIRE SUPPRESSION - OVERALL FLOOR PLAN



BADGER ISD #676
RENOVATIONS
BADGER, MN



REVISIONS:

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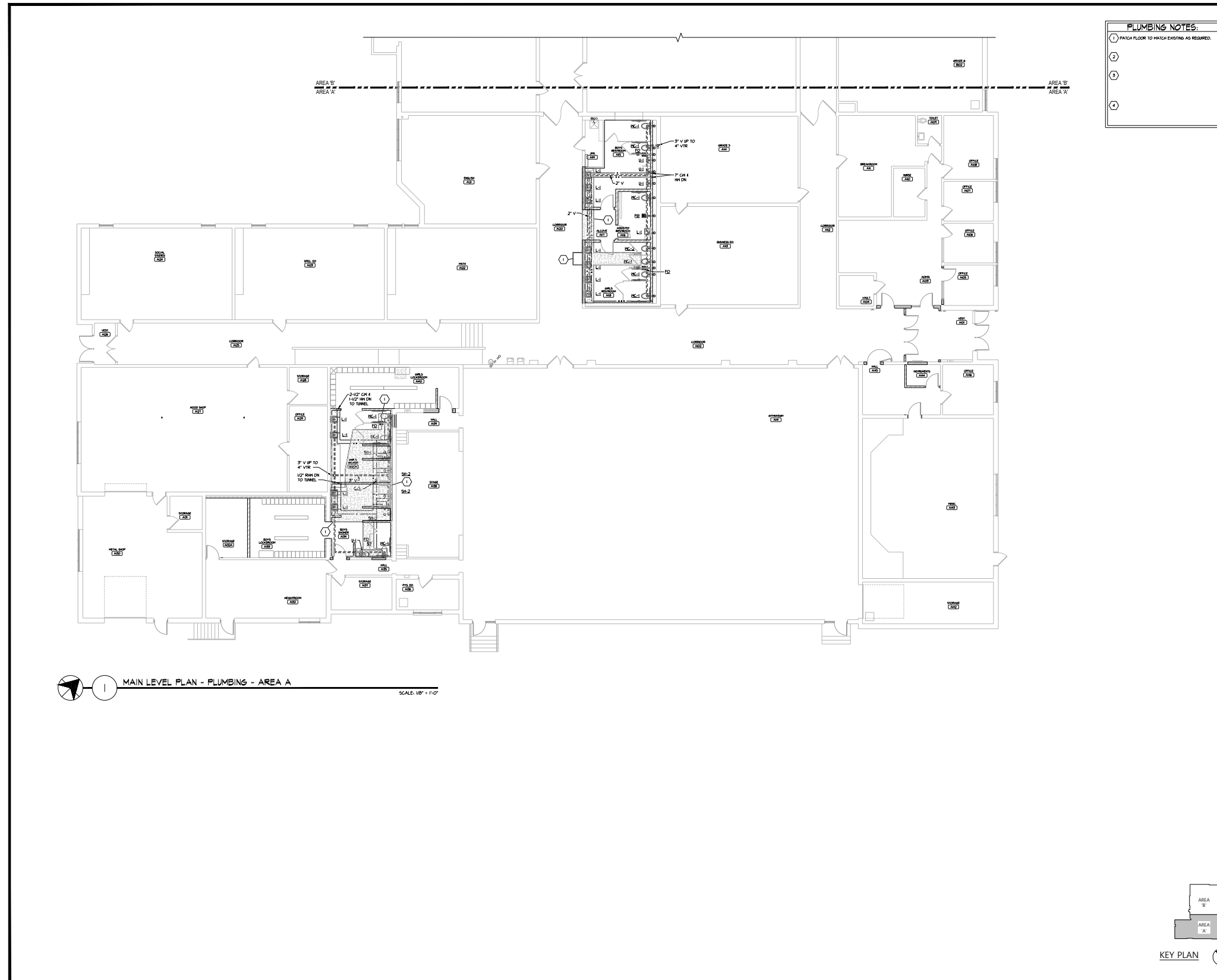
SIGNATURE:
REGISTRATION NAME: JESSIE OWEN-BROCKSON
REGISTRATION NUMBER: 83981

PROJECT NUMBER: 2025033
SCALE: AS NOTED
DATE: 8/19/2025
DRAWN: JEB

MAIN LEVEL FIRE PROTECTION PLANS

SHEET:
F101

PLUMBING - ENLARGED FLOOR PLAN - AREA A



PLUMBING NOTES:

- ① PATCH FLOOR TO MATCH EXISTING AS REQUIRED.
- ②
- ③
- ④

1 MAIN LEVEL PLAN - PLUMBING - AREA A
SCALE: 1/8" = 1'-0"


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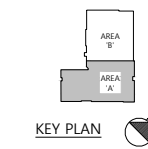
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SIGNATURE: _____
REGISTRATION NAME: JAMES O'BRIEN/DRICKSON
REGISTRATION NUMBER: 6382
PROJECT NUMBER: 202603
SCALE: AS NOTED
DATE: 06/20/26
DRAWN: JEB

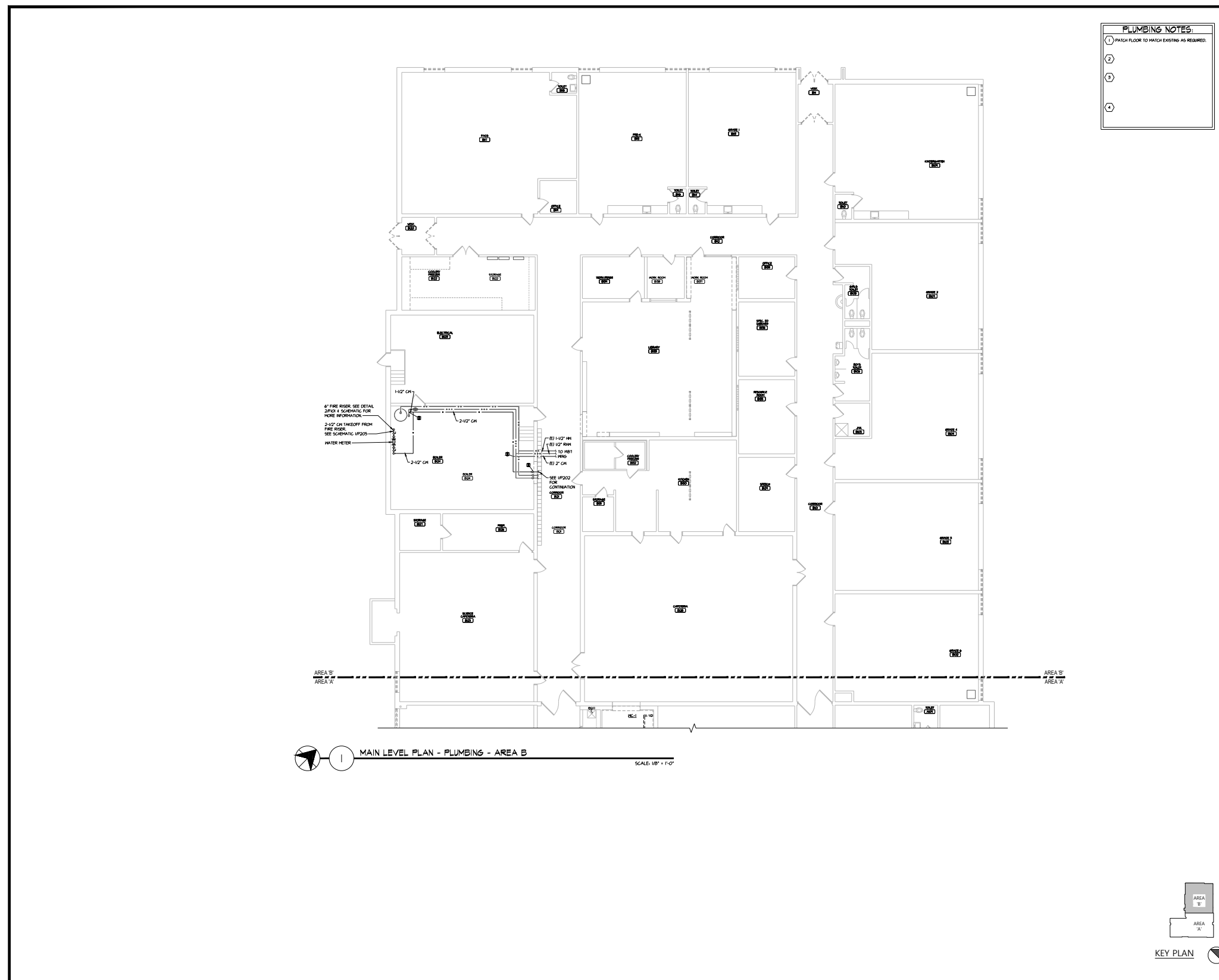
MAIN LEVEL
PLAN - PLUMBING
AREA A



SHEET:
P203



PLUMBING - ENLARGED FLOOR PLAN - AREA B



PLUMBING NOTES:

- 1 PATCH FLOOR TO MATCH EXISTING AS REQUIRED.
- 2
- 3
- 4


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RENOVATIONS
BADGER, MN



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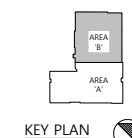
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SIGNATURE
REGISTRATION NAME: JONAS OBERDORFSON
REGISTRATION NUMBER: 57863
PROJECT NUMBER: 2025133
SCALE: AS NOTED
DATE: 06/20/26
DRAWN: JEB

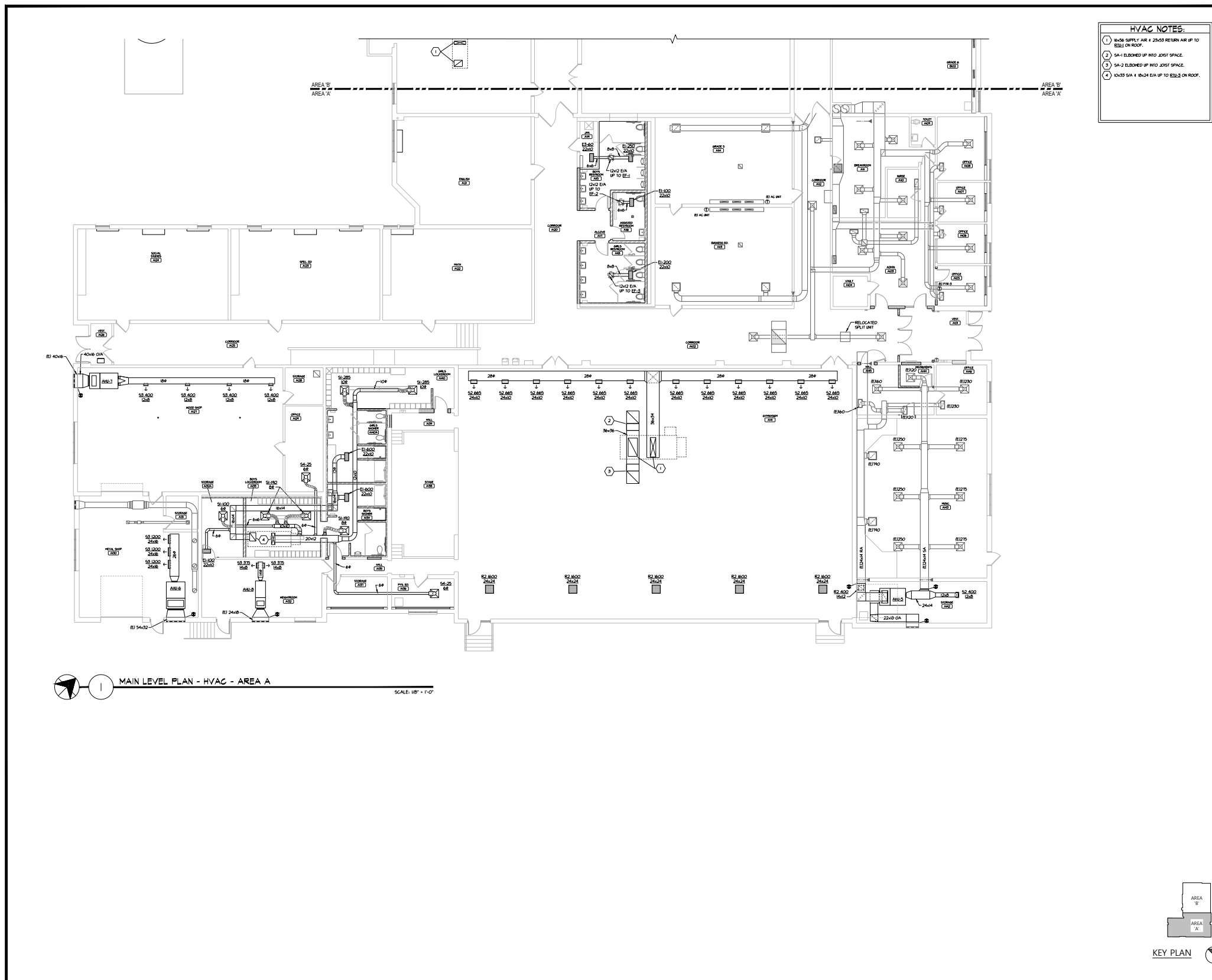
**MAIN LEVEL
PLAN - PLUMBING
AREA B**

SHEET:
P204





HVAC - ENLARGED FLOOR PLAN - AREA A



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RENOVATIONS
BADGER, MN



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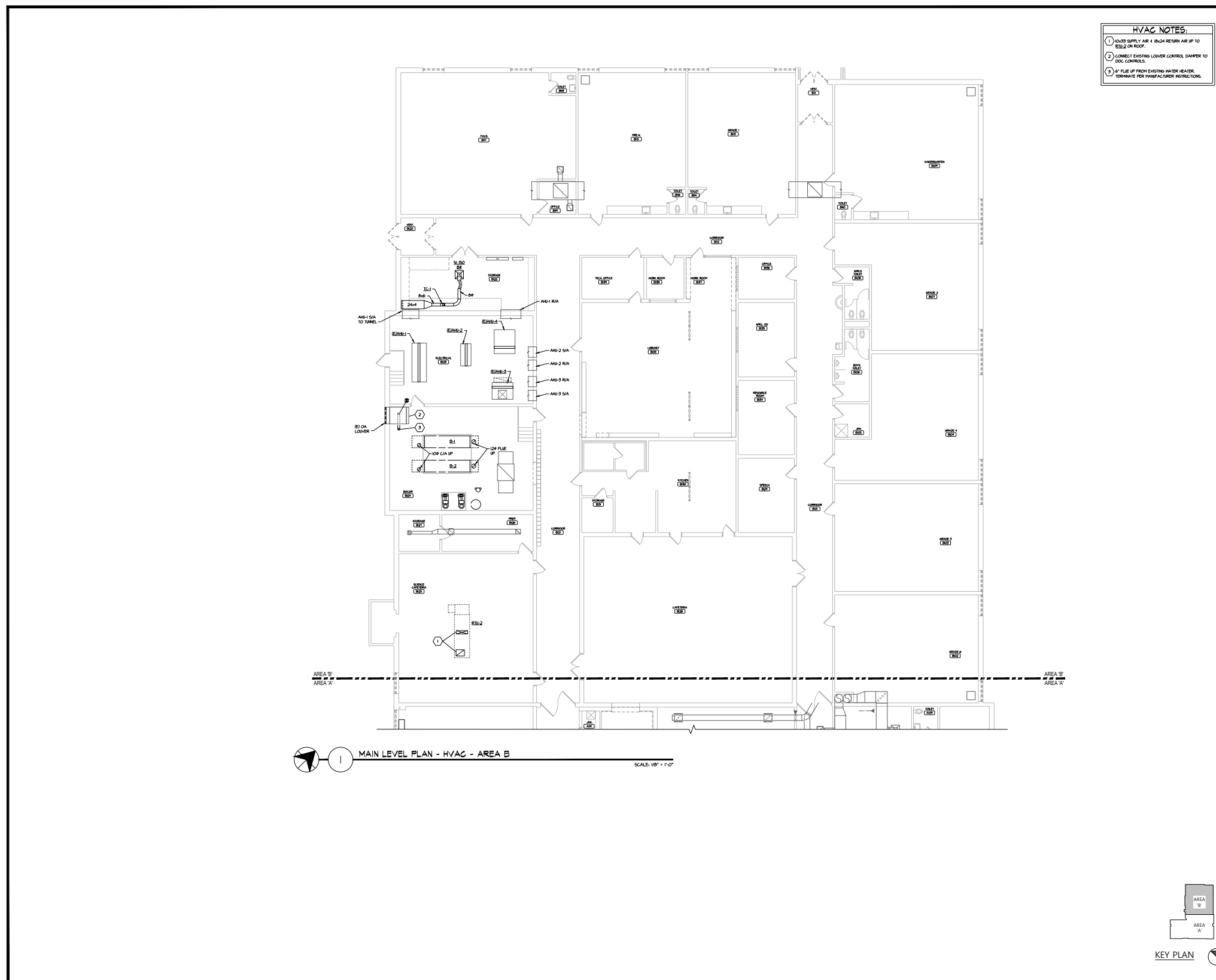
SIGNATURE: _____
 REGISTRATION NAME: JAMES O'BRIEN/DROKSON
 REGISTRATION NUMBER: 43982
 PROJECT NUMBER: 202633
 SCALE: AS NOTED
 DATE: 30/09/2025
 DRAWN: JEB

MAIN LEVEL
PLAN - HVAC
AREA A

SHEET: **M401**



HVAC - ENLARGED FLOOR PLAN - AREA B



- HVAC NOTES:**
- 1) DASH SUPPLY AIR 4 INCH RETURN AIR UP TO BE32 ON ROOF.
 - 2) CORRECT EXISTING LOWER CONTROL DAMPER TO DDC CONTROLS.
 - 3) 4" FLE UP FROM EXISTING WATER HEATER. TERMINATE PER MANUFACTURER INSTRUCTIONS.

MAIN LEVEL PLAN - HVAC - AREA B
SCALE: 1/8" = 1'-0"

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BADGER, MN



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SIGNATURE:
REGISTRATION NAME: JONAS OYERSON
REGISTRATION NUMBER: 43983

PROJECT NUMBER: 202623
SCALE: AS NOTED
DATE: 06/20/26
DRAWN: JEB

MAIN LEVEL
PLAN - HVAC
AREA B

SHEET:
M402



ELECTRICAL SCHEMATIC DESIGN NARRATIVE

Date	March 24, 2025
Project #	2026033
Project Name	Badger School Renovations
Project Location	Badger, MN
Description	Electrical Schematic Design Narrative

PART 1. ELECTRICAL GENERAL INFORMATION

1.1 OVERVIEW

Majority of project consists of the upgrading of the HVAC system, fire alarm system, fire suppression system, space renovations, and various other energy saving updates to the building.

The following narrative outlines the electrical work required for the proposed updates as part of this project.

1.2 SCOPE

- A. This narrative document summarizes the design concepts for the major electrical systems (Division 26), and electronic safety and security systems (Division 28) to be included in the facility.
- B. Electrical systems (Division 26) included in this document:
 - 1. Low voltage power distribution system.
 - 2. Interior lighting systems. (Reuse Existing)
- C. Electronic safety and security systems (Division 28) included in this document:
 - 1. Fire alarm system.
 - 2. Electronic Access Control. (Reuse Existing)

PART 2. DESCRIPTION OF ELECTRICAL SYSTEMS

2.1 ELECTRICAL SERVICE

- A. At the time of this narrative, the existing 208/120V electrical service is intended to remain, as is. The electrical load required for new mechanical equipment will be determined in later design portions of the project. As we coordinate with the utility company and the mechanical team, if it is discovered that the current electrical service does not contain enough capacity for the new mechanical equipment, an updated electrical service will need to be investigated.

2.2 LOW VOLTAGE ELECTRICAL POWER DISTRIBUTION

- A. Power will be delivered to all new mechanical equipment via existing switchboard and branch panels throughout the building. Either new breakers will be provided or existing spare breakers will be utilized. If required panels are deemed not suitable for use, the replacement of existing panels will be explored.

B. Panelboards

- 1. Existing electrical panels will be assessed at all locations in which they are required to be utilized for new equipment.
- 2. Distribution panelboards will be circuit breaker type with copper or aluminum bus and lugs, 100% neutral bus, and ground bus.
- 3. Branch Circuit Panelboards will have bolt-on type branch circuit breakers, 20 ampere minimum, copper or aluminum bus, 100% neutral bus, and hinged cover construction.

C. Raceways

- 1. All wiring will be in metal conduit except for under floor raceway which will be High Density Polyethylene (HDPE). Metal conduit will generally be electrical metallic tubing (EMT) except where exposed to damage where it will be full-weight rigid galvanized steel conduit.
- 2. Flexible metal conduit will be used at equipment connection where required by the application.

D. Wire and Cable

- 1. All feeder and branch circuit wiring for power, lighting, and control will be copper, 98% conductivity, stranded in sizes #10 AWG and larger, with 600 volt THHW or THWN-THHN thermoplastic insulation. The exception on insulation will be on VFD motor circuits where 1000 volt high-dielectric XHHW thermoset insulation will be used. Metal Clad (MC) will be allowed where individual branch circuits will be hidden in walls and above ceilings. Home runs are to be in conduit.
- 2. Minimum wire size will be #12 AWG except #14 AWG for control circuits.
- 3. Feeders will be designed to limit voltage drop to 2% as noted in ASHRAE 90.1.
- 4. Voltage drop will be designed to not exceed 3% on branch circuits, 5% overall.
- 5. Grounding systems shall be provided with 5 ohms maximum.
- 6. All bonding and grounding wires will be copper. Terminations will be bronze.
- 7. Grounding electrodes will be 10'-0", 3/4" copper clad steel.

E. Wiring Devices

- 1. Duplex receptacles will be 125 volt grounding types with stainless steel cover plates.
- 2. GFCI type receptacle will be provided where required by Code.
- 3. Tamper resistant devices will be provided where required by Code.

- F. The Division 25 Contractor will provide VFDs for pumps, and other HVAC equipment motors that require VFDs. Generally, across the line enclosed motor controllers will be provided for motors smaller than 3 HP by the Division 26 contractor. Fire alarm shut downs will be wired directly into the VFDs.

2.3 GENERAL INTERIOR LIGHTING SYSTEMS

- A. Where required, existing light fixtures will be removed and stored during construction. These light fixtures will be reinstalled in the same locations when the installation of mechanical equipment is complete.



PART 3. ELECTRONIC SAFETY AND SECURITY SYSTEMS

3.1 FIRE ALARM SYSTEMS

- A. A completely new fire alarm system will be installed and will consist of emergency voice/alarm communication.
- B. The system will meet the requirements of NFPA 72 and ADA.
- C. Addressable automatic detectors will be provided in mechanical and electrical rooms, storage rooms, janitor rooms, and similar areas, as required by Code.
- D. Addressable smoke detectors will be provided in supply and return air ductwork of air handling units rated 2,000 cfm or greater and within 5' of any and all fire-smoke dampers.
- E. Addressable relays will be used for control of fire-smoke dampers and air handling equipment.
- F. Addressable relays will be used for supervision of fire sprinkler valves and switches.
- G. Notification appliances with voice communication will be located throughout the building.

3.2 ELECTRONIC DOOR ACCESS CONTROL

- A. Existing door access control shall be removed from existing doors and reinstalled at new doors.

PART 4. TECHNICAL CRITERIA

4.1 CODES AND STANDARDS

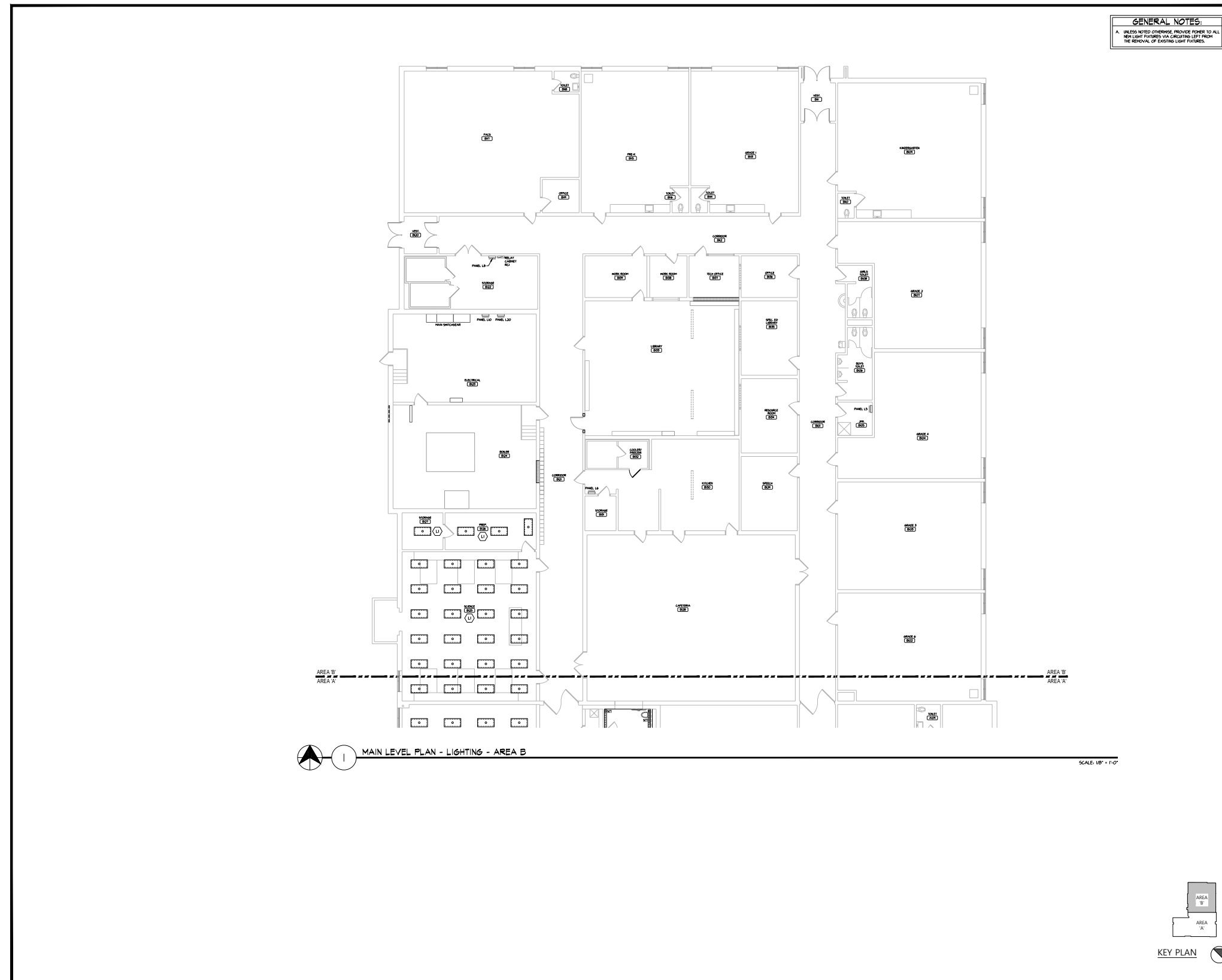
- A. The following is a partial list of applicable codes governing the systems described herein:
 - 1. International Building Code (IBC).
 - 2. International Mechanical Code (IMC).
 - 3. International Fire Code (IFC).
 - 4. State of Minnesota Energy Code.
 - 5. NFPA 70 National Electrical Code.
 - 6. NFPA 72 National Fire Alarm and Signaling Code.
 - 7. NFPA 101 Life Safety Code.
 - 8. Americans with Disabilities Act (ADA).
 - 9. International Electrical Testing Association (NETA) Standards.
 - 10. National Electrical Contractors Association (NECA) Standards.

Respectfully,

CMTA, Inc.

Travor Fredrickson, PE
Senior Electrical Engineer

ELECTRICAL - ENLARGED FLOOR PLAN - AREA B




**BADGER ISD #676
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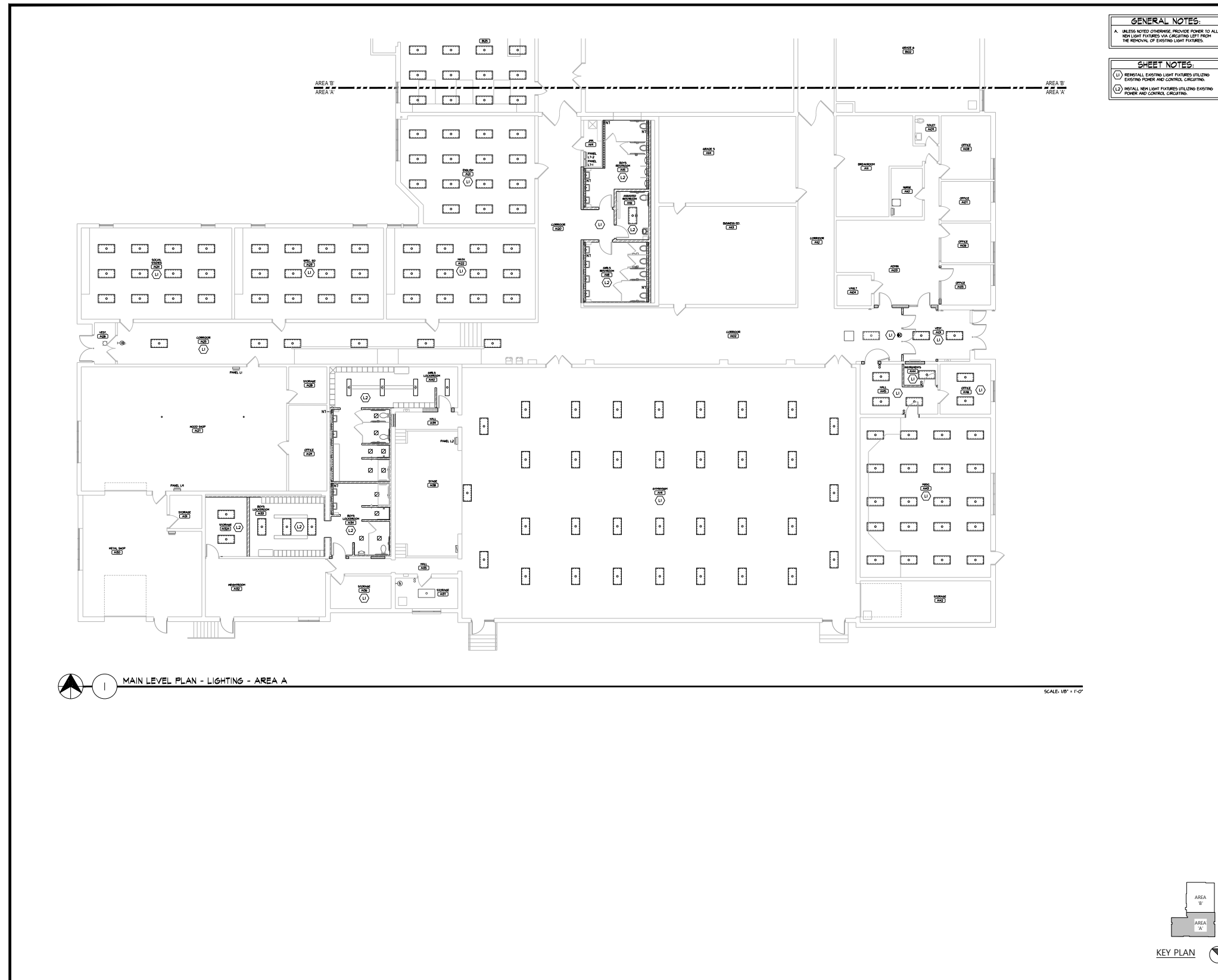
SIGNATURE:
 REGISTRATION NAME: TRAVOR D. FREDERICKSON
 REGISTRATION NUMBER: 5782

PROJECT NUMBER: 250033
SCALE: AS NOTED
DATE: 06/10/25
DRAWN: HLB

**MAIN LEVEL PLAN -
 LIGHTING - AREA B**

SHEET:
E202

ELECTRICAL - ENLARGED FLOOR PLAN - AREA A



GENERAL NOTES:
A. UNLESS NOTED OTHERWISE, PROVIDE POWER TO ALL NEW LIGHT FIXTURES VIA CIRCUITING LEFT FROM THE REMOVAL OF EXISTING LIGHT FIXTURES.

SHEET NOTES:
① REINSTALL EXISTING LIGHT FIXTURES UTILIZING EXISTING POWER AND CONTROL CIRCUITING.
② INSTALL NEW LIGHT FIXTURES UTILIZING EXISTING POWER AND CONTROL CIRCUITING.


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BADGER, MN**


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1 MAIN LEVEL PLAN - LIGHTING - AREA A

SCALE: 1/8" = 1'-0"

REVISIONS:


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SIGNATURE: _____
REGISTRATION NAME: TRAVOR D. FREDERICKSON
REGISTRATION NUMBER: 5792
PROJECT NUMBER: 202603
SCALE: AS NOTED
DATE: 06/11/26
DRAWN: HCB

MAIN LEVEL PLAN - LIGHTING - AREA A

SHEET:  E201




DESIGN DEVELOPMENT ESTIMATE

	Document Date: 6/21/2026		AREA: SF	46,312	Document Date: 3/20/2026		AREA: SF	46,312			
	Project Start:		Area 1		Project Start:		Area 1				
	Project Completion:		Area 2		Project Completion:		Area 2				
	% Cost Escalation:		Area 3		% Cost Escalation:		Area 3				
			Area 4				Area 4				
Owner: Badger ISD #676		Area 5		Owner: Badger ISD #676		Area 5					
Project: Badger ISD #676 - Renovations		Area 6		Project: Badger ISD #676 - Renovations		Area 6					
Location: 110 E Carpenter Ave, Badger, MN 56714		Area 7		Location: 110 E Carpenter Ave, Badger, MN 56714		Area 7					
Designer: Foss Architects		Area 8		Designer: Foss Architects		Area 8					
		Area 9				Area 9					
		Area 10				Area 10					
		CONSTRUCTION BUDGET \$3,951,441				CONSTRUCTION BUDGET \$3,951,441					
Badger ISD #676 - Renovations		Design Development			Schematic Design						
ITEM DESCRIPTION		QTY	UOM	UNIT COST	COST/SF	TOTAL COST	QTY	UOM	UNIT COST	COST/SF	TOTAL COST
BUILDING DEMOLITION					\$2.64	\$126,713.00				\$3.09	\$147,213.00
BUILDING STRUCTURE					\$1.03	\$47,810.00				\$1.30	\$60,000.00
EXTERIOR ENCLOSURE - SHELL					\$4.72	\$230,640.75				\$5.24	\$254,852.00
INTERIOR CONSTRUCTION					\$5.94	\$277,917.70				\$6.25	\$289,596.60
SPECIALTIES & EQUIPMENT & FURNISHINGS					\$2.42	\$111,925.00				\$2.93	\$135,875.00
MECHANICAL					\$53.05	\$2,482,199.25				\$46.11	\$2,188,047.00
ELECTRICAL					\$3.91	\$194,984.60				\$4.65	\$215,530.55
SITE WORK					\$0.98	\$45,580.00				\$0.94	\$43,390.00
		ESTIMATE TOTALS			\$74.69	\$3,517,770.30	ESTIMATE TOTALS			\$70.52	\$3,334,504.15
		CONTRACTOR OVERHEAD AND PROFIT			10.00%	\$351,777.03	CONTRACTOR OVERHEAD AND PROFIT			10.00%	\$333,450.42
		ESTIMATE CONTIGENCY			5.00%	\$175,888.52	ESTIMATE CONTIGENCY			5.00%	\$166,725.21
		% COST ESCALATION			5.00%	\$175,888.52	% COST ESCALATION			5.00%	\$166,725.21
TOTALS		GRAND TOTAL				\$4,221,324.36	GRAND TOTAL				\$4,001,404.98
		ESTIMATE TOTALS W/ ALTERNATES					ESTIMATE TOTALS W/ ALTERNATES				
		CONTRACTOR OVERHEAD AND PROFIT					CONTRACTOR OVERHEAD AND PROFIT				
		ESTIMATE CONTIGENCY					ESTIMATE CONTIGENCY				
		% COST ESCALATION					% COST ESCALATION				
TOTALS W/ ALTERNATES		GRAND TOTAL W/ ALTERNATES					GRAND TOTAL W/ ALTERNATES				
		CONSTRUCTION BUDGET				\$3,951,441.00	CONSTRUCTION BUDGET				\$3,951,441.00
		OVER/UNDER BASE SCOPE ESTIMATE				(\$269,883.36)	OVER/UNDER BASE SCOPE ESTIMATE				(\$49,963.98)
		OVER/UNDER BASE & ALTS ESTIMATE					OVER/UNDER BASE & ALTS ESTIMATE				
BUDGET											

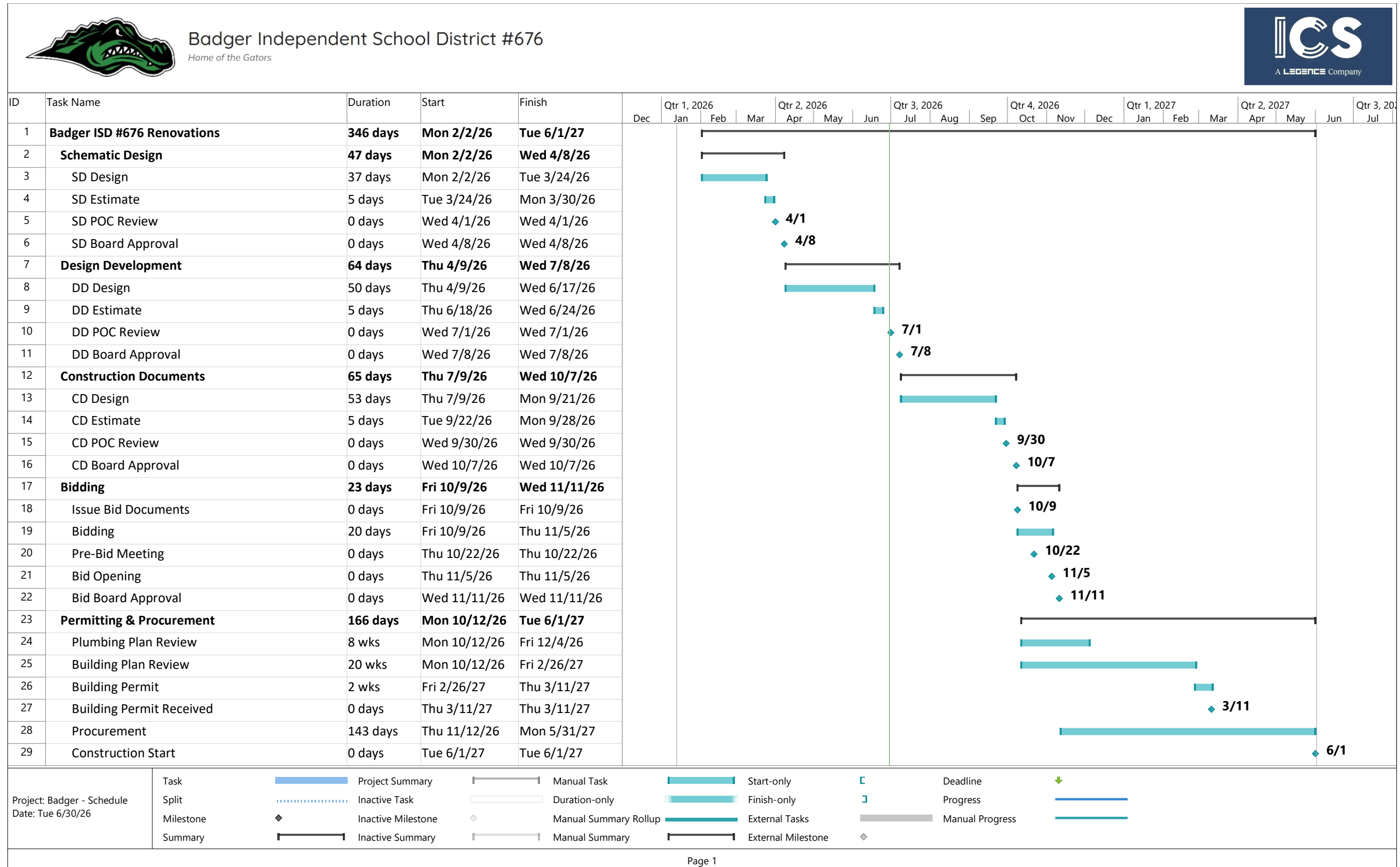


SAFE & SECURE ENTRANCE / TECH OFFICE ESTIMATE

	
Owner:	Badger ISD #676
Project:	Badger ISD #676 - Renovations
Location:	110 E Carpenter Ave, Badger, MN 56714
Designer:	Foss Architects
Badger ISD #676 - Renovations	
ITEM DESCRIPTION	
BUILDING DEMOLITION	
EXTERIOR ENCLOSURE - SHELL	
INTERIOR CONSTRUCTION	
ELECTRICAL	
TOTALS	
TOTALS W/ ALTERNATES	

		AREA: SF	564
Document Date:	6/21/2026	Area 1	Secured Entrance
Project Start:		Area 2	
Project Completion:		Area 3	
% Cost Escalation:		Area 4	
		Area 5	
PM Estimating:	Spencer Lake	Area 6	
		Area 7	
		Area 8	
		Area 9	
		Area 10	
CONSTRUCTION BUDGET			
Design Development			
QTY	UOM	UNIT COST	COST/SF
			\$24.69
			\$13,925.00
			\$12,000.00
			\$45.29
			\$25,545.40
			\$5.13
			\$5,120.00
ESTIMATE TOTALS		\$75.11	\$56,590.40
CONTRACTOR OVERHEAD AND PROFIT		10.00%	\$5,659.04
ESTIMATE CONTIGENCY		5.00%	\$2,829.52
% COST ESCALATION		5.00%	\$2,829.52
GRAND TOTAL			\$67,908.48
ESTIMATE TOTALS W/ ALTERNATES			
CONTRACTOR OVERHEAD AND PROFIT			
ESTIMATE CONTIGENCY			
% COST ESCALATION			
GRAND TOTAL W/ ALTERNATES			

SCHEDULE





Badger ISD #676

