THE SCHOOL DISTRICT OF
PRESCOTT
Prescott, Wisconsin

Facilities Study

SDS PROJECT NO.: 1913
SUMMER 2019

SDS ARCHITECTS
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PROJECT TEAM

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Heath Mathews, Plumbing Designer - Apex Engineering

1 CHAPTER OVERVIEW

Introduction

Process

In May of 2019, SDS Architects and Apex Engineering were hired by the Prescott School District to prepare a facility assessment of the existing Malone Elementary School, Malone Intermediate School, and the Middle School.

The first charge of the assessment was for SDS Architects and its Engineers to visit each building and document existing conditions and issues. This documentation would include such things as identifying the types, locations and conditions of the existing site, exterior enclosure, interiors, services, electrical, heating, air conditioning, ventilation, plumbing and fire protection systems.

Existing drawings, provided by the District, were used to supplement data gathered from each visit. This “raw” information was translated into pre-design diagrams including:

General Overview
Site Analysis
Building Construction, Remodels and Additions
Roof Analysis
Room Assignments and Building Use
Floor Plan Analysis
Interior Analysis
Mechanical Analysis
Plumbing Analysis
Electrical Analysis
Photographs

The diagrams are provided to support visual thinkers and learners. Commentaries are also being provided to elaborate on current conditions, show the needs for replacement or repair, and communicate recommendations for potential project execution or sequencing, along with preliminary cost estimates.

Objective

The objective of the Facilities Planning Study is to develop a document that can serve as a tool to assist the School District with short and long range strategic planning decisions. The study is not a strategic facility plan, nor is it a facility management plan.

The information and analysis contained herein is meant to give the reader a broad understanding of the characteristics of the existing site and building. The contents of this document are the results of preliminary work which will serve as a foundational resource for possible subsequent maintenance or construction projects. The adoption of this study is only the beginning of a series of actions necessary to achieve the objectives expressed in this report. The study should be used as a guide for making decisions concerning major site and building improvements and the feasibility of those improvements.

Throughout this study process we analyze the buildings physical condition to consider items such as inadequacies in terms of size, where systems are in terms of their useful life cycle, and the schools overall safety, but what can easily be over looked is the creature comfort and how we interact with each of these spaces.

Data Collection and Documentation/Facility Study (Phase I)

May-August 2019

Evaluation of existing district facilities by Architects and Engineers to:

- Identify and document current building usage.
- Identify and document existing major building systems (HVAC, Plumbing, Structural, etc.) and components (types and ages of systems and materials).
- Identify and document building and site deficiencies related to code/ADA compliance, security, educational performance, expected useful life, and operational efficiency.
- Interview Principal at each site to discuss known operational, security and space utilization issues.
- Interview Administration and staff to develop preliminary space needs.
- Review existing documentation of facilities.
- Develop existing conditions deficiency summary for each facility with prioritized recommendations and associated cost estimates.
- Present final finding of facts to the Board of Education and Administration.

Concept Development (potential future Phase II)

September-November 2019

Develop concepts based on final finding of facts and feedback from the Board of Education and Administration:

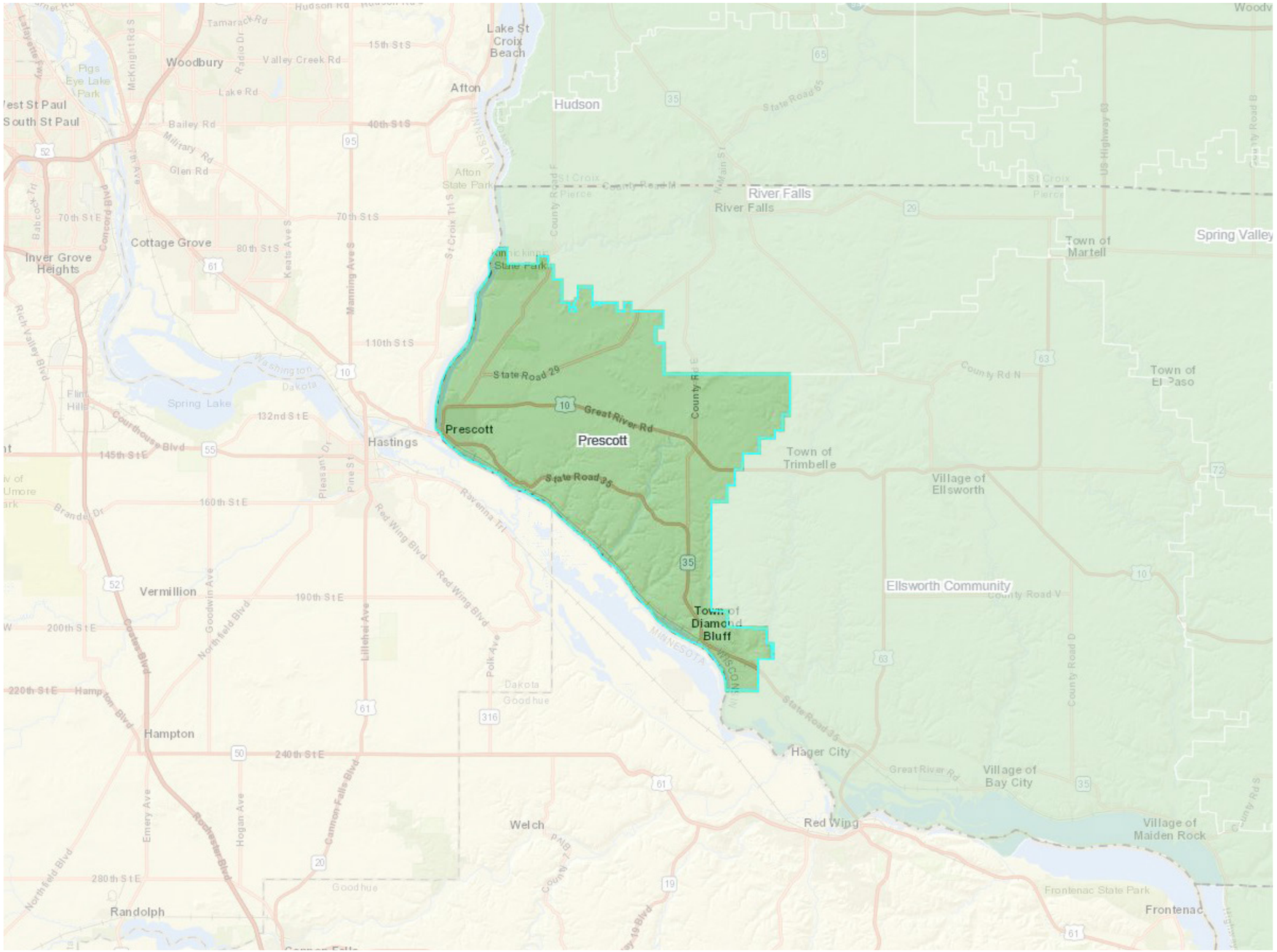
- Develop preliminary concept options and budgets to allow comparison of alternatives to address district needs.
- Meet with District Administration and Building Committee.
- Review options based on feedback from District Administration and Staff.
- Refine selected option(s) based on feedback including:
  - Proposed schematic site and building concept plans (as required).
  - Comparison of benefits associated with each option.
  - Cost projections for each option.
  - Anticipated design and construction schedule for each option.

Preliminary Cost Estimates

- Are based on 2019 construction cost data and are intended to provide a basis for decision making.
- Will vary based on the year of actual construction.
- Are based on anticipated or projected infrastructure and program needs, include assumptions for quantities of materials, construction details, interior finishes and utilities to the site. As more detailed information is defined for the project, cost estimates become more accurate. Typically, a budget is set and building plans, material selections and construction details will be manipulated to bring a project into the budget. If specific material selections, details or items are requested in the design it may affect the project budget.
- Do not generally include estimates for technology acquisition, furniture and moveable equipment. Actual costs may range significantly based on specific furniture and moveable equipment required.
- Include a percentage mark-up for soft costs for the project. This includes: estimated architectural and engineering fees, a suitable project contingency, and reimbursable expenses (i.e. printing, plotting, Department of Safety and Professional Services fees, etc). Legal, accounting, or other professional fees are not included in these budgets and must be added by the owner as appropriate.
- Are based on a square foot cost approach using National Cost Information provided by R.S. Means and other historical data. Since some of these are national figures adjusted by region, discrepancies between the actual local cost of construction items will differ from the estimate. We rely on the averaging effect of specific cost items to provide an estimate that is reasonably accurate.
- Are no substitute for bidding of a construction project. A competitive bidding environment will provide the lowest cost for the building as designed.

District Boundaries

Superintendent:	Dr. Rick Spicuzza
District Coverage:	Approx. 40 acres (not including High School)
Number of Facilities:	4 Malone Elementary School Malone Intermediate School Middle School High School



District Site Plan

Pavement Surface Condition - Rating System

Surface Rating	Description	General Condition and Recommendations
10 Excellent	None	New construction.
9 Excellent	None	Recent overlay. Like new.
8 Very Good	No longitudinal cracks except reflection of paving joints. Occasional transverse cracks, widely spaced (40’ or greater). All cracks sealed or tight (open less than 1/4”). No longitudinal cracks except reflection of paving joints.	Recent sealcoat or new cold mix. Little or no maintenance required.
7 Good	Very slight or no raveling, surface shows some traffic wear. Longitudinal cracks (open 1/4”) due to reflection or paving joints. Transverse cracks (open 1/4”) spaced 10’ or more apart, little or slight crack raveling. No patching or very few patches in excellent condition.	First signs of aging. Maintain with routine crack filling.
6 Good	Slight raveling (loss of fines) and traffic wear. Longitudinal cracks (open 1/4” - 1/2”), some spaced less than 10’. First sign of block cracking. Slight to moderate flushing or polishing. Occasional patching in good condition.	Shows signs of aging. Sound structural condition. could extend life with sealcoat.
5 Fair	Moderate to severe raveling (loss of fine and coarse aggregate). Longitudinal and transverse cracks (open 1/2”) and first signs of slight raveling and secondary cracks. First signs of longitudinal cracks near pavement edge. Block cracking across 50% of the surface. Extensive to severe flushing or polishing. Some patching or edge wedging (in good condition).	Surface aging. Sound structural condition. Needs sealcoat or thin non-structural overlay (less than 2”).
4 Fair	Severe surface raveling. Multiple longitudinal and transverse cracking with slight raveling. Longitudinal cracking in wheel path. Block cracking over 50% of the surface. Patching in fair condition. Slight rutting or distortions (1/2” deep or less).	Significant aging and initial signs of need for strengthening. Would benefit from a structural overlay (2” or more).
3 Poor	Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion. Severe block cracking. Some alligator cracking over less than 25% of the surface. Patches in fair to poor condition. Moderate rutting or distortion 1” or 2” deep. Occasional potholes.	Needs patching and repair prior to major overlay. Milling and removal of deterioration extends the life of the overlay.
2 Very Poor	Alligator cracking over 25% of surface. Severe distortions over 2” deep. Extensive patching in poor condition. Potholes.	Severe deterioration. Needs reconstruction with extensive base repair. Pulverization of old pavement is effective.
1 Failed	Severe distress with extensive loss of surface integrity.	Failed. Needs complete reconstruction.

CHAPTER 2

MALONE ELEMENTARY SCHOOL

THE SCHOOL DISTRICT OF PRESCOTT
Prescott, Wisconsin

Malone Elementary School

505 N. Campbell St.
Prescott, WI 54021

SDS ARCHITECTS
7 South Dewey Street
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General Overview

Principal:	Sara Dusek
2018-2019 Enrollment	**Students**
4K:	76 Total / 12 on-site*
Kindergarten:	79
1st Grade:	87
2nd Grade:	89
Total:	**267**
Approx. Building Areas	
First Floor:	56,630 GSF
Total:	**56,630 GSF****
GSF/Student:	212
Assignable square footage:	36,820 ASF***
Efficiency (ASF/GSF):	65%
Parking Stalls	
P1:	16
P2:	60
Total:	**76**
Property Area	**Acres**
Parcel 1:	7.40
Parcel 2:	0.88
Total:	**8.28**

*4K has three off-site facilities and the classroom utilized at Malone Elementary (Classroom 151) is only occupied in the afternoon, with 12 students.

**Gross square footage (GSF) = the sum of all areas on all floors of a building included within the outside faces of the exterior walls

***Assignable square footage (ASF) = The sum of all areas on all floors of a building which are occupied or used to accomplish the institution's mission (classrooms, offices, gym, library, computer labs, etc.); does not include circulation, toilet rooms, mechanical/ support areas, wall/structure space, etc.

Property information from Pierce County, Wisconsin Land Records Web Portal.

Site Analysis

1. Damage/worn stoop
2. Bus drop off is not ideal for supervision or building access
3. Concentrated area of damage/worn paving

Paved Area P.1
Description: Faculty Parking
Type: Asphalt
Area: Approx. 27,100 SF
Rating: 6

Paved Area P.2
Description: Visitor Parking
Type: Asphalt
Area: Approx. 12,600 SF
Rating: 5-6

Paved Area P.3
Description: Playground
Type: Asphalt
Area: Approx. 11,750 SF
Rating: 3-4

Paved Area P.4
Description: Playground
Type: Asphalt
Area: Approx. 10,620 SF
Rating: 8-9

See the final page of Chapter 1 for rating system of paved surfaces.

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

Roof Analysis

Roof Types

BUR (Built Up Roof System)

TPO (Thermoplastic Polyolefin Single Ply Roof System)

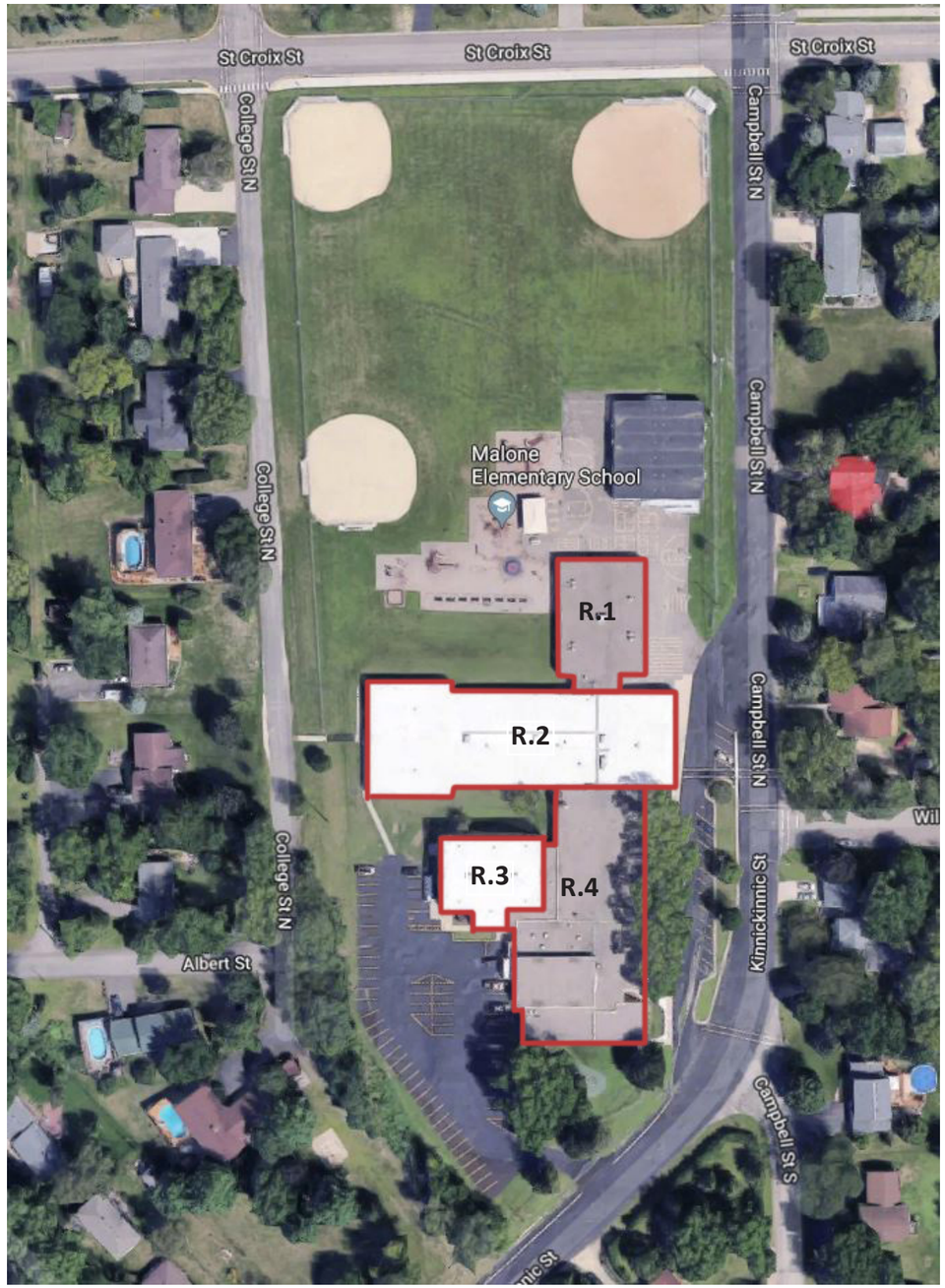
Roof Areas

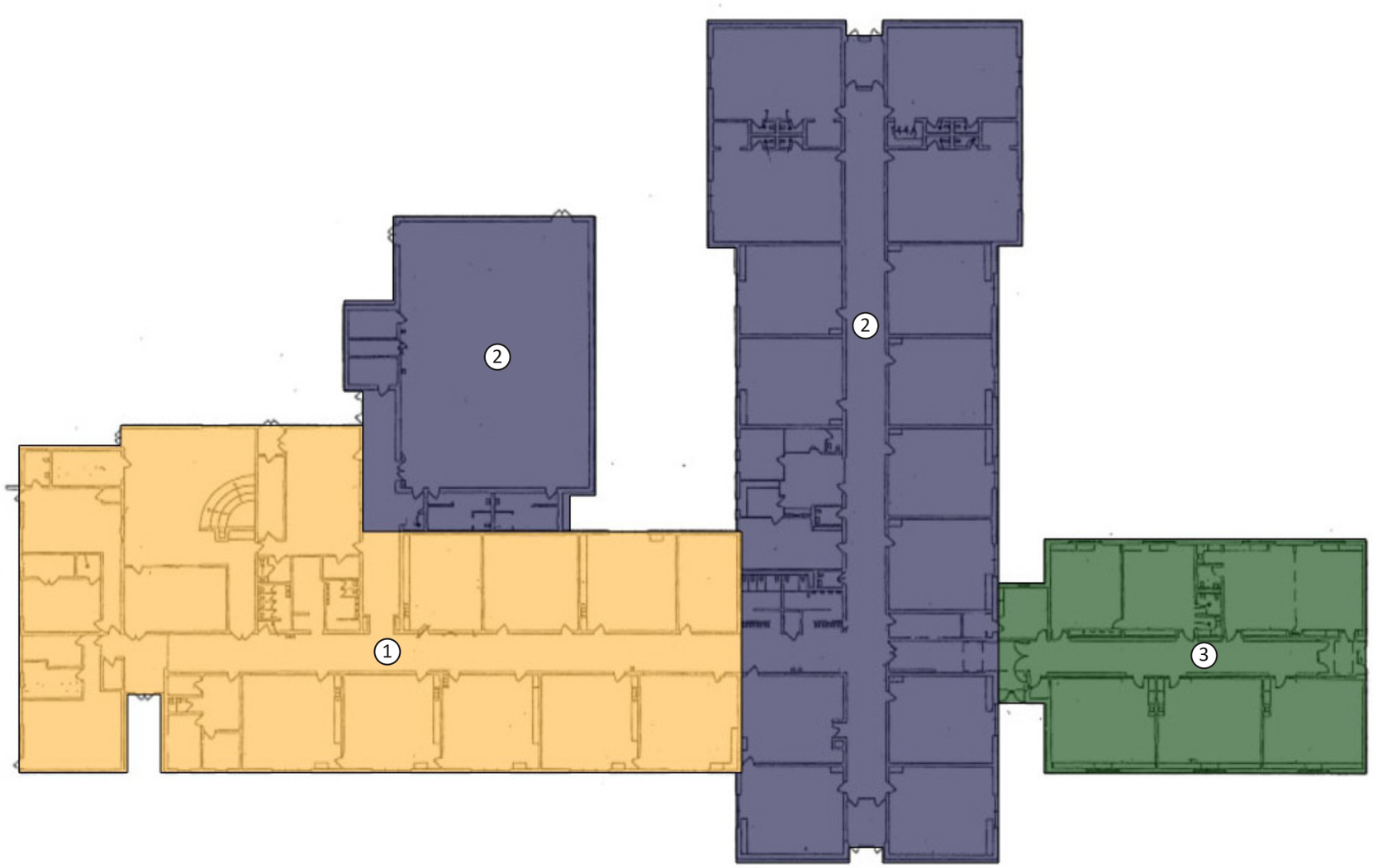
Roof Area R.1
Roof Type: BUR
Area: 7,790 SF
Year Installed: 2001
Condition: Fair
Current Age: 18 years

Roof Area R.2
Roof Type: TPO
Area: 22,170 SF
Year Installed: 2009
Condition: Good
Current Age: 10 years

Roof Area R.3
Roof Type: TPO
Area: 5,420 SF
Year Installed: 2009
Condition: Good
Current Age: 10 years

Roof Area R.4
Roof Type: BUR
Area: 21,260 SF
Year Installed: 2001
Condition: Fair
Current Age: 18 years





Building Construction Ages

Year	Project Scope	Area
1963	Original Construction	19,815 SF
1988	Addition	29,030 SF
2001	Addition	7,785 SF

Legend

(1) Foundation: Concrete slab-on-grade; cast-in-place foundation walls and footings
Exterior Shell: Brick over CMU
Interior: CMU walls

(2) Foundation: Concrete slab-on-grade; cast-in-place foundation walls (with perimeter insulation) and footings
Exterior Shell: Brick cavity wall; CMU backup
Interior: CMU walls

(3) Foundation: Concrete slab-on-grade; CMU foundation walls (with perimeter insulation); cast-in-place footings
Exterior Shell: Brick cavity wall; CMU backup
Interior: CMU walls

Room Assignments and Building Use

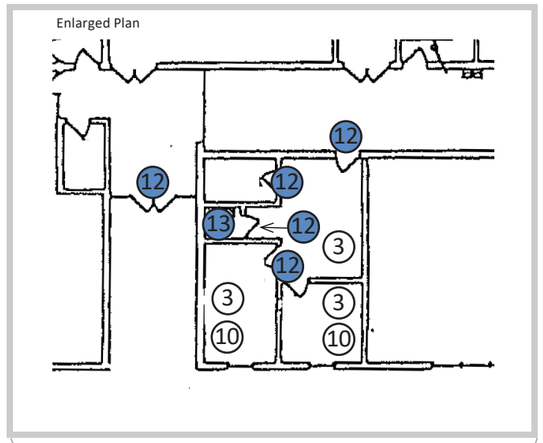
Legend

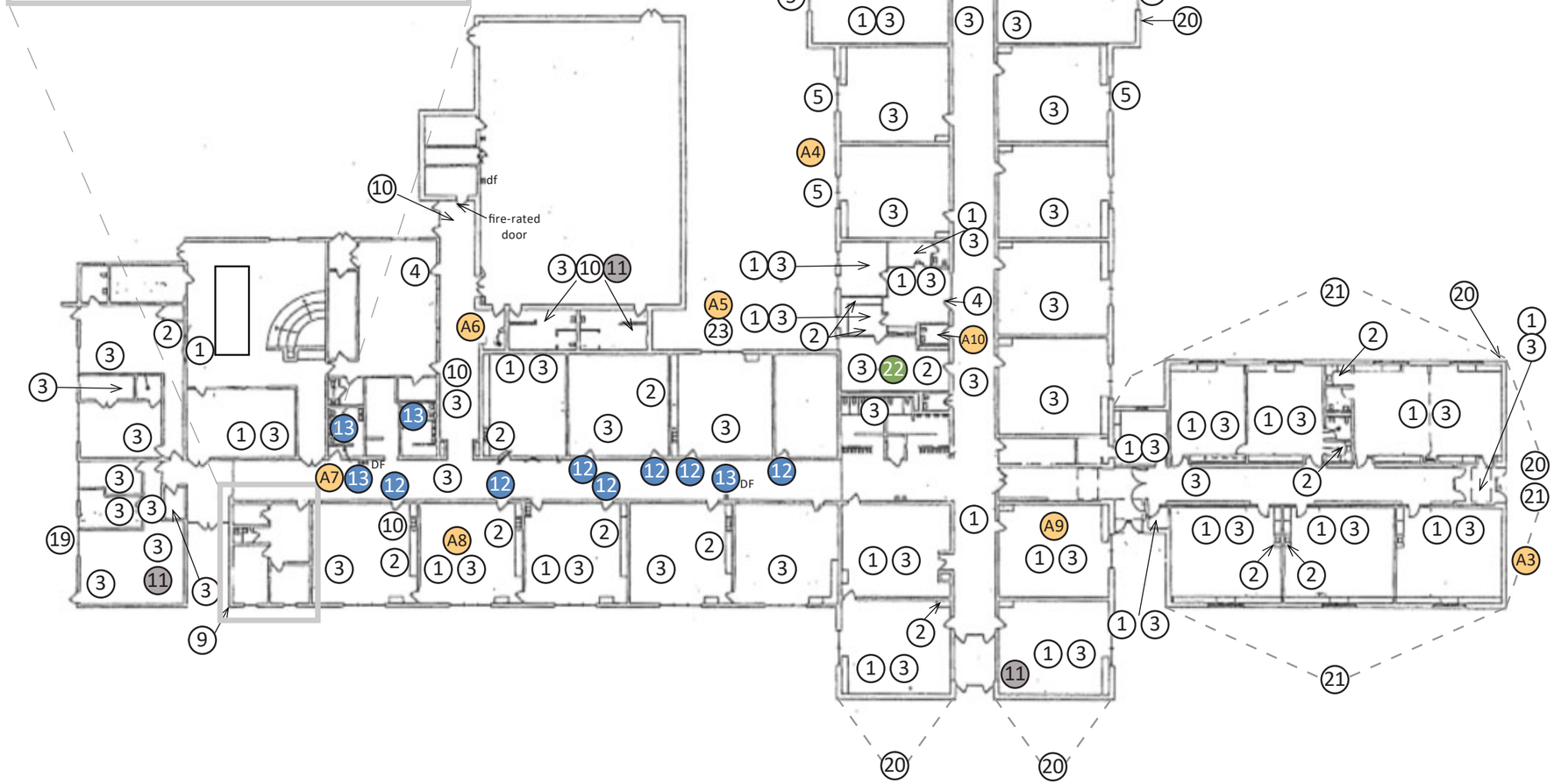
- Classroom/Instruction
- Administration/Conference
- Elective/Fine Arts
- General/Support
- Food Service
- Athletics
- Circulation
- Core

101	Storage	122	Girls	146	Recess Storage
102	LD	123	Classroom	147	Office
102A	Pysch	124	Boys	148	Classroom
102B	Speech	125	Janitor	149	Classroom
103	Special Education	126	Classroom	150	Classroom
103A	ED	127	Classroom	151	Classroom
103B	Storage	128	Classroom	151A	Toilet
103C	Special Education	129	Classroom	151B	Storage
103D	Storage	130	Storage	152	Classroom
103E	Toilet	131	Water Service	153	Classroom
104	Computer Lab	132	Classroom	153A	Toilet
105	Media Center	133	Toilet	153B	Storage
105A	Work	134	Classroom	154	Classroom
106	Kitchen	135	Faculty		
106A	Toilet	136	Toilet		
106B	Food Storage	137	Office		
106C	Toilet	137A	Work		
106D	Receiving	137B	Principal		
107	Girls	137C	Nurse		
108	Janitor	137D	Toilet		
109	Boys	138	Classroom		
110	Storage	139	Classroom		
111	OT / PT	140	Classroom		
112	Gym	141	Classroom		
112A	Locker Room	142	Classroom		
112B	Locker Room	142A	Work		
112C	Gym Storage	142B	Toilet		
113	Conference Rm	142C	Toilet		
113A	Storage	143	Classroom		
113B	Speech	143A	Work		
113C	??	143B	Toilet		
113D	Toilet	143C	Toilet		
114	Music	144	Classroom		
115	Classroom	144A	Work		
116A	Art	144B	Toilet		
117	Classroom	144C	Toilet		
118	Classroom	145	Classroom		
119	Classroom	145A	Work		
120	Classroom	145B	Toilet		
121	Classroom	145C	Toilet		

Average Classroom Size
1962 Classrooms: 850 SF
1988 Classrooms: 875 SF
2001 Classrooms: 600 / 900 SF

Recommended Classroom Size
Kindergarten Classrooms: 1100 SF
1-5 Classrooms: 900 SF





Floor Plan Analysis *(not all notes will be used)*

1. Damaged/worn flooring
2. Damaged/worn casework
3. Damaged/worn ceiling
4. Damaged/worn door and/or door hardware
5. Damaged/worn window
6. Damaged/worn wall
7. Damaged/worn plumbing fixtures
8. Cracks along foundation wall
9. Water related wall damage
10. Water related ceiling damage
11. Inefficient or improper use of space
12. ADA non-compliant accessible route/entry/reach
13. ADA non-compliant toilet room/drinking fountain
14. ADA non-compliant locker room/shower
15. Code - Construction
16. Code - Exiting/Travel Distance
17. Code - Stair/Ramp
18. Possible Asbestos tile flooring
19. Damaged/worn gutter
20. Tuckpointing or expansion joint sealant in need of repair
21. Wall weeps and/or flashing needs repair
22. No visual connection from Office to main entrance
23. Damaged roof drain outlet and splash block

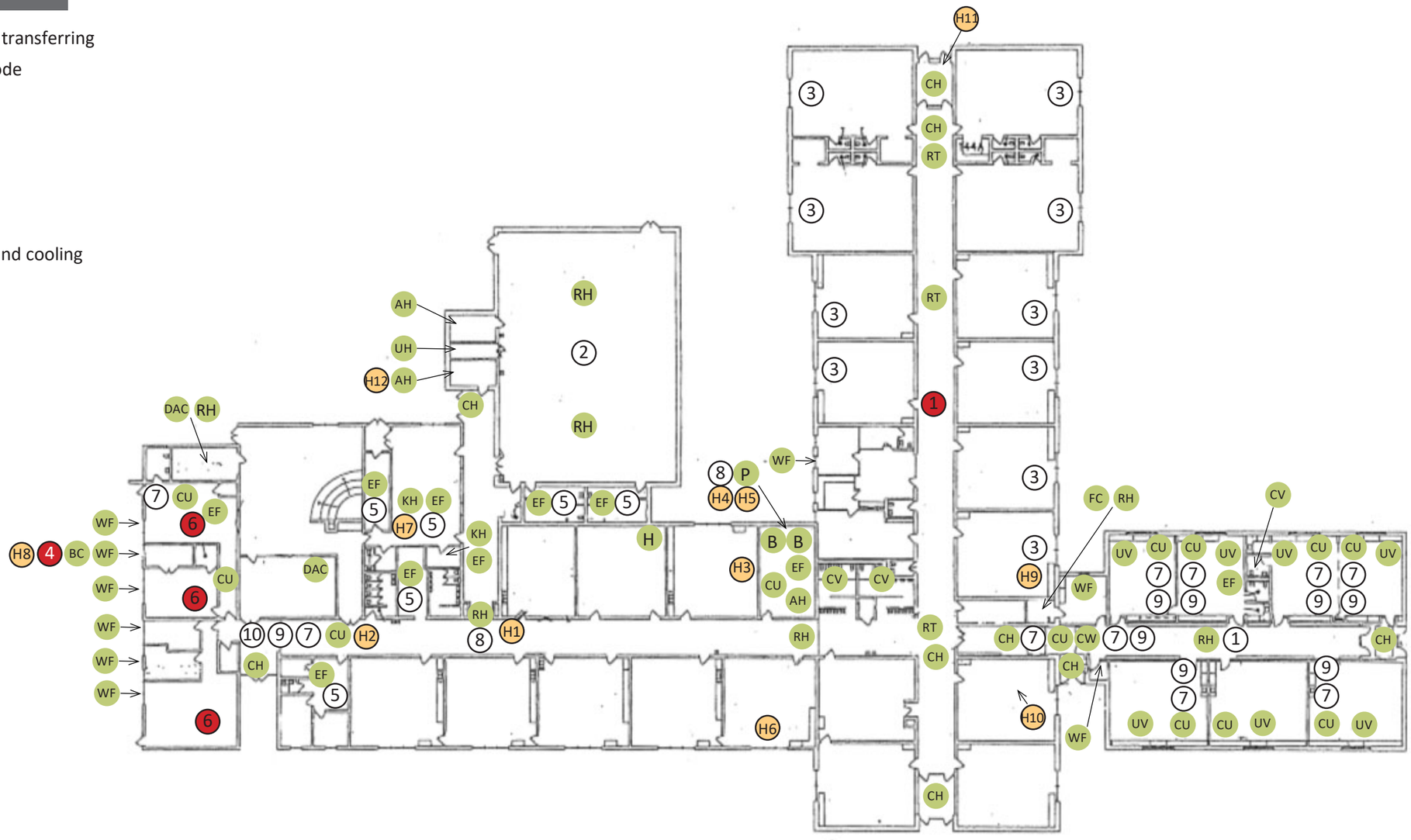
- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

Mechanical Analysis

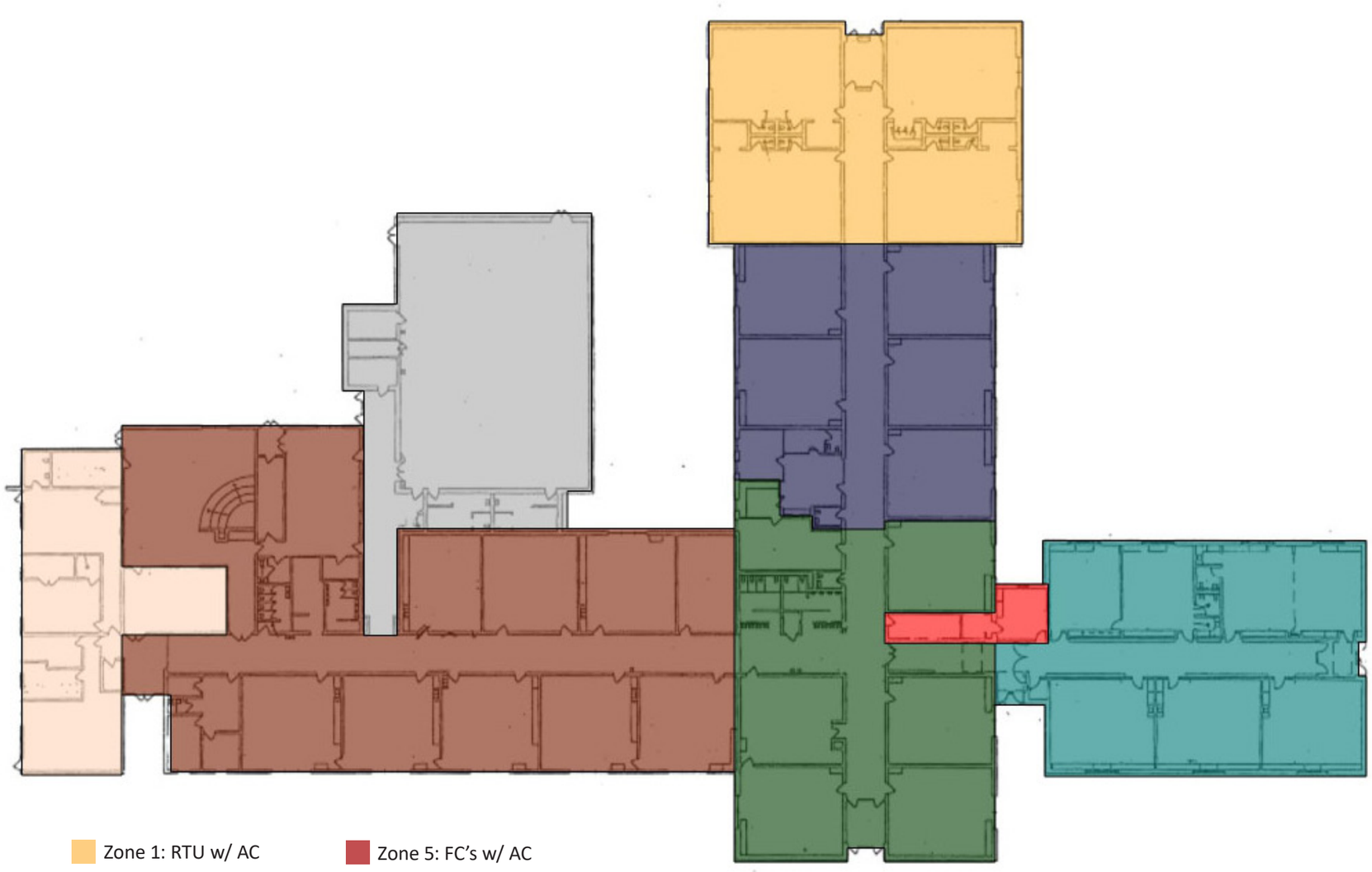
1. Corridor is being used as a relief air plenum with air transferring from rooms, code compliant at time of work. Not code compliant under current code
2. No air conditioning in Gym/Cafeteria
3. Unit ventilator abandoned in place
4. Provide ducted outside air to unit
5. Units approaching end of useful life
6. Upgrade controls to prevent simultaneous heating and cooling
7. R-22 refrgerant
8. Rust
9. Missing or damaged DX pipe insulation
10. Seal wall opening at DX pipe

- AH Air Handling Unit
- B Boiler
- BC Blower Coil
- CU Condensing Unit
- CH Cabinet Unit Heater
- CV Convector
- DAC Ductless Air Conditioner
- EF Exhaust Fan
- FC Fan Coil
- H Hood
- HC Hot Water Coil
- KH Kitchen Hood
- P Pump
- RH Roof Hood
- RTU Rooftop Unit
- UH Unit Heater
- UV Unit Ventilator
- VV VAV Unit
- WF Wall Fin

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue



Mechanical Analysis - HVAC Zones



MECHANICAL NARRATIVE:

BOILER SYSTEM: The facility is served by two gas-fired Hydrotherm KN16 high-efficiency cast iron condensing boilers located in the central boiler/ mechanical room. The boilers are newer and appear to be in good working order. Combustion air is ducted with PVC pipe to each boiler from a sidewall intake louver. Boiler venting is combined to one double-wall vent through the roof. Eight B&G inline circulating pumps, with variable frequency drives (VFD) are located in this room which distribute the heating water throughout the building.

HVAC SYSTEM: The building is conditioned by various HVAC systems/ equipment ranging from central air handling units, packaged roof top air handling units, variable air volume boxes (VAV) with reheat coils, blower coil units, fan coils units, ductless mini-split units, unit ventilators, cabinet unit heaters, convectors, and wall fin. The air handling unit serving the west classroom wing is located in the boiler room and contains a hot water heating coil and a DX cooling coil. The condensing unit serving the cooling coil is located on the roof. This area has abandoned below grade ductwork. The two air handling units serving the Gym are located in a mezzanine next to the Gym and each contains a hot water heating coil, but no air conditioning. The far west end of the building is heated by perimeter hot water wall fin and cooled by vertical cooling only blower coil units. The center classrooms are served by three packaged rooftop units that have gas heating and DX cooling. These rooftop units utilize VAV/reheat boxes to control individual space conditioning. The wall unit ventilators in this area were abandoned in place and are no longer operational. The east classrooms have exterior wall mounted unit ventilators that contain hot water heating and DX cooling coils. The condensing units serving the cooling coils for each unit ventilator are located on the roof. The building ceiling space is used as a return air plenum. Air is relieved from the classrooms through either door grilles or overhead ducted transfer grilles to the corridor. Air is then relieved from the building through gravity relief roof hoods. The kitchen contains a center island hood over the cooling equipment and a dishwasher hood. The art room contains a ducted hood over the kiln. Ductless mini-split cooling units serve the computer lab and the server room. The electrical room is served by a horizontal hot water fan coil unit. Vestibules are heated by hot water cabinet unit heaters. Convectors are used for heating in some toilet rooms and other small areas. Wall fin is also used in some smaller areas for heating.

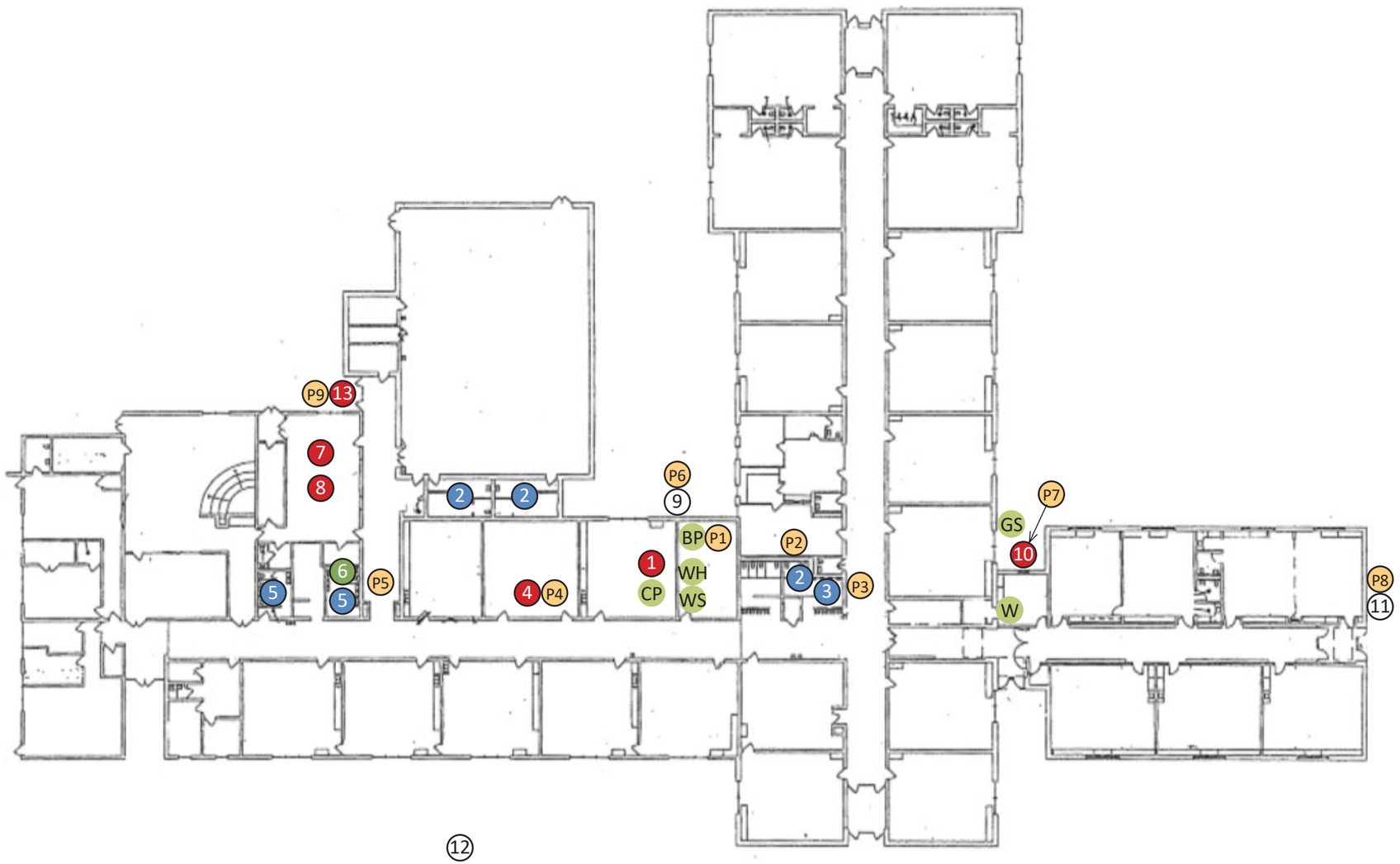
CONTROLS: The building utilizes DDC controls.

Electrical Analysis

1. Electrical service panel has missing blank covers exposing live parts
2. Panelboard does not have required working clearances.

EM Electric Meter
FA Fire Alarm Control Panel
ITR IT Racks
MC Master Clock System
MS Main Service
P Panels
PA Public Address System
SS Security System
UT Utility Transformer

Photos
Code Issue
Safety/Health Issue
ADA/Accessibility Issue



Plumbing Analysis

1. Hot water piping at new (2016) water heater is not insulated per code
2. Plumbing fixtures are not compliant with ADA Standards for Accessible Design
3. Reach distance at urinals for handle operation are not ADA compliant
4. Art room sink does not have solids/clay interceptor
5. Sinks do not have waste, trap, or supplies insulated per ADA standards
6. Urinals only flush all together by a gravity tank installed above; not able to flush individually; this is a sanitary and water consumption issue
7. Dishwasher and wash sinks should be discharging through a grease interceptor
8. Prep sink waste is not connected to the sanitary by way of air gap connection
9. Rain leader discharges to grade (no freeze protection)
10. No cover at sanitary clean out
11. Guard at drinking fountain has broken off
12. Several exterior hose bibs are no longer functioning, unable to obtain parts for repair
13. Exterior hose bib is in an undesirable location; potential trip hazard when in use and hose lays in front of doors

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

- BP Back Flow Preventer, Boiler Makeup
- CP Domestic Water Circulation Pump
- GS Gas Service
- WH Water Heater
- W Water Service
- WS Water Softener

Electrical & Plumbing Narratives

ELECTRICAL NARRATIVE:

UTILITIES: The building is served by a 1200 120/208 Volt 3-phase service. The utility company transformer is pole mounted in the courtyard. The electrical meter is adjacent to the service. The service is of newer vintage. Power Distribution: Panelboards are located throughout the building and serve various loads. The majority are original to the building and past their life expectancy. Adequate power is provided to the classrooms and supporting spaces.

LIGHTING AND LIGHTING CONTROLS: Lighting is original fluorescent troffers with T-8 lamps throughout. Exit signs are a combination of original and newer LED, although the batteries in these are most likely past their life expectancy. Emergency egress lighting fixtures are of a newer vintage, but again the integral batteries are most likely past their life expectancy. Exterior lighting is on the process of being upgraded to LED.
Lighting control comprises of simple light switches throughout. Automatic controls are not provided in the interior of the building. Exterior lighting is controlled through a timeclock.

SPECIAL SYSTEMS: The fire alarm system is difficult to determine. It is a combination of new and old equipment. The type of system is obsolete and does not comply with current Code. Coverage of annunciating and initiating devices does not meet current Code.

The clock system is dated and only semi-functional. Problems with synchronization are present in the system.

The security system is relatively new and is currently serving the building adequately.

The public address system is comprised of traditional speakers and call buttons in classrooms. More user-friendly updated technology exists for public address systems.

Two IT racks serve the building. One is located in Storage room 105A ad one is located in Storage 130. The system is currently serving the building adequately, however further discussions with IT personnel is required to determine additional capacity if it is needed.

PLUMBING NARRATIVE:

UTILITIES: The facility is served by city-supplied 2 1/2" potable water service with water pressure of 70 Psig static, 950 gallons per minute flow at 65 psig residual pressure. The water meter is 2" in size with a 2" bypass piping and a 2" pressure reducing valve. The water service enters the building in room 147 of the 2001 addition. The building is served by 6" sanitary service. From the 1962 construction and a 4" sanitary from the 2001 addition.

Per discussion with maintenance staff, this facility has issues with debris in school water lines after city preforms water main flushing in the area of the school. This causes aerators and flush valves to clog and they need to go thru all the fixtures to clean the aerators and flush valve diaphragms.

GAS SYSTEM: The building is served with one natural gas utility service provided by St.Croix Gas. The service is located on the North side of the 1988 building. The gas utility is provided firm gas. The gas distribution in the building is black iron piping.

STORM SEWER: The majority of all roof water is collected via roof drains and connected via underground storm piping running below the school. The storm water then exits the facility to the south and east, and is piped to the municipal storm water system, with the original building discharging on grade to the East.

SANITARY: All building sanitary is gravity drained with no lift stations or grinder pumps. Piping consist of Cast Iron and galvanized materials with PVC for areas that have been remodel or repaired. The Cast Iron and galvanized piping that is visible appears to be in fair condition.

POTABLE WATER DISTRIBUTION: Potable water is distributed throughout the building via a copper and galvanized distribution on piping located above grade. Piping condition on appears to be in fair condition. Asbestos insulation is likely in the older section of the building and in concealed locations that were not accessed during any remodel or repaired areas.

POTABLE WATER HEATING: The building is served by one natural gas fired tank type water heaters with gravity vent exhaust, producing 120-degree hot water throughout the building. A hot water recirculation line/pump is present and operating. The water heater was installed in 2016 in good condition. A booster heater to serve the kitchen dishwasher. Water softener unit conditions the hard water for the hot water system.

FIRE PROTECTION SYSTEM: This building does not have any fire protection in the building.

PLUMBING FIXTURES: Plumbing fixtures located in the facility are original to the building and its addition, or the time of the areas were last remodeled. Majority of the fixtures are in good condition. The toilet facilities consist of floor mounted tank type water closets with 3 gallon per flush older models and 1.6 gallons per flush for the newer models. 1998 and 2001 additions the water closets are wall hung with handle flush valves. Floor mounted urinals with handle flush valves in the 1988 addition, and gravity flush tank in the 1962 construction. Lavatory sinks are wall mounted with handle faucets, or semi-circle wash fountain. The Locker Room showers, surface mount hot and cold shower valves with fixed shower heads. Water coolers are wall hung units; newer models have water bottle fillers. Sinks located in classrooms are based on the classroom needs, the standard classroom sinks are a mix of hot and cold or just cold water faucets, and some have a bubbler.

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Photographs

Unless noted otherwise, all photos were taken on May 21, 2019

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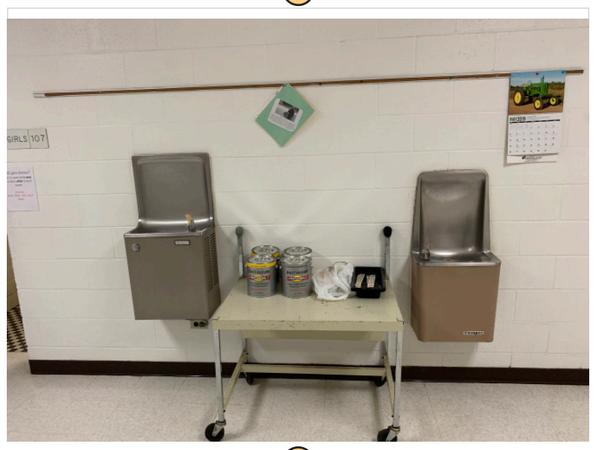

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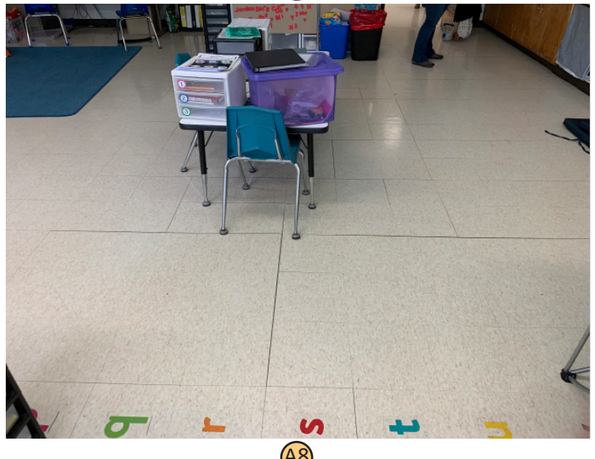

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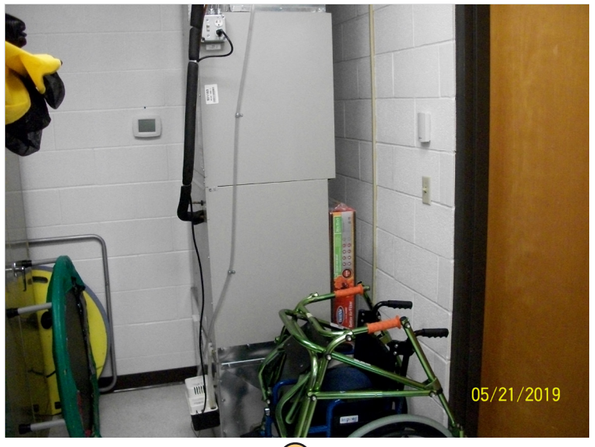

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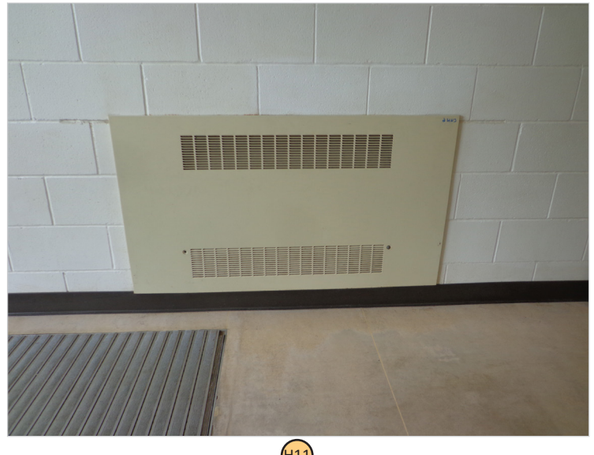
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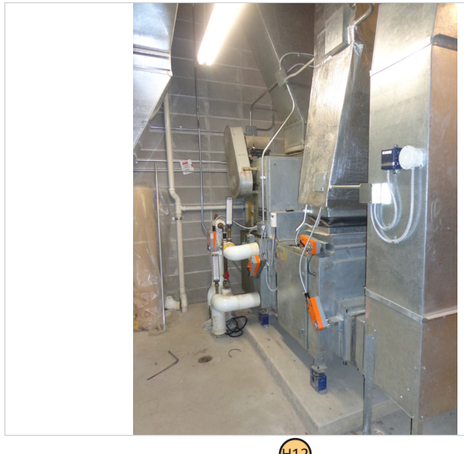
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Photographs

E1

E2

E3

E4

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P1

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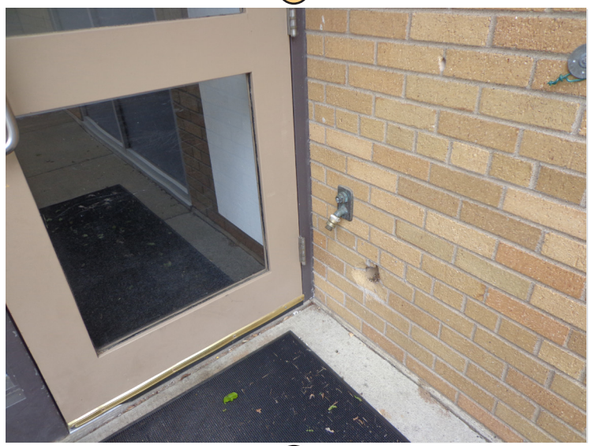


P9

CHAPTER 3

MALONE INTERMEDIATE SCHOOL

THE SCHOOL DISTRICT OF PRESCOTT
Prescott, Wisconsin

Malone Intermediate School

1220 Saint Croix St.
Prescott, WI 54021

SDS ARCHITECTS
7 South Dewey Street
Eau Claire, Wisconsin 54701
715.832.1605 | sdsarch.com

General Overview

Principal:	Donita Stepan

2018-2019 Enrollment	**Students**
3rd Grade:	76
4th Grade:	91
5th Grade:	88
Total:	**255**

Approx. Building Area	
Lower Level:	22,960 GSF
First Floor:	71,140 GSF
Total:	**94,100 GSF***

GSF/Student:	369

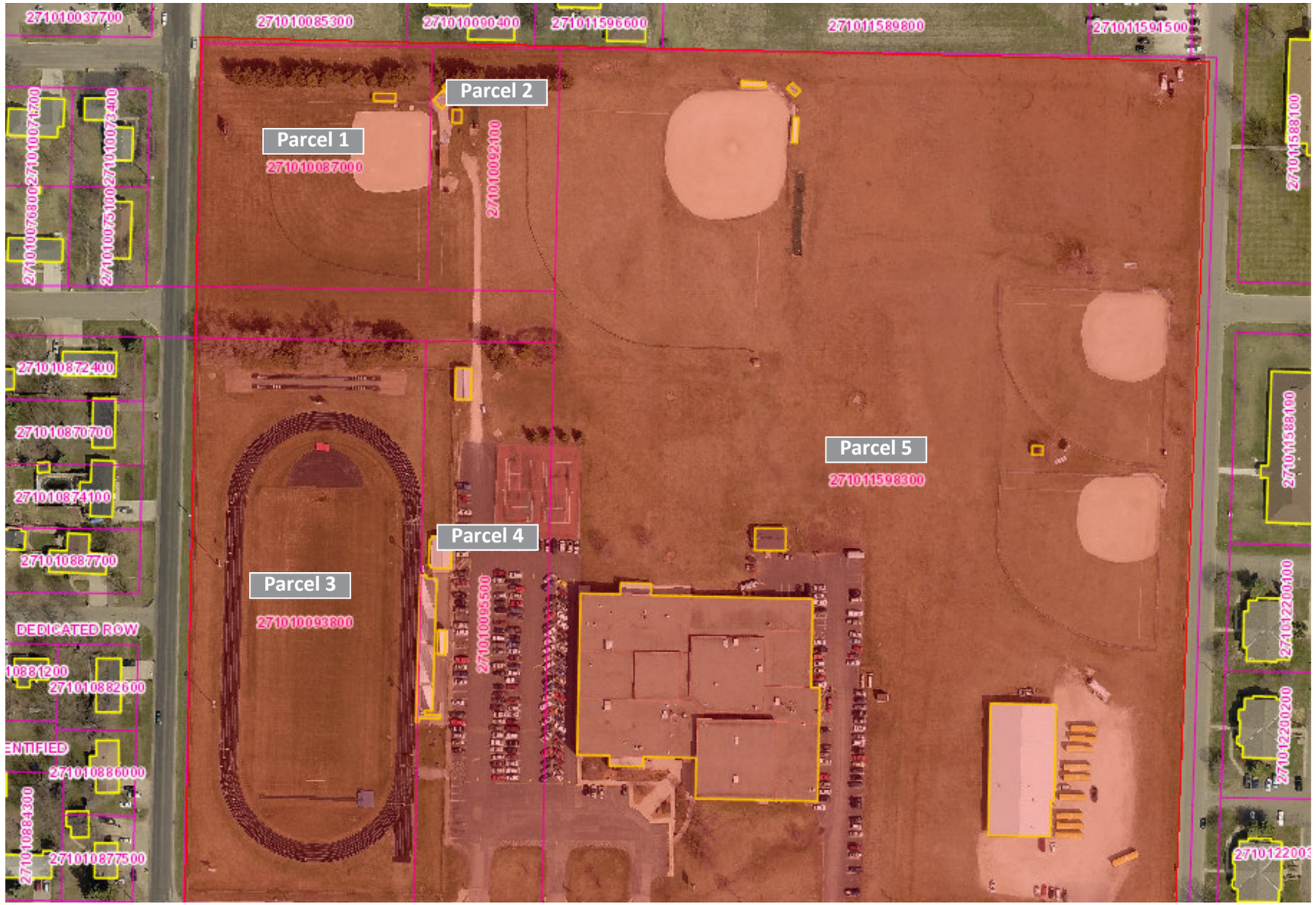
Assignable square footage:	53,510 ASF**
Efficiency (ASF/GSF):	57%

Parking Stalls	
P1:	174
P2:	70
Total:	**244**

Property Area	**Acres**
Parcel 1:	2.06
Parcel 2:	1.05
Parcel 3:	4.50
Parcel 4:	2.37
Parcel 5:	19.23
Total:	**29.21**

*Gross square footage (GSF) = the sum of all areas on all floors of a building included within the outside faces of the exterior walls

**Assignable square footage (ASF) = The sum of all areas on all floors of a building which are occupied or used to accomplish the institution's mission (classrooms, offices, gym, library, computer labs, etc.); does not include circulation, toilet rooms, mechanical/ support areas, wall/structure space, etc.



Property information from Pierce County, Wisconsin Land Records Web Portal.

Site Analysis

1. Roof overflow scupper located directly above electrical equipment
2. Concentrated area of damage/worn paving
3. Curb area is damaged/worn
4. Stoop at entrance damaged/worn

Paved Area P.1
Description: General Parking & Bus Drop
Type: Asphalt
Area: Approx. 89,000 SF
Rating: 6-7

Paved Area P.2
Description: Faculty Parking & Parent Drop
Type: Asphalt
Area: Approx. 27,820 SF
Rating: 4-5

Paved Area P.3
Description: Playground
Type: Asphalt
Area: Approx. 15,360 SF
Rating: 8

See the final page of Chapter 1 for rating system of paved surfaces.

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

Roof Analysis

Roof Types

BUR (Built Up Roof System)

TPO (Thermoplastic Polyolefin Single Ply Roof System)

Roof Areas

Roof Area R.1
Roof Type: BUR
Area: 52,200 SF
Year Installed: 1995
Condition: Fair-Poor
Current Age: 24 years

Roof Area R.2
Roof Type: BUR
Area: 8,550 SF
Year Installed: 1995
Condition: Fair-Poor
Current Age: 24 years

Roof Area R.3
Roof Type: BUR
Area: 10,390 SF
Year Installed: 1995
Condition: Fair-Poor
Current Age: 24 years

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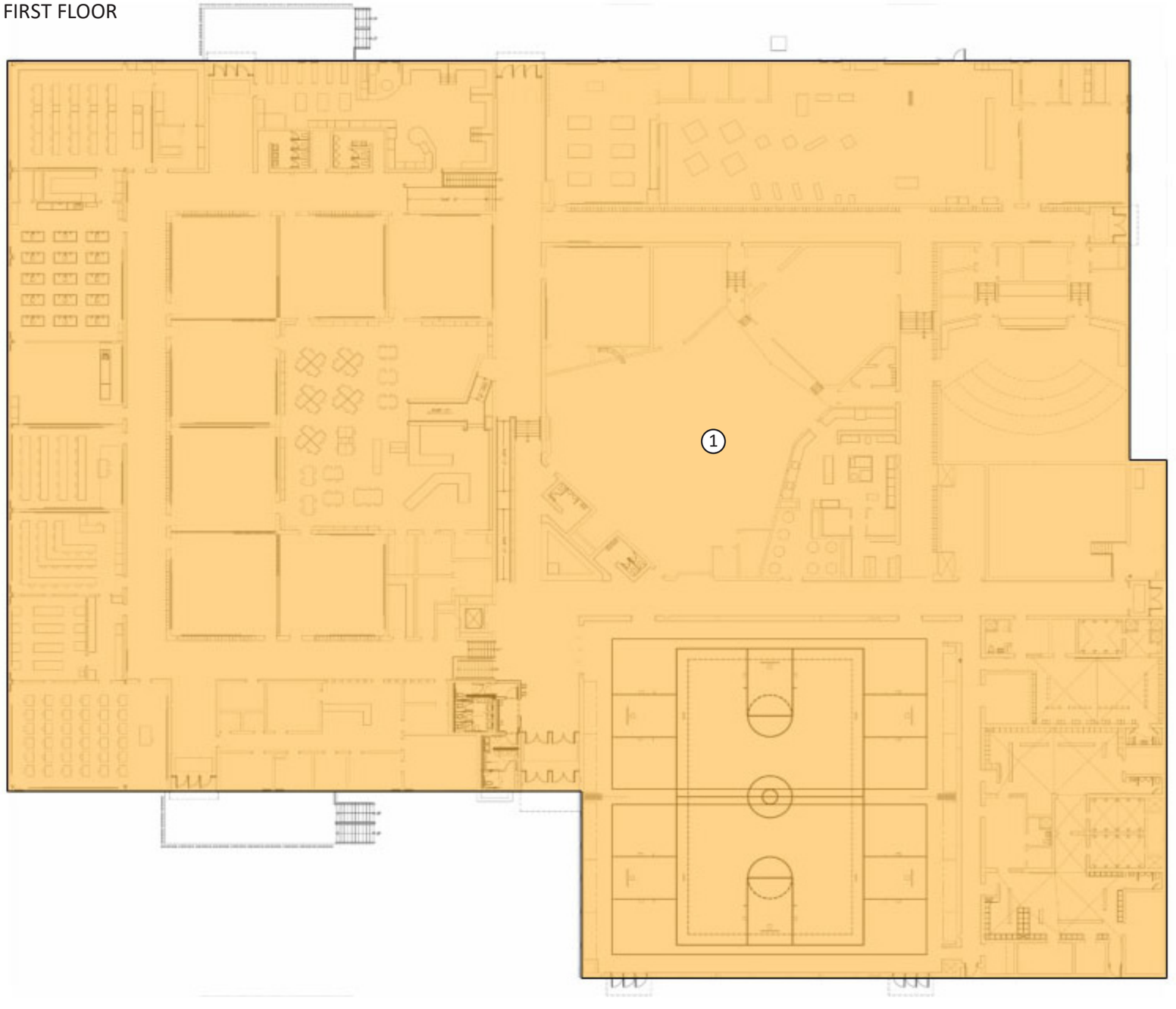
Building Construction Ages

Year	Project Scope	Area
1968	Original Construction	71,140 SF

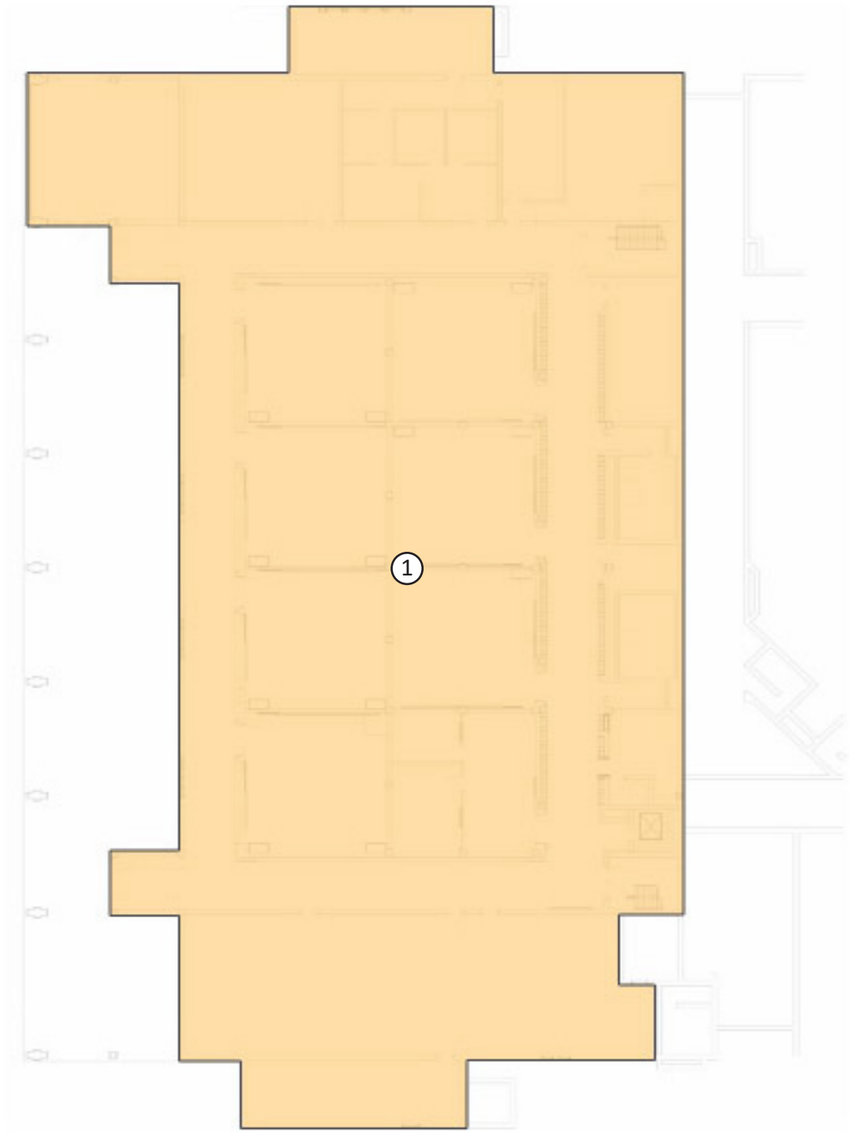
Legend

(1) Foundation: Concrete slab-on-grade; cast-in-place foundation walls (24" of perimeter insulation vertical & horizontal); cast-in-place footings
Exterior Shell: Brick over CMU (no insulation)
Interior: CMU walls

FIRST FLOOR



LOWER LEVEL



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	Exterior Shell:	Brick over CMU (no insulation)
	Interior:	CMU walls

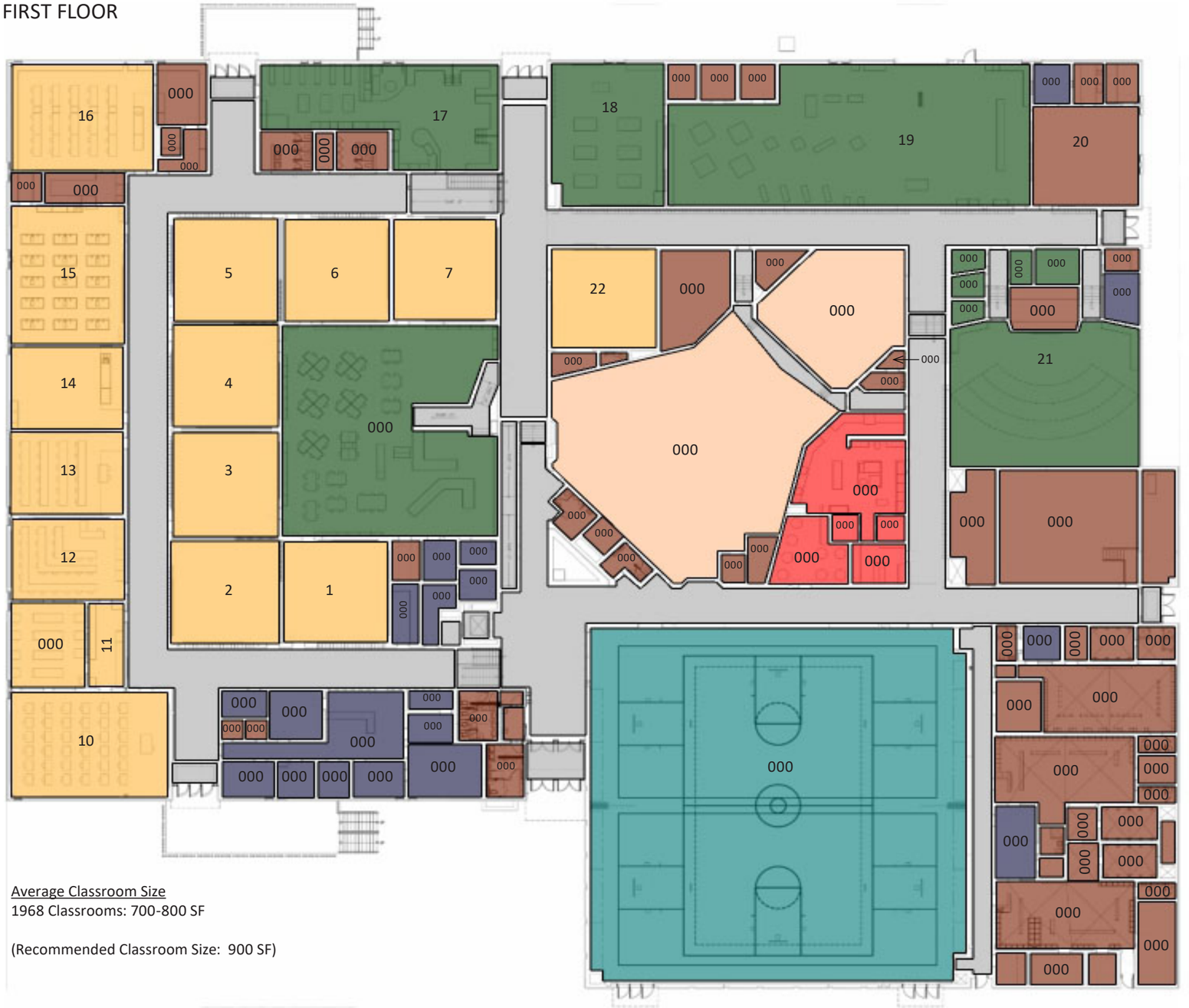
Room Assignments and Building Use

Legend

- Classroom/Instruction
- Administration/Conference
- Elective/Fine Arts
- General/Support
- Food Service
- Athletics
- Circulation
- Core

1	Classroom
2	Classroom
3	Classroom
4	Classroom
5	Classroom
6	Classroom
7	Classroom
8	Classroom
9	Classroom
10	Classroom
11	Classroom
12	Classroom
13	Classroom
14	Classroom
15	Classroom
16	Classroom
17	Classroom
18	Art
19	Shop
20	Maintenance Storage
21	Band / Choir
22	Classroom

FIRST FLOOR



Average Classroom Size
1968 Classrooms: 700-800 SF

(Recommended Classroom Size: 900 SF)

LOWER LEVEL

Room Assignments and Building Use

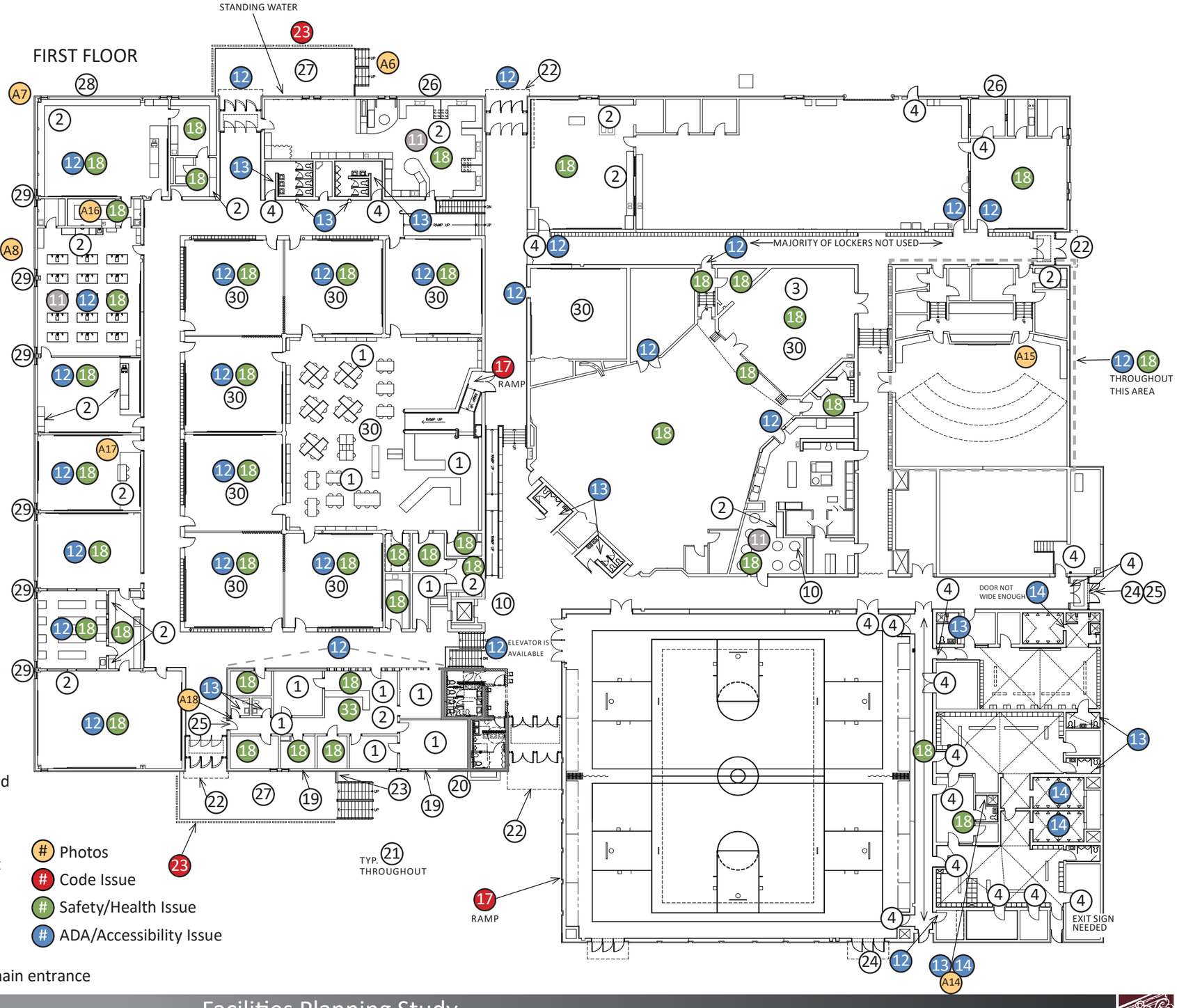
Legend

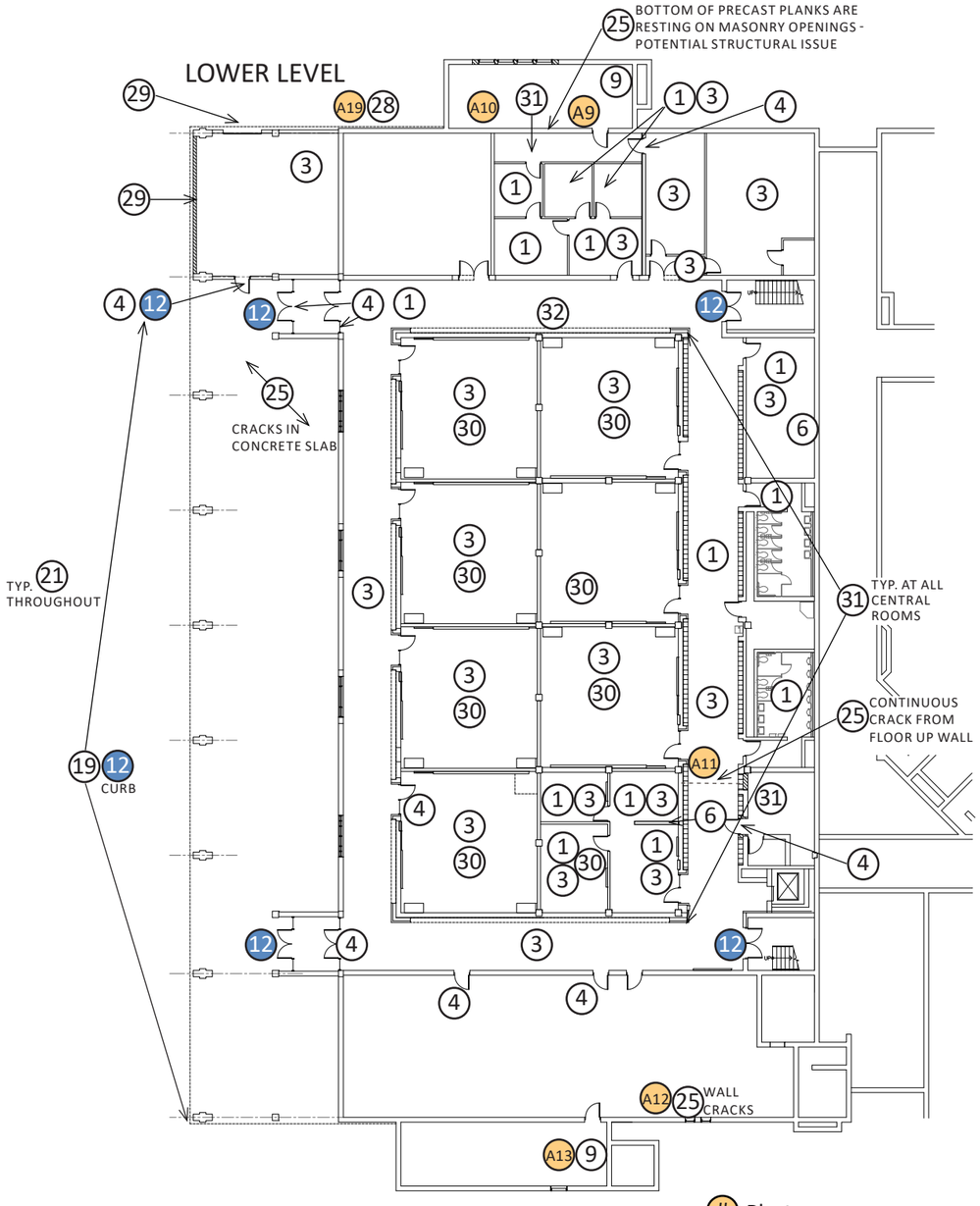
- Classroom/Instruction
- Administration/Conference
- Elective/Fine Arts
- General/Support
- Food Service
- Athletics
- Circulation
- Core

G1	District Office
G2	Computer Lab
G3	Classroom
G4	Classroom
G5	Classroom
G6	Classroom
G7	Classroom
G8	Conference Room
G9	Classroom
G10	Office
G11	Office
G12	SPED
G13	Storage

Floor Plan Analysis *(not all notes will be used)*

1. Damaged/worn flooring
2. Damaged/worn casework
3. Damaged/worn ceiling
4. Damaged/worn door and/or door hardware
5. Damaged/worn window
6. Damaged/worn wall
7. Damaged/worn plumbing fixtures
8. Cracks along foundation wall
9. Water related wall damage
10. Water related ceiling damage
11. Inefficient or improper use of space
12. ADA non-compliant accessible route/entry/reach
13. ADA non-compliant toilet room/drinking fountain
14. ADA non-compliant locker room/shower
15. Code - Construction
16. Code - Exiting/Travel Distance
17. Code - Stair/Ramp
18. Possible asbestos tile flooring
19. Sealant is damaged/worn and in need of replacement
20. HVAC grate damaged/worn and in need of replacement
21. Window sealant worn and window setting nearing end of useful life
22. Vestibule canopy in need of paint/refresh
23. Railings are not code compliant
24. Structural lintel is bent and corroding
25. Structural issue evident at this location, further investigation needed
26. Vent/louver in need of repair
27. Sealer/topcoat peeling off of exterior concrete patio surface
28. Infill area does not have proper foundation; structural issue evident
29. Concrete spalling occurring at window sill
30. No natural light in interior occupied room
31. Acoustical separation between spaces is inadequate
32. Damaged/worn lockers
33. No visual connection from Office to main entrance





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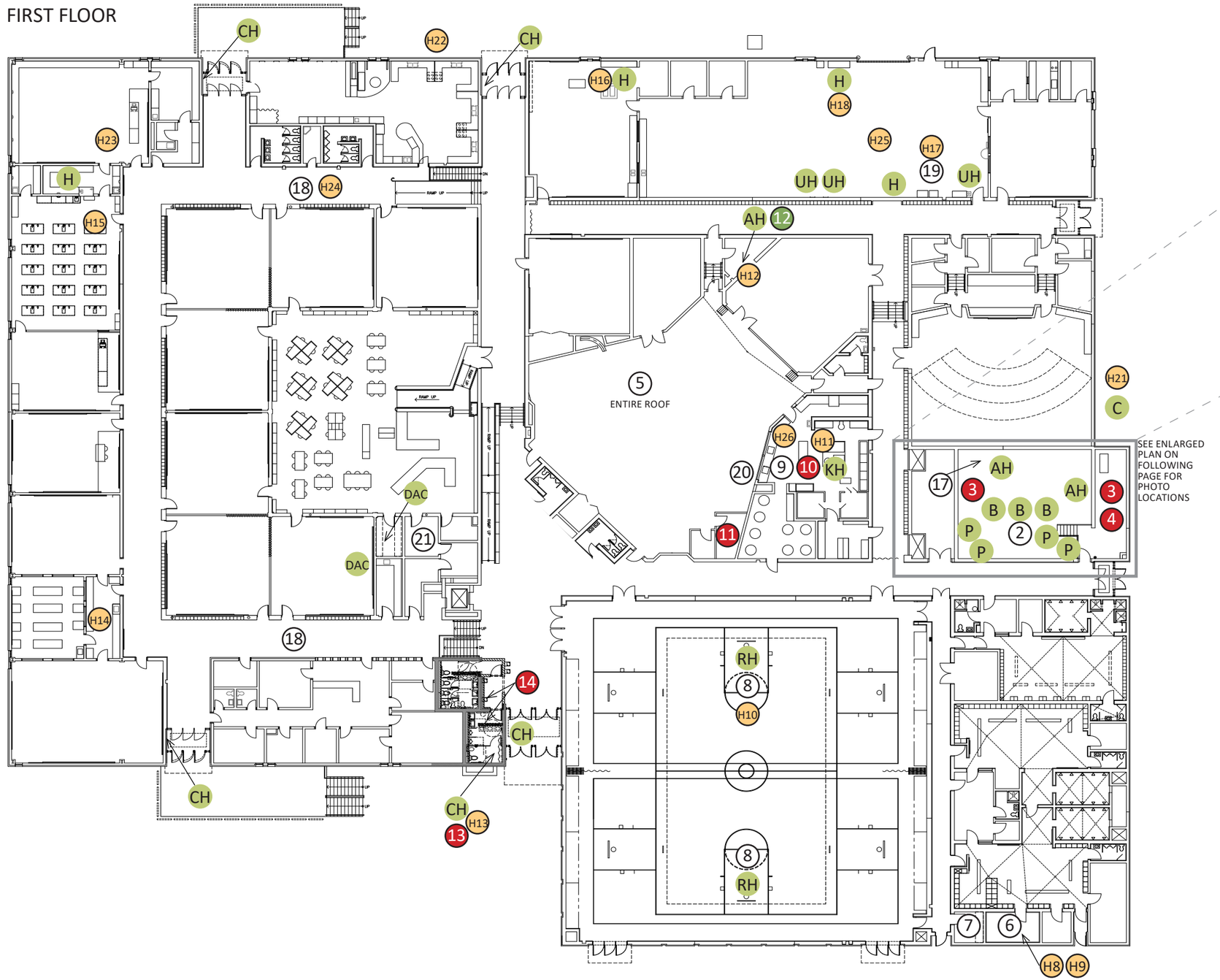
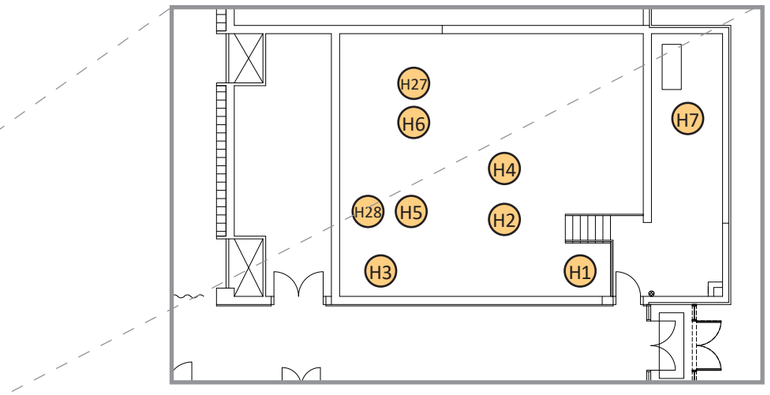
Mechanical Analysis

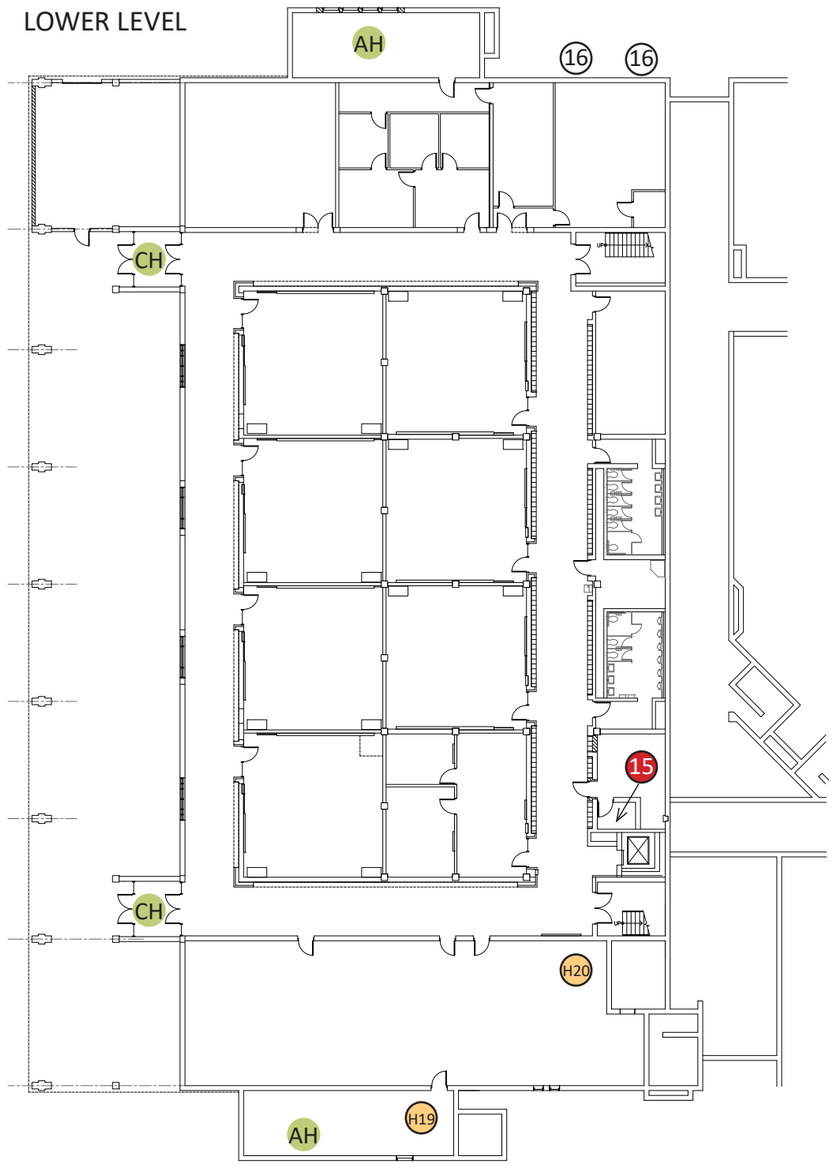
1. Corridor is being used as a relief air plenum with air transferring from rooms. Code compliant at time of work, not code compliant under current code.
2. Corrossion on venting and base of boilers
3. Outside air duct not insulated
4. Improper clearence to electrical panels
5. Roof exhaust fan units approaching end of useful life
6. Rust on diffuser
7. Verify proper amount of make-up air for dryer
8. No drip pan below roof hood
9. No fire suppression
10. Cooking equipment not totally under hood
11. No ventilation in office
12. Sharp duct edges below 6' A.F.F.
13. Convector does not maintain temperature
14. No transfer air path for exhaust air
15. No exhaust air in elevator equipment room
16. Missing wall cap
17. Loose screen on roof hood
18. Shroud installed to prevent snow from entering roof hood
19. Rusted gooseneck on roof
20. Temporary cover on exhaust fan
21. Loud rattle noise from exhaust fan

FIRST FLOOR



- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue





Mechanical Analysis

- AH Air Handling Unit
- B Boiler
- C Chiller
- CH Cabinet Unit Heater
- CU Condensing Unit
- CV Convector
- DAC Ductless Air Conditioner
- EF Exhaust Fan
- H Hood
- HC Hot Water Coil
- KH Kitchen Hood
- P Pump
- PC Pneumatic Compressor
- RH Roof Hood
- UH Unit Heater
- UV Unit Ventilator
- VV VAV Unit

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

Mechanical Analysis - HVAC Zones

MECHANICAL NARRATIVE:

BOILER SYSTEM: The facility is served by three gas-fired Laars Rheos high-efficiency condensing boilers located in the east side boiler/mechanical room. The boilers are newer and appear to be in good working order. Combustion air is ducted to each boiler from the roof. Boiler venting is double-wall vent through the roof. There is corrosion visible on the venting and at the base of the boiler. Maintenance staff indicated that this was caused by a control issue that has since been corrected. Two Armstrong base mounted pumps, with variable frequency drives (VFD) are located in this room which distribute the heating water throughout the building. CHILLER SYSTEM: The facility is served by a single Trane chiller located outside on the east side of the building near the boiler room. The chiller is newer and appears to be in good working order. Two B&G base mounted pumps, with VFD's are located in the boiler room and distribute the cooling water throughout the building.

HVAC SYSTEM: The building is conditioned by various HVAC systems/ equipment ranging from central air handling units, variable air volume boxes (VAV) with reheat coils, ductless mini-split air conditioning units, cabinet unit heaters, unit heaters and convectors. Two air handling units are located in the boiler room and each contains a hot water heating coil and chilled water cooling coil. One air handling unit is located on the mezzanine near the lunch room and contains a hot water heating coil and chilled water cooling coil. Two air handling units are located in the lower level, one on the north end and one on the south end, and each contains a hot water heating coil and chiller water cooling coil. All of the air handling units are provided with VFD's. The building ceiling space is used as a return air plenum. Supply air distribution is a mixture of ceiling diffusers and perimeter floor air baseboards. The ductwork for the supply air serving the west side classrooms on the first floor is fiber-board that could not be accessed during the most recent modifications due to its' location in the overhang area. Air is relieved from the classrooms through door grilles to the corridor. Air is then relieved from the building through gravity relief roof hoods. One classroom and an IT room near the library are each cooled by a ductless mini-split wall-hung air conditioning unit that is piped to a condensing unit located on the roof. Both units use R-410A refrigerant. The kitchen contains a center island hood over the cooking equipment and a dishwasher hood. The kitchen hood does not have fire suppression. The science room contains a lab hood that has been abandoned in place. The art room contains a hood that has been abandoned in place. The discharge, from the generator located in the boiler room, is ducted to the outside. The gym contains exposed ductwork for supply air and low return grilles located in two of the corners. Relief is through two roof hoods. There is no drip pan below the openings to the roof hoods. The commercial dryer, located near the locker room area, is vented through the roof. It could not be confirmed during our site visit whether sufficient make-up air is being provided for the dryer exhaust. The dryer was operating and the door to the room was open (maintenance staff indicated that since the school is now used for 3rd-5th graders and not as a high

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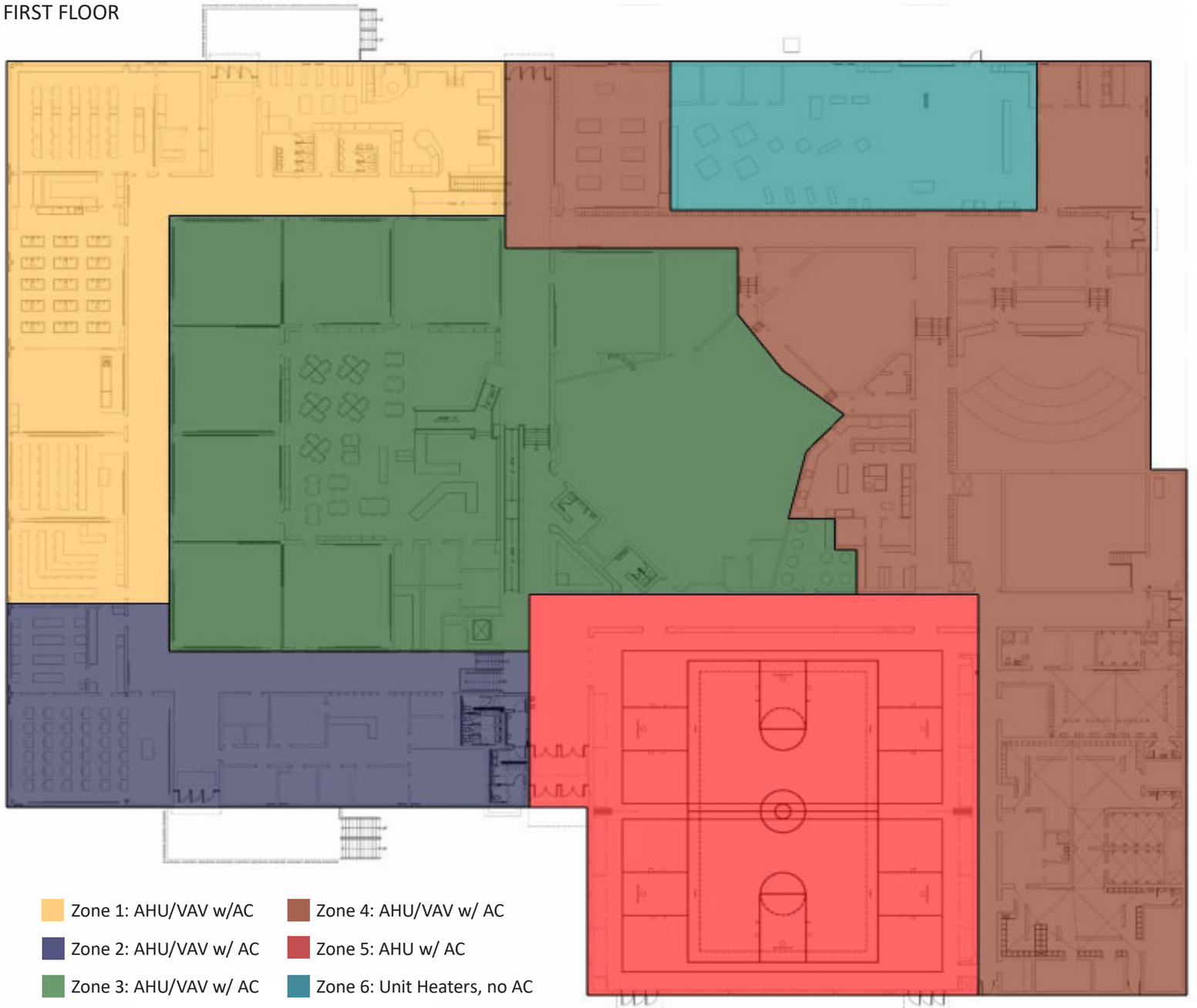
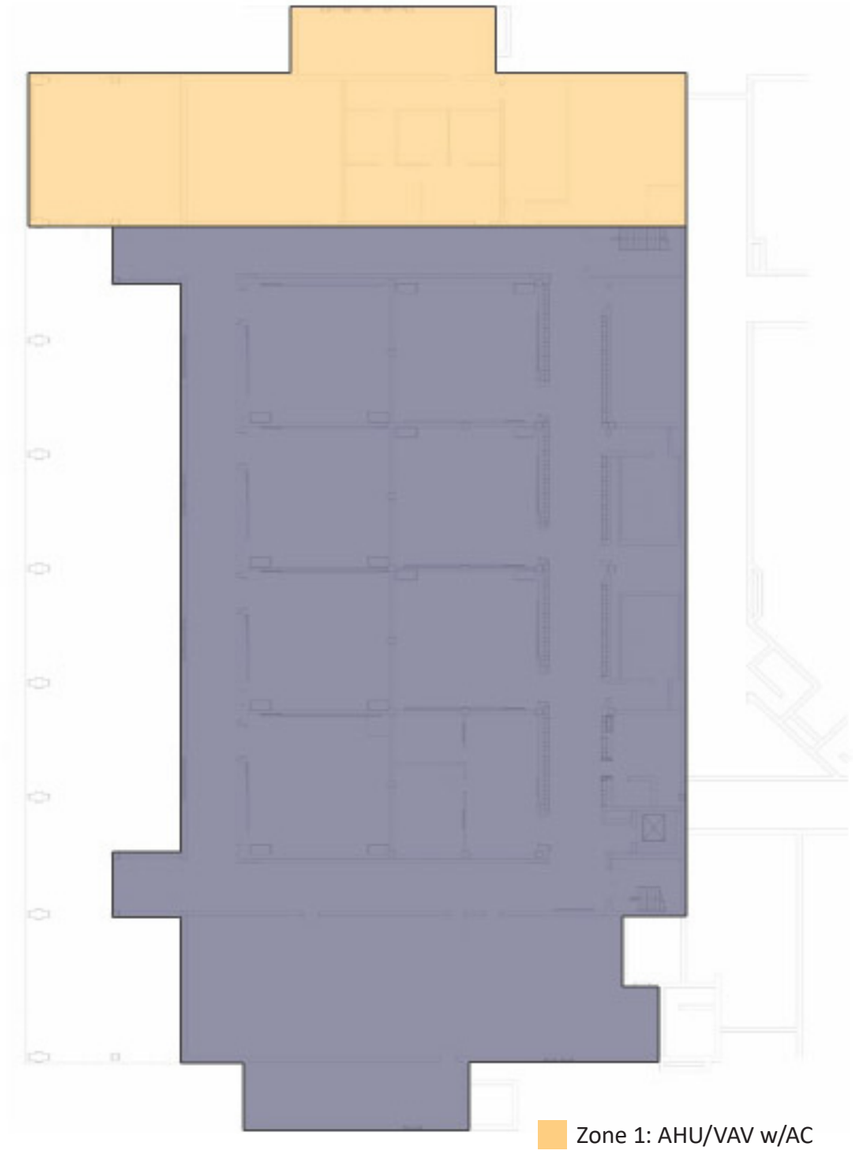


**Zones 1 & 2 serve both the lower level and 1st floor*

Mechanical Analysis - HVAC Zones

LOWER LEVEL



**Zones 1 & 2 serve both the lower level and 1st floor*

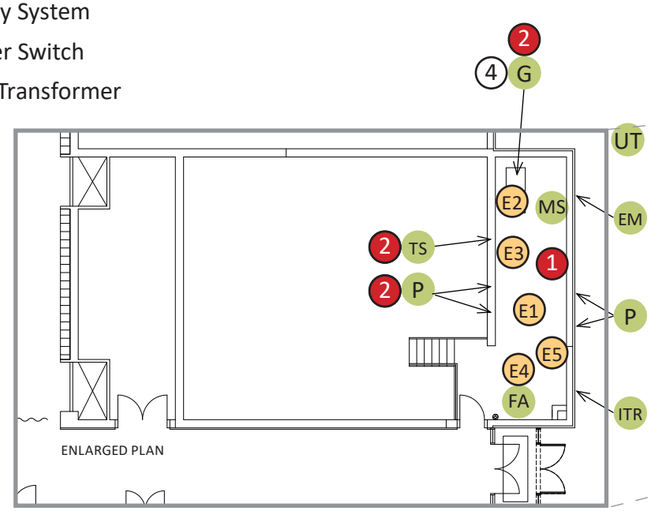
school, laundry use is minimal). Toilets contain ceiling exhaust grilles ducted to roof exhaust fans. Vestibules are typically heated by hot water cabinet unit heaters. Convectors are used for heating in some toilet rooms. Hot water unit heaters provide heat in the shop area. The shop area is currently used by the maintenance department for storage. Since the building was originally designed as a high school, there are spaces such as the art, science and shop areas that have hoods and other equipment that are no longer used by the Intermediate level students. It was noted during our visit that if there were ever a roofing project implemented, there are abandoned roof hoods that could be removed that remain from the last remodel project.

CONTROLS: The building utilizes DDC controls.

Electrical Analysis

1. Electrical service does not have required working clearances
2. Emergency equipment is not separated by 10’ from normal equipment
3. Open junction box; provide cover plate
4. Generator is nearing end of its useful life

- EM Electric Meter
- FA Fire Alarm Control Panel
- G Generator
- ITR IT Racks
- MC Master Clock
- MS Main Service
- P Panels
- SS Security System
- TS Transfer Switch
- UT Utility Transformer



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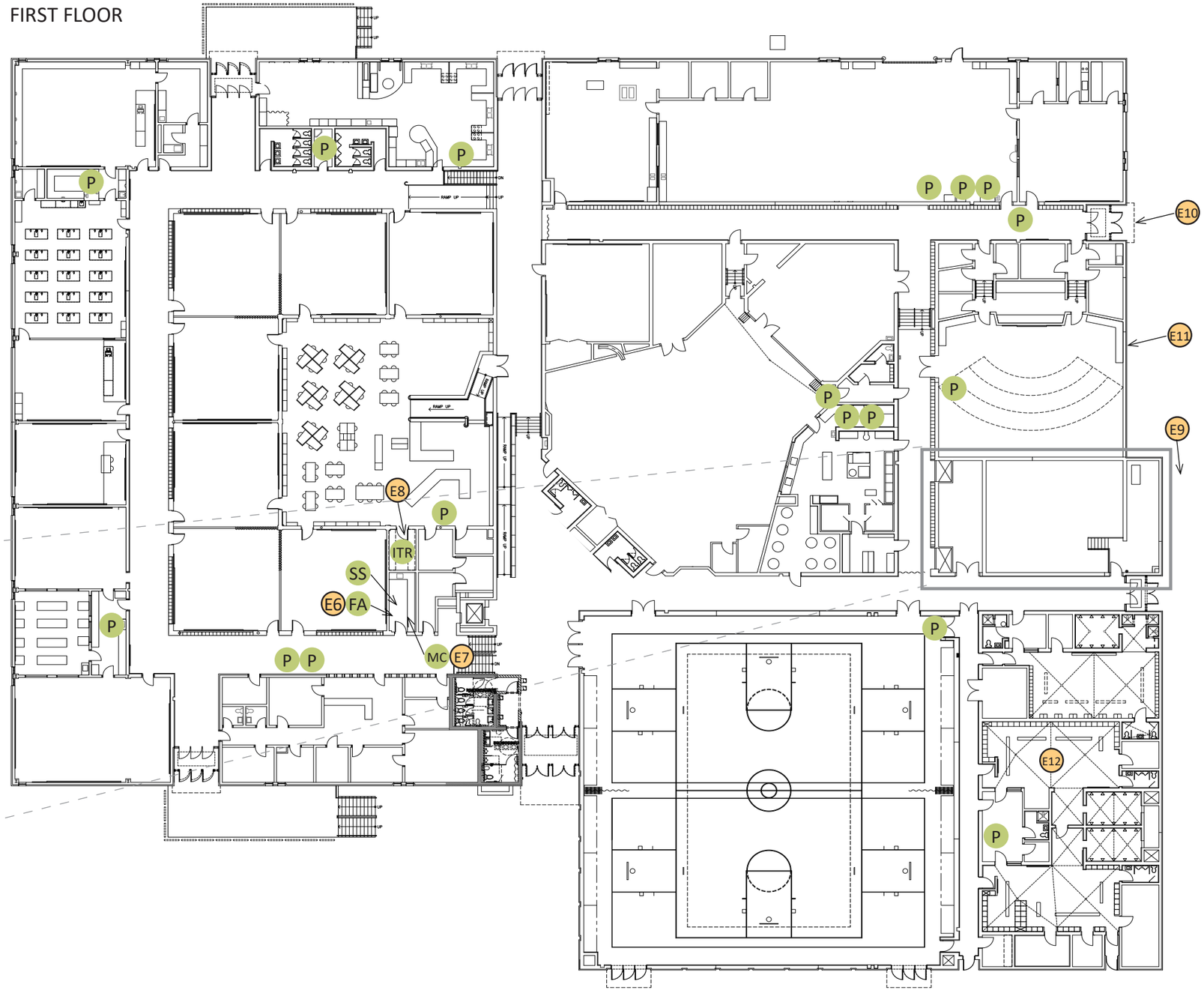


- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

ELECTRICAL NARRATIVE:

UTILITIES: The building is served by a 2500A 120/208 Volt 3-phase service. The utility company transformer is located adjacent to the boiler room at the exterior of the building. The electrical meter is integral to the service. The service is past it's life expectancy and does not have Code required front or top working clearances.

EMERGENCY SOURCE: A 12.5kW emergency generator is located in the boiler room. Emergency lighting loads are fed from an adjacent panel through one automatic transfer switch. Code required working clearances are not present. The generator is past it's life expectancy.

POWER DISTRIBUTION: Panelboards are located throughout the building and serve various loads. The majority are original to the building and are past their life expectancy. Adequate power is provided to the classrooms and supporting spaces.

LIGHTING AND LIGHTING CONTROLS: Lighting at on the main level has been recently updated with LED luminaires. Existing fluorescent lighting at the basement level has been retrofitted with new LED lamps. Exit signs are a combination of original and new LED. Exterior lighting has been updated with new LED luminaires.

Lighting control comprises of simple light switches throughout. Automatic controls are not provided in the interior of the building. Exterior lighting is controlled through a timeclock.

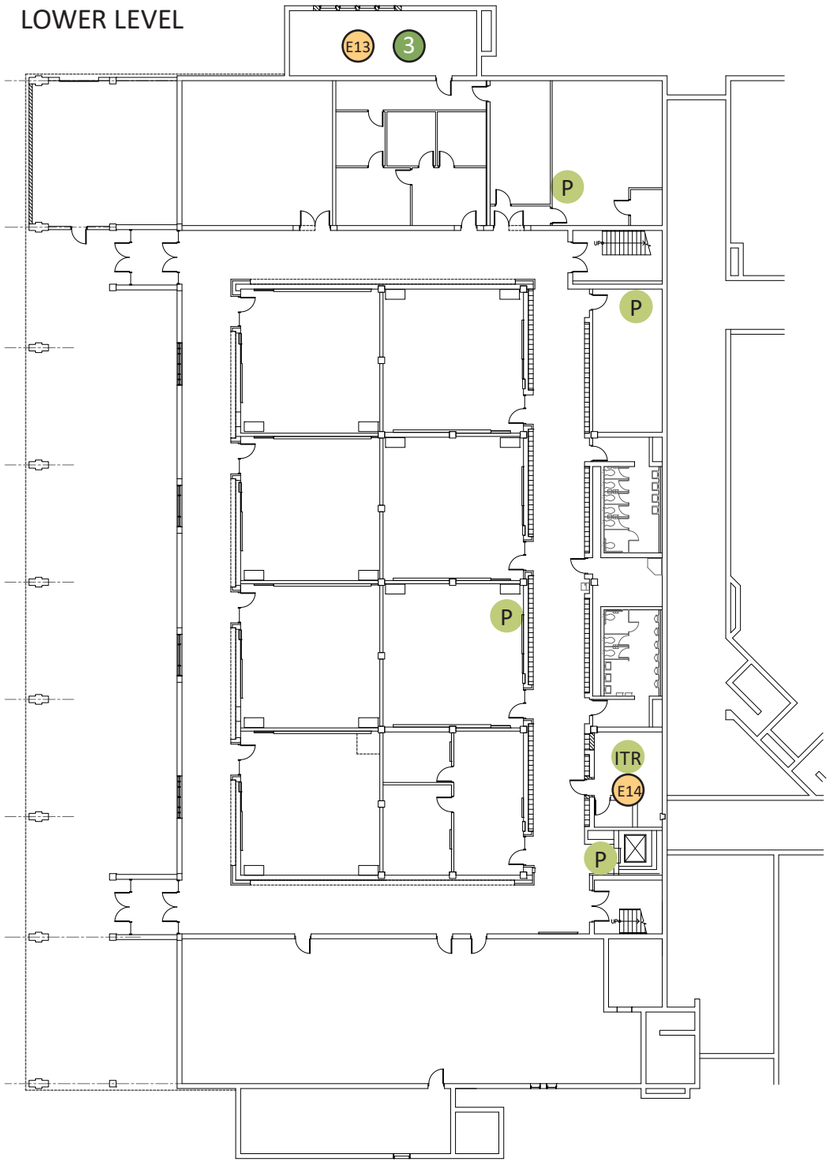
SPECIAL SYSTEMS: The fire alarm system is difficult to determine. It is a combination of new and old equipment. The type of system is obsolete and does not comply with current Code. Coverage of annunciating and initiating devices does not meet current Code.

The clock system is dated and only semi-functional. Problems with synchronization are present in the system.

The security system is relatively new and is currently serving the building adequately.

The public address system is comprised of traditional speakers and call buttons in classrooms. More user-friendly updated technology exists for public address systems.

The main IT server for the building is located in a closet in the Library/Media Center. The system is currently serving the building adequately, however further discussions with IT personnel is required to determine additional capacity if it is needed.



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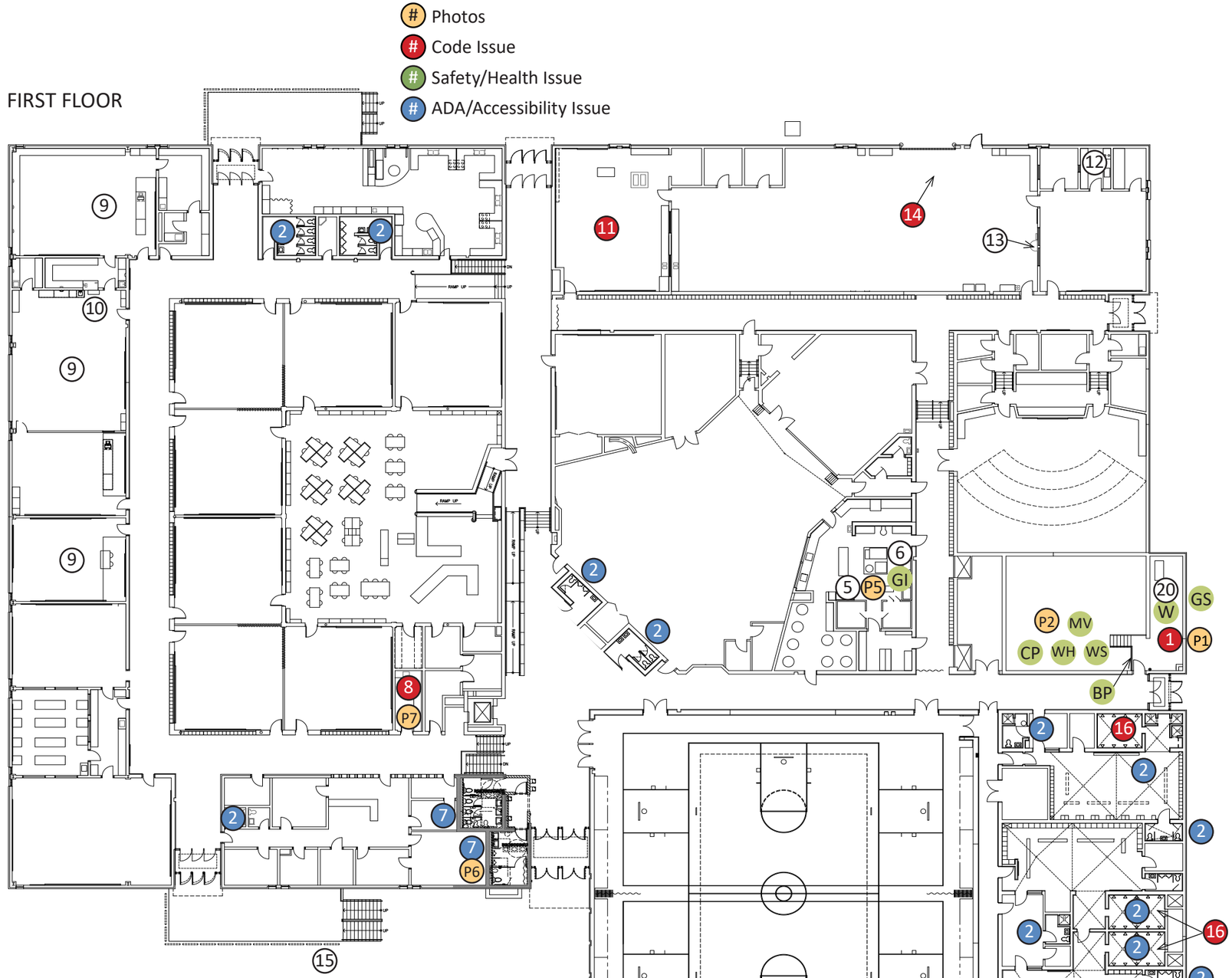
- MS Main Service
- P Panels
- SS Security System
- TS Transfer Switch
- UT Utility Transformer

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

Plumbing Analysis

1. Water meter set with no bypass for the water meter
2. Plumbing fixtures are not compliant with ADA Standards for Accessible Design
3. Sanitary hub drain is undersized for therapy tub and ice maker; provide proper air gap connection
4. No lint collection trench screen or interceptor at washing machine
5. Floor drain with condensate drain located in front of access door creating a trip hazard
6. In-floor grease interceptor - maintenance faculty mentioned that the baffles are worn
7. Urinals are both mounted at 24”; one should be mounted at 17” high for ADA compliancy; sinks do not have waste, trap, or supplies insulated per ADA standards
8. Condensate drain line is discharging into counter sink, which is not an approved receptor
9. Sink faucets have been disconnected or removed from lab sinks where no longer used. Backflow prevention would need to be corrected if sinks are to be used. Teacher stations are compliant; gas piping has been disconnected.
10. Fume hood has been disconnected from gas and water supply lines
11. Art room sink does not have solids/clay interceptor
12. Former shop sink has no solids interceptor, sink and faucet are in poor condition
13. Wash-fountain sink with eyewash and drink bubbler are damaged/worn
14. No garage catch basin at trench drain
15. Several exterior hose bibs are no longer functioning, unable to obtain parts for repair
16. Because the shower drains are centrally located, users have to pass through other user’s water drainage path

FIRST FLOOR



PLUMBING NARRATIVE:

UTILITIES: The facility is served by city supplied 4" potable water service with water pressure of 75 Psig static, 1,250 gallons per minute flow at 70 psig residual pressure. The water meter is 4" in size with no bypass piping. The water service enters the building on the East side in the Boiler room. The building is served by 8" main sanitary services.
Per discussion with maintenance staff, this facility has issues with debris in school water lines after city preforms water main flushing in the area of the school. This causes aerators and flush valves to clog and they need to go thru all the fixtures to clean the aerators and flush valve diaphragms.

GAS SYSTEM: The building is served with one natural gas utility service provided by St.Croix Gas. The service is located on the East side of the facility just outside of the Boiler Room. The gas utility is provided high pressure firm gas and interruptible gas. The interruptible gas serves the boilers system with propane gas as backup. The propane tanks and vaporizer are located on the East side of the building across the parking area, in a fence in area. The gas distribution in the building is black iron piping.

STORM SEWER: The majority of all roof water is collected via roof drains and connected via underground storm piping running below the school. The storm water then exits the facility to the south and is piped to the municipal storm water system. Elevator sump pump discharges to the storm system.

SANITARY: All building sanitary is gravity drained with no lift stations or grinder pumps. Piping consist of Cast Iron and galvanized materials with PVC for areas that have been remodel or repaired. The Cast Iron and galvanized piping that is visible appears to be in fair condition. The science rooms piping is majority glass pipe with polypropylene chem pipe.

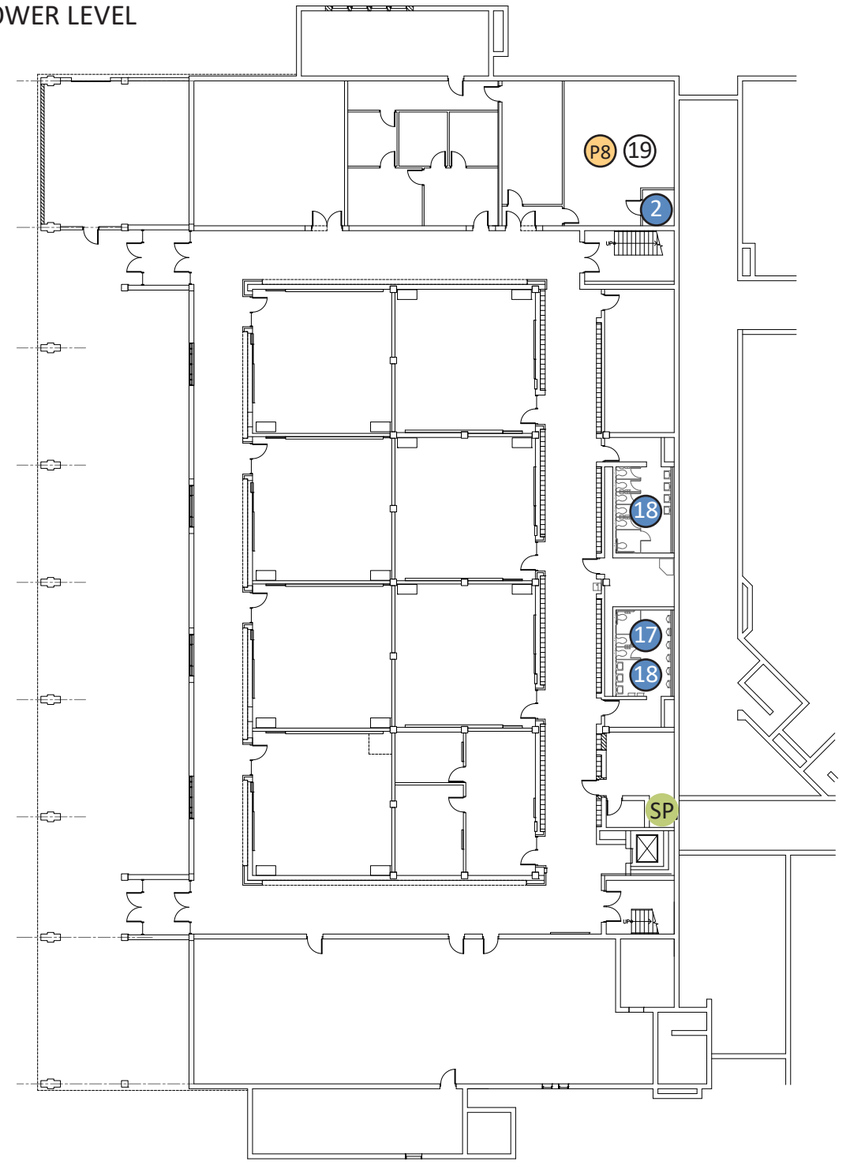
POTABLE WATER DISTRIBUTION: Potable water is distributed throughout the building via a copper and galvanized distribution on piping located above grade. Piping condition on appears to be in fair condition. Asbestos insulation is likely in the older section of the building and in concealed locations that were not accessed during any remodel or repaired areas.

POTABLE WATER HEATING: The building is served by two high efficiency natural gas fired tank type water heaters, producing 140-degree hot water with a master mixing valve for 120-degree hot water throughout the building. A hot water recirculation line/pump is present and operating, which were newly installed with the water heater upgrades in 2018. The water heaters were installed in 2018 in good condition. A third high efficiency natural gas fire tank type water heater is used as a booster heater to serve 180-degree hot water for the kitchen dishwasher. This water heater was also installed in 2018. Water softener unit conditions the hard water for the hot water system.

FIRE PROTECTION SYSTEM: This building does not have any fire protection in the building.

PLUMBING FIXTURES: Plumbing fixtures located in the facility are original to the building and its addition, or the time of the areas were last remodeled. Majority of the fixtures are in good condition with some rated as fair to poor. The toilet facilities consist of floor mounted tank type or pressure assisted water closets with 3 gallon per flush older models and 1.6 gallons per flush for the newer models. Floor or wall mounted urinals with sensor or handle flush valves. Lavatory sinks are wall mounted with handle faucets. Locker Room showers, hot and cold shower valves with fixed shower heads. Water coolers are wall hung units; newer models have water bottle fillers some of the older models do not meet ADA requirements. Sinks located in classrooms are based on the classroom needs.

LOWER LEVEL



Plumbing Analysis

17 Reach distance at urinals for handle operation are not ADA compliant
18 Sinks do not have waste, trap, or supplies insulated per ADA standards
19 Double bowl sink is not ADA compliant for knee clearance; waste, trap and supplies are not insulated per ADA standards
20 No water filter at water service, maintenance issue

BP Backflow Preventer, Boiler Makeup
CP Domestic Water Circulation Pump
GI Grease Interceptor
GS Gas Service
MV Master Mixing Valve
SP Sump Pump
WH Water Heater
W Water Service
WS Water Softener

Photos
Code Issue
Safety/Health Issue
ADA/Accessibility Issue

Photographs

Unless noted otherwise, all photos were taken on May 21, 2019

A1

A2

A3

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A5

A6

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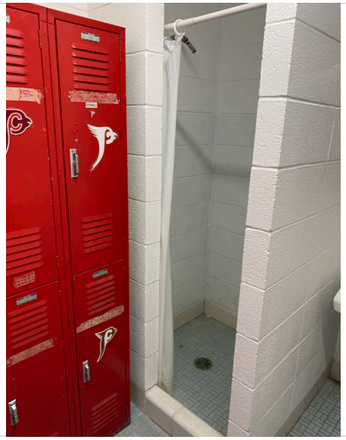
A12

A13



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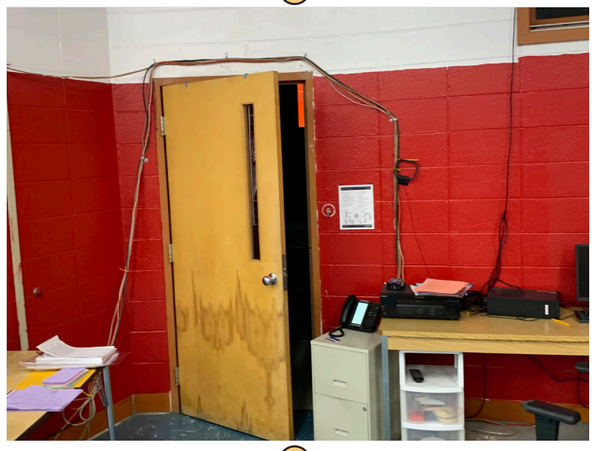
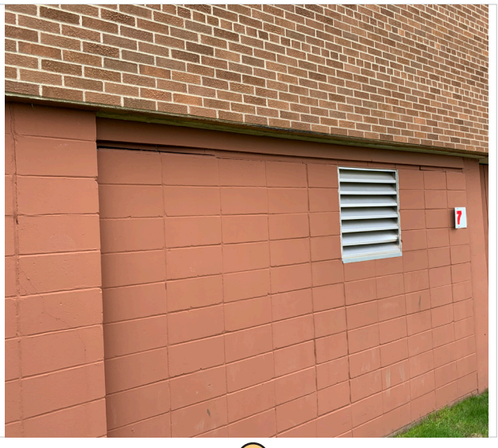


A15

A16

A17

A18



A19

H1

H2

H3

H4

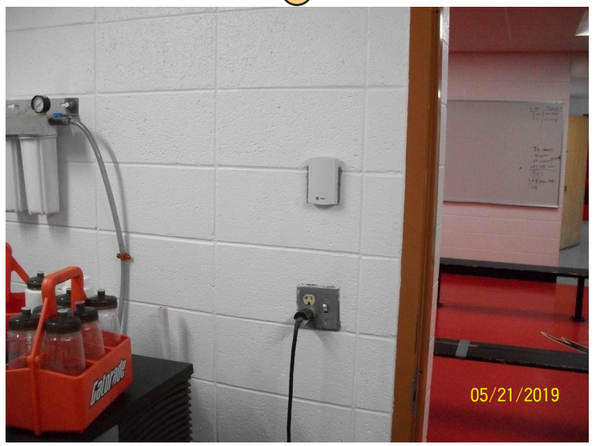
Photographs

H5

H6

H7

H8



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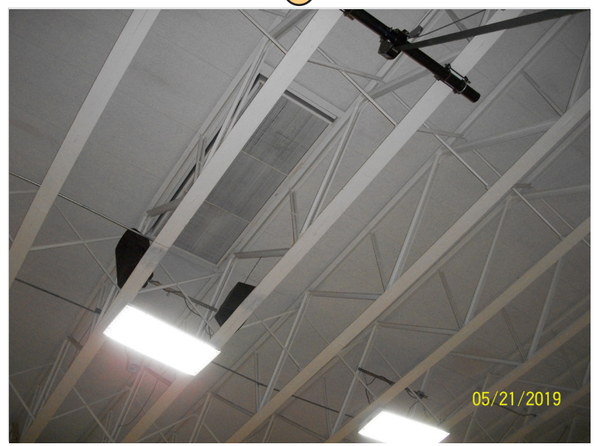
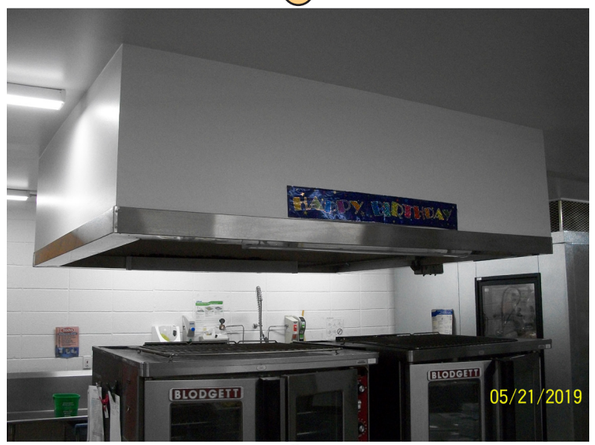


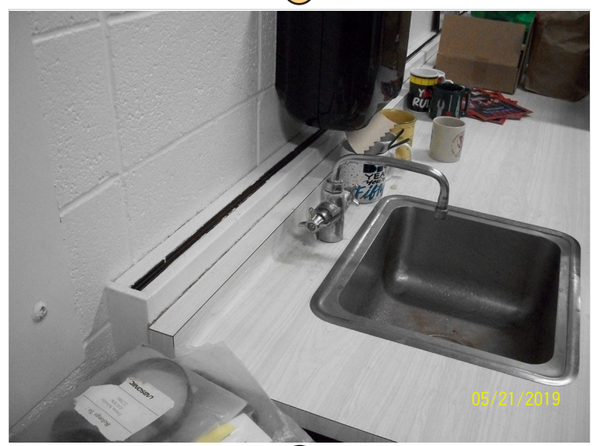
H10



H11

H12

H13



H14

H15

H16

H17

H18

H19

H20

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H26

Photographs

H27

H28

E1

E2

E3

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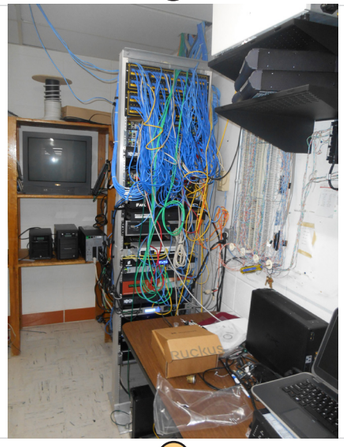
E7



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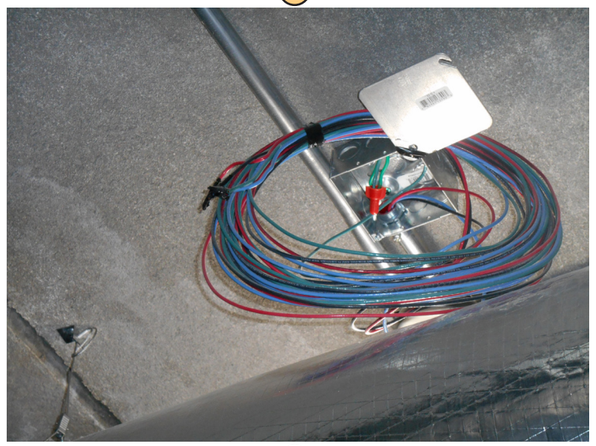

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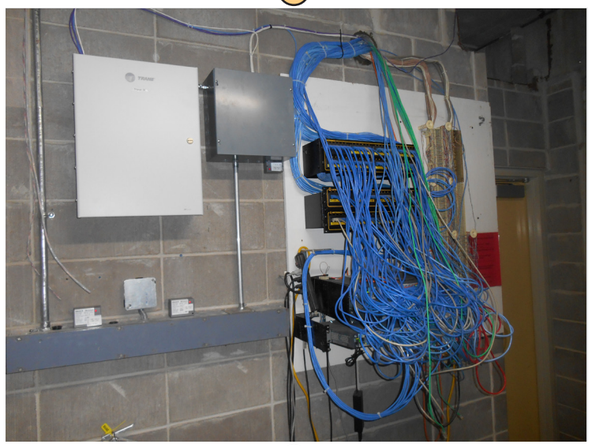


E14

P1

P2

P3

P4

P5

P6

Photographs

P7

P8

CHAPTER 4

PRESCOTT MIDDLE SCHOOL

THE SCHOOL DISTRICT OF PRESCOTT
Prescott, Wisconsin

Prescott Middle School

125 North Elm Street
Prescott, WI 54021

SDS ARCHITECTS
7 South Dewey Street
Eau Claire, Wisconsin 54701
715.832.1605 | sdsarch.com

4 CHAPTER
PRESCOTT MIDDLE SCHOOL

General Overview

Principal:	Kyle Igou

2018-2019 Enrollment	**Students**
6th Grade:	117
7th Grade:	111
8th Grade:	103
Total:	**331**

Approx. Building Area	
Lower Level:	22,450 GSF
First Floor:	33,790 GSF
Second Floor:	10,970 GSF
Total:	**67,210 GSF***

GSF/Student:	203

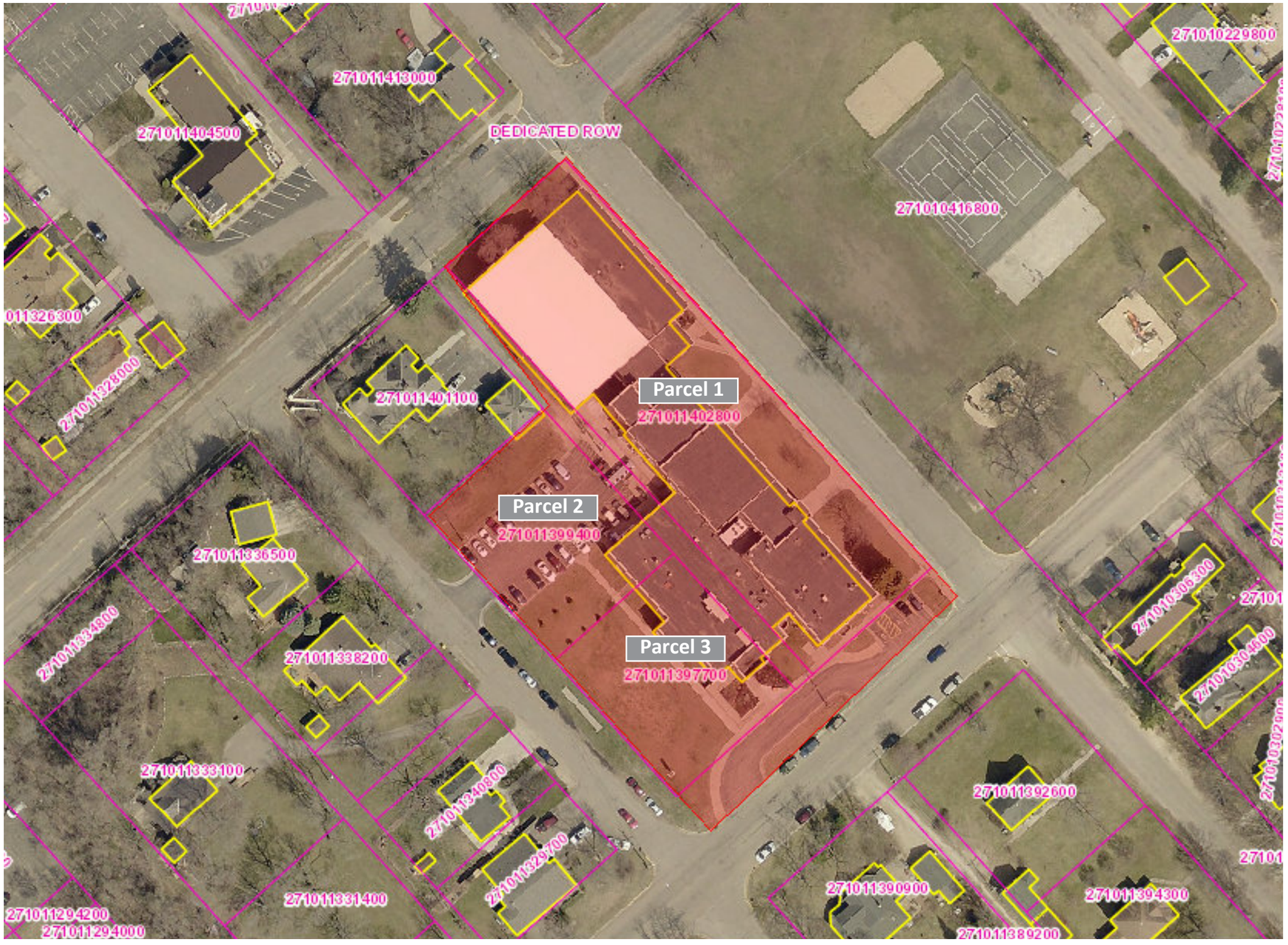
Assignable square footage:	34,930 ASF**
Efficiency (ASF/GSF):	52%

Parking Stalls	
P1:	4
P2:	24
Total:	**28**

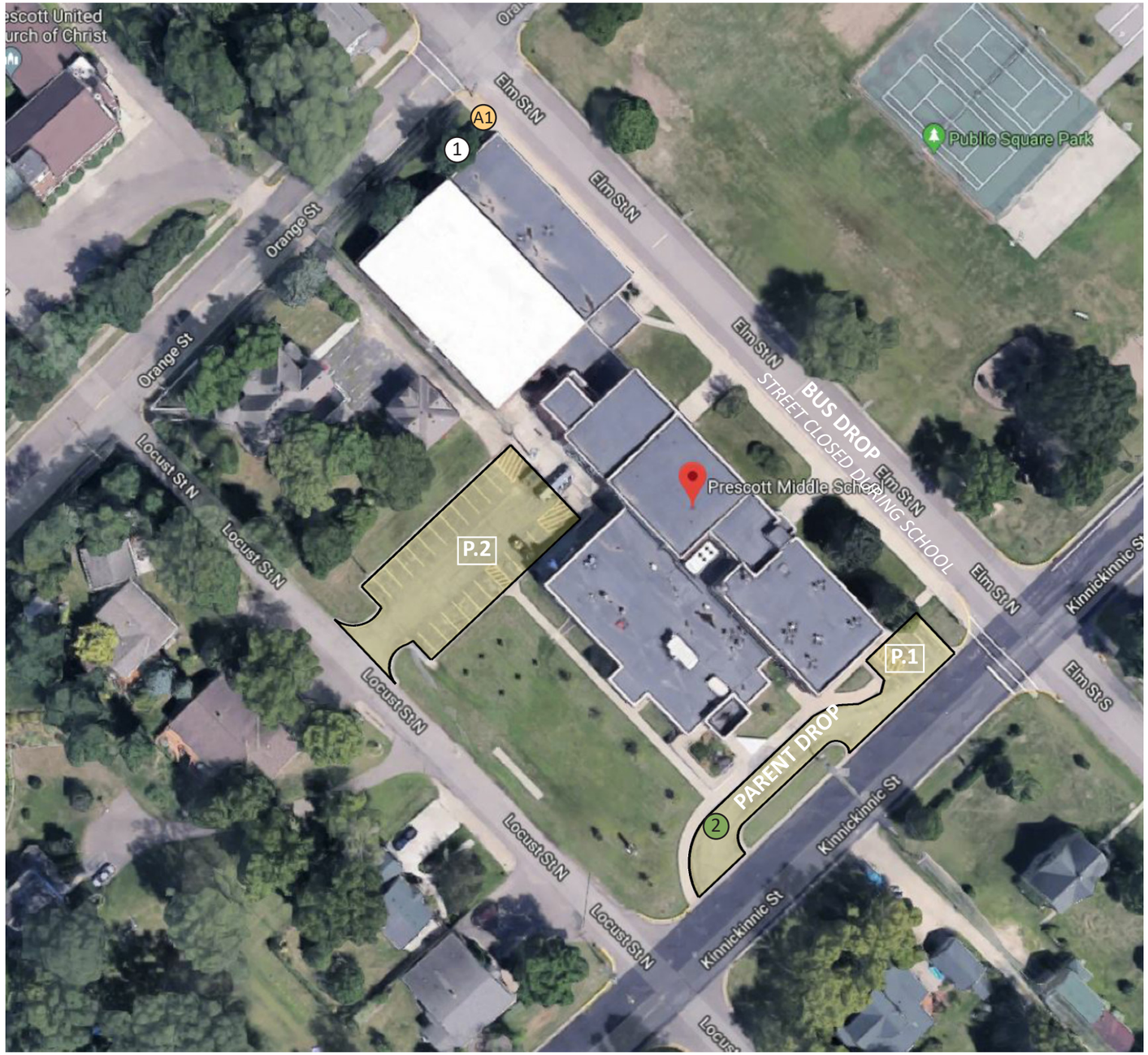
Property Area	**Acres**
Parcel 1:	1.14
Parcel 2:	0.82
Parcel 3:	0.50
Total:	**2.46**

*Gross square footage (GSF) = the sum of all areas on all floors of a building included within the outside faces of the exterior walls

**Assignable square footage (ASF) = The sum of all areas on all floors of a building which are occupied or used to accomplish the institution's mission (classrooms, offices, gym, library, computer labs, etc.); does not include circulation, toilet rooms, mechanical/ support areas, wall/structure space, etc.



Property information from Pierce County, Wisconsin Land Records Web Portal.



Site Analysis

1. Damaged sidewalk; needs handrail; drainage issue caused by sidewalk sloping towards building
2. Parent drop becomes very congested during drop-off and pick-up

Paved Area P.1
Description: Visitor Parking
Type: Asphalt
Area: Approx. 4,310 SF
Rating: 6

Paved Area P.2
Description: Faculty Parking
Type: Asphalt
Area: Approx. 7,370 SF
Rating: 6-7

See the final page of Chapter 1 for rating system of paved surfaces.

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

Roof Analysis

Roof Types

ASPM (Adhered Single Ply EPDM)

TPO (Thermoplastic Polyolefin Single Ply Roof System)

Roof Areas

Roof Area R.1
Roof Type: TPO
Area: 7,835 SF
Year Installed: 2006
Condition: Fair
Current Age: 13 years

Roof Area R.2
Roof Type: ASPM
Area: 4,400 SF
Year Installed: 2006
Condition: Fair
Current Age: 13 years

Roof Area R.3
Roof Type: ASPM
Area: 1,600 SF
Year Installed: 2006
Condition: Fair
Current Age: 13 years

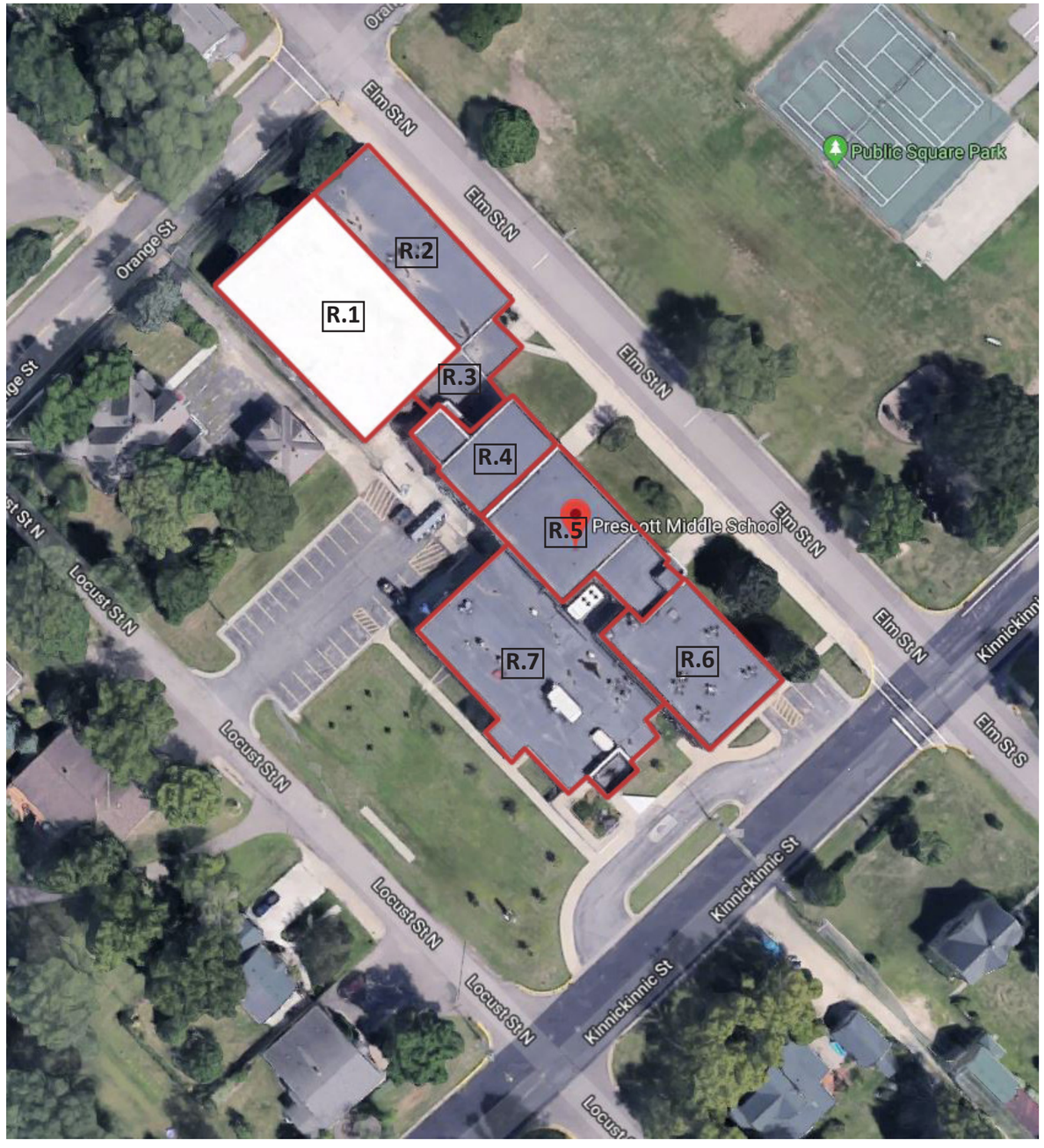
Roof Area R.4
Roof Type: ASPM
Area: 2,560 SF
Year Installed: 2006
Condition: Fair
Current Age: 13 years

Roof Area R.5
Roof Type: ASPM
Area: 4,540 SF
Year Installed: 2006
Condition: Fair
Current Age: 13 years

Roof Area R.6
Roof Type: ASPM
Area: 3,940 SF
Year Installed: 2006
Condition: Fair
Current Age: 13 years

Roof Area R.7
Roof Type: ASPM
Area: 8,940 SF
Year Installed: 2006
Condition: Fair
Current Age: 13 years

(#) Photos
(#) Code Issue
(#) Safety/Health Issue



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4 CHAPTER
PRESCOTT MIDDLE SCHOOL

Building Construction Ages

	Year	Project Scope	Area
	19??	Original Construction	000 SF
	19??	Addition	000 SF
	19??	Addition	000 SF
	2004	Addition	17,785 SF

Legend

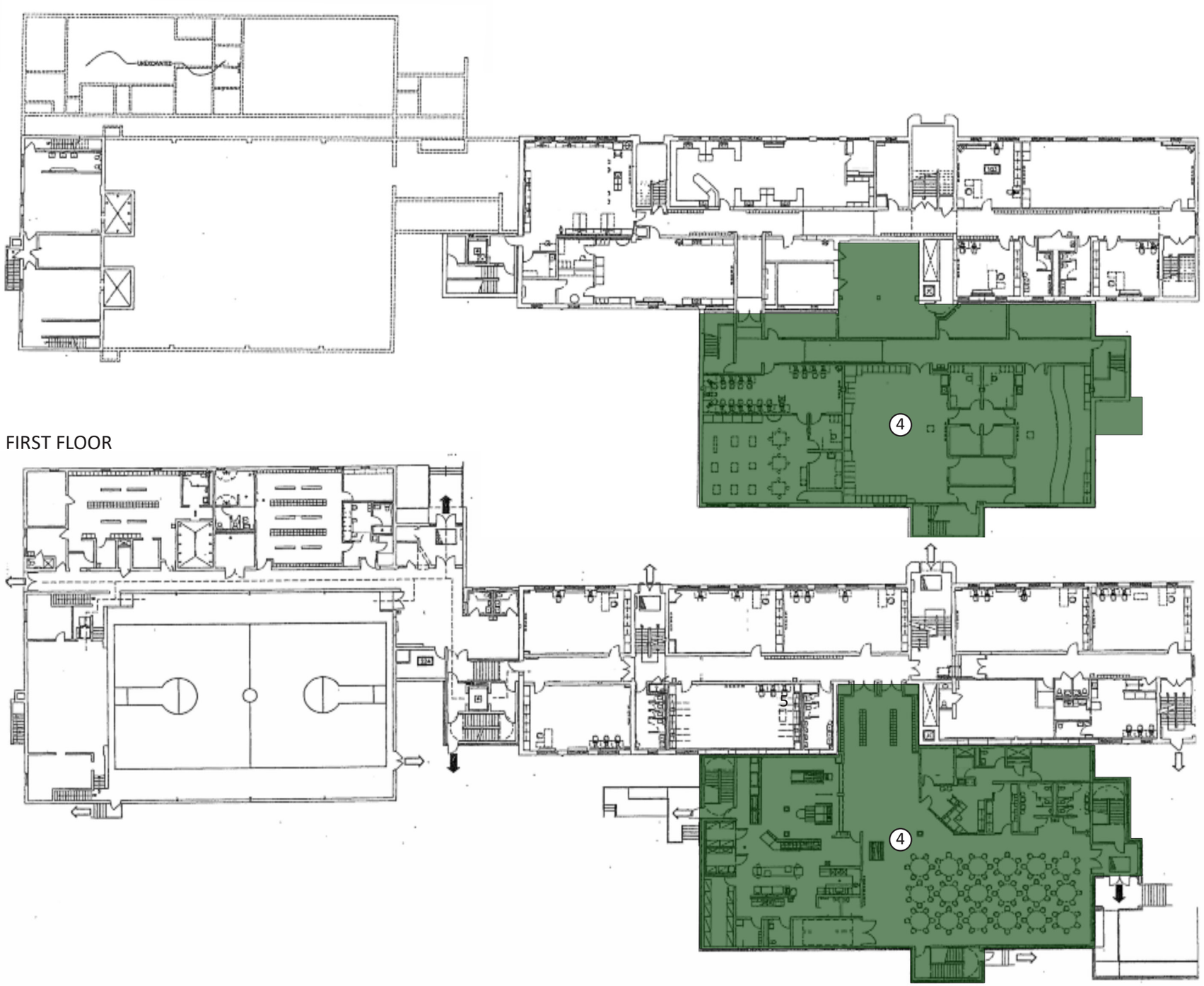
(1) Foundation: Concrete slab-on-grade; ? foundation walls; cast-in-place footings
Exterior Shell: ?
Interior: CMU

(2) Foundation: Concrete slab-on-grade; ? foundation walls; cast-in-place footings
Exterior Shell: ?
Interior: CMU

(3) Foundation: Concrete slab-on-grade; ? foundation walls; cast-in-place footings
Exterior Shell: ?
Interior: CMU

(4) Foundation: Concrete slab-on-grade; CMU foundation walls (with perimeter insulation); cast-in-place footings
Exterior Shell: Brick cavity wall; CMU backup
Interior: CMU walls

LOWER LEVEL

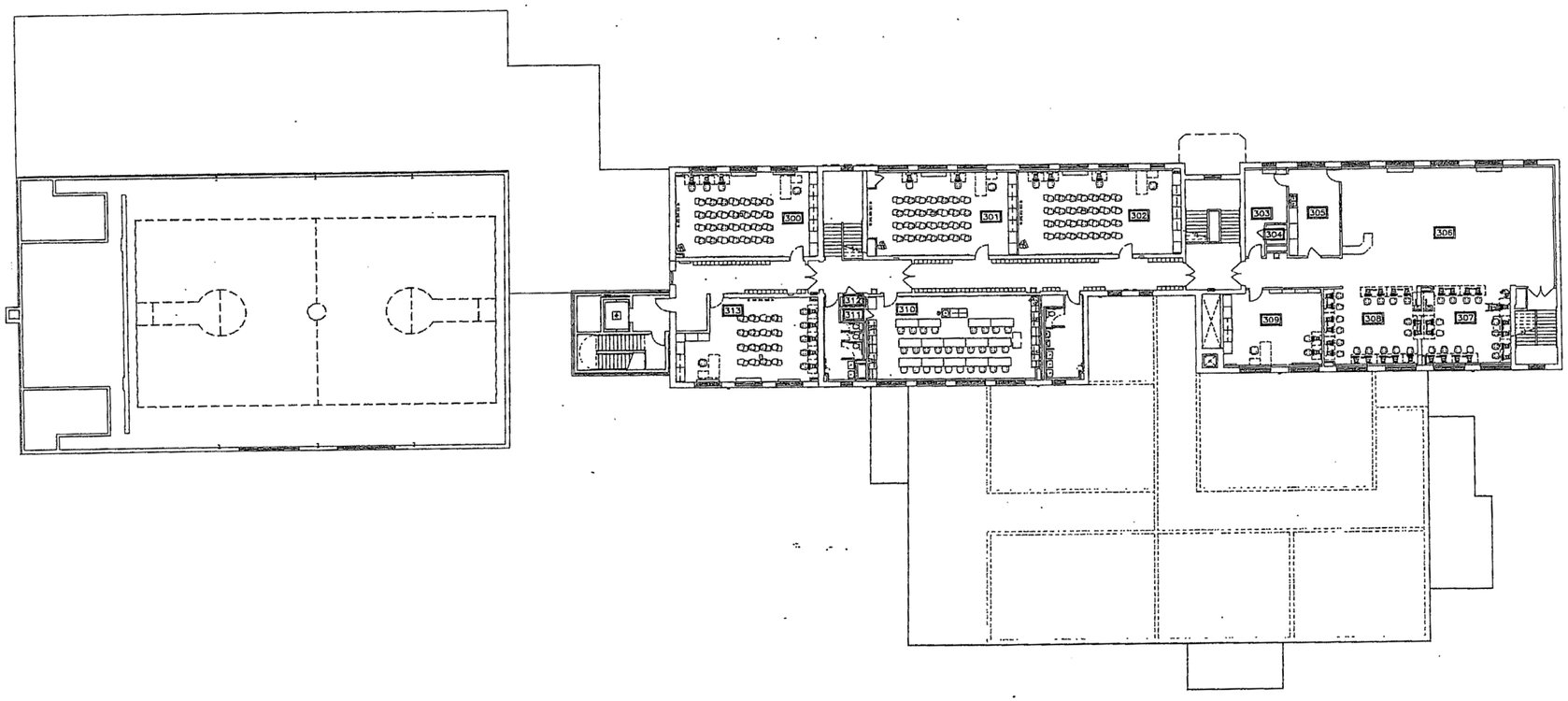


Building Construction Ages

	Year	Project Scope	Area
	19??	Original Construction	000 SF
	19??	Addition	000 SF
	19??	Addition	000 SF
	2004	Addition	000 SF

Legend

SECOND FLOOR



Room Assignments and Building Use

Legend

- Classroom/Instruction
- Administration/Conference
- Elective/Fine Arts
- General/Support
- Food Service
- Athletics
- Circulation
- Core

100	Classroom	200	Classroom
101	Storage	201	Classroom
102	Storage	202	Classroom
103	Classroom	203	Classroom
104	Classroom	204	Classroom
105	Classroom	205	Classroom
106	Classroom	206	Staff
107	Fire Alarm	207	Reception
108	Boiler Room	208	Office
109	Janitor	209	Storage
110	Storage	210	Conference
111	Data	211	Mail
112	Storage	212	Cafeteria / Commons
113	Choir	213	Storage
114	Storage	214	Janitor
115	Practice Room	215	Servery
116	Practice Room	216	Kitchen
117	Office	217	Janitor
118	Office	218	Staff
119	Band	219	Storage
120	Computer Lab	220	Freezer
121	Office	221	Cooler
122	Shop	222	Classroom
123	Storage	223	Classroom
124	Storage	224	Elevator Equip.
125	Art	225	Gym
126	Kiln	226	Storage
127	Storage	227	Stage
128	Office	228	Storage
129	Classroom	229	Office
130	Storage	230	Locker Room
131	Locker Room	231	Storage
132	Mechanical Room	232	Storage
133	Storage	233	Storage
		234	Laundry
		235	Locker Room
		236	Storage
		237	Office
		238	Storage
		239	Storage
		240	Storage

LOWER LEVEL

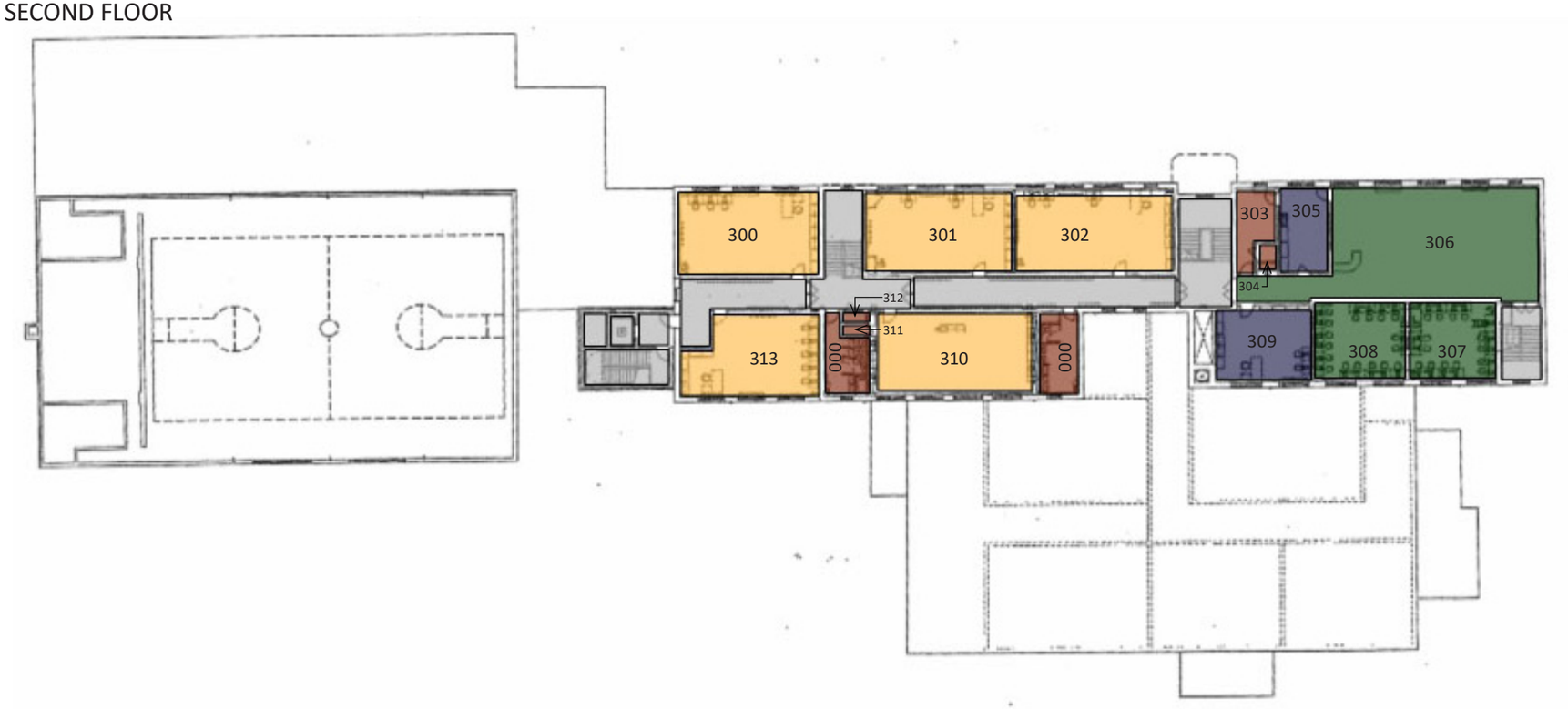
FIRST FLOOR

Average Classroom Size
Classroom size varies from 600-1000 SF

(Recommended Classroom Size: 900 SF)

Room Assignments and Building Use

SECOND FLOOR



Legend

Classroom/Instruction	Food Service
Administration/Conference	Athletics
Elective/Fine Arts	Circulation
General/Support	Core

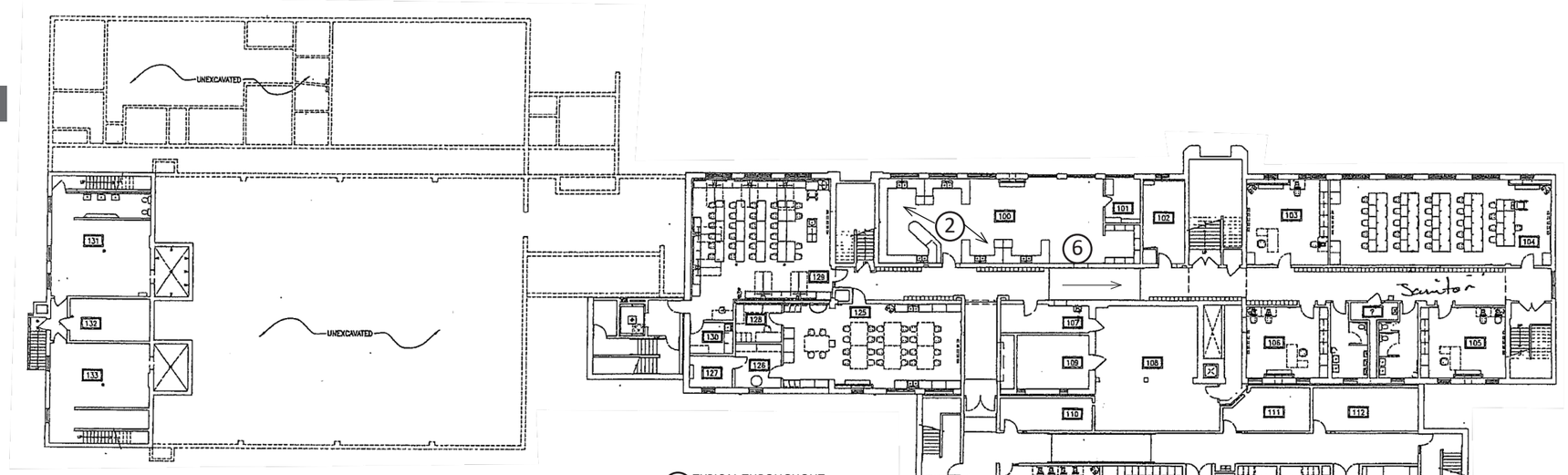
300	Classroom
301	Classroom
302	Classroom
303	Storage
304	Storage
305	Office
306	Media Library
307	Computer Lab
308	Computer Lab
309	Office
310	Classroom
311	Storage
312	Janitor
313	Classroom

4 CHAPTER
PRESCOTT MIDDLE SCHOOL

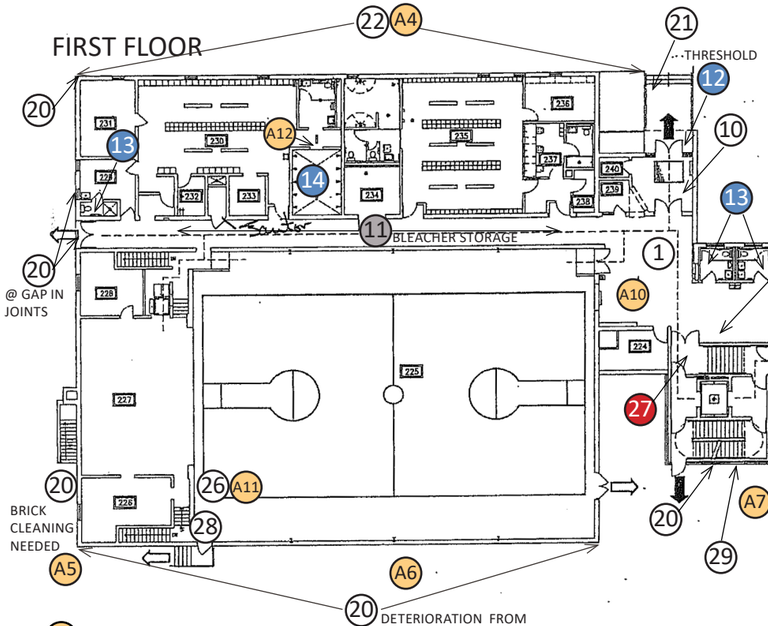
Floor Plan Analysis *(not all notes will be used)*

1. Damaged/worn flooring
2. Damaged/worn casework
3. Damaged/worn ceiling
4. Damaged/worn door and/or door hardware
5. Damaged/worn window
6. Damaged/worn wall
7. Damaged/worn plumbing fixtures
8. Cracks along foundation wall
9. Water related wall damage
10. Water related ceiling damage
11. Inefficient or improper use of space
12. ADA non-compliant accessible route/entry/reach
13. ADA non-compliant toilet room/drinking fountain
14. ADA non-compliant locker room/shower
15. Code - Construction
16. Code - Exiting/Travel Distance
17. Code - Stair/Ramp
18. Possible asbestos tile flooring
19. Stoop has shifted creating too high of a threshold
20. Damaged/worn brick and/or masonry
21. Damaged/worn stoop, exterior stair, & railings
22. Damaged/worn sealant at expansion joints
23. Damaged/worn window sealant (typical throughout)
24. Exposed insulation/membrane at area well
25. Exterior railing is not code compliant (safety issue also)
26. Structural issue evident at this location
27. Door hold open is not code compliant
28. Door opening not sealed, causing frost issues
29. Standing water from gutter due to sidewalk not sloping/ draining properly
30. No visual connection from office to main entrance
31. Rusted/detached lintel

LOWER LEVEL

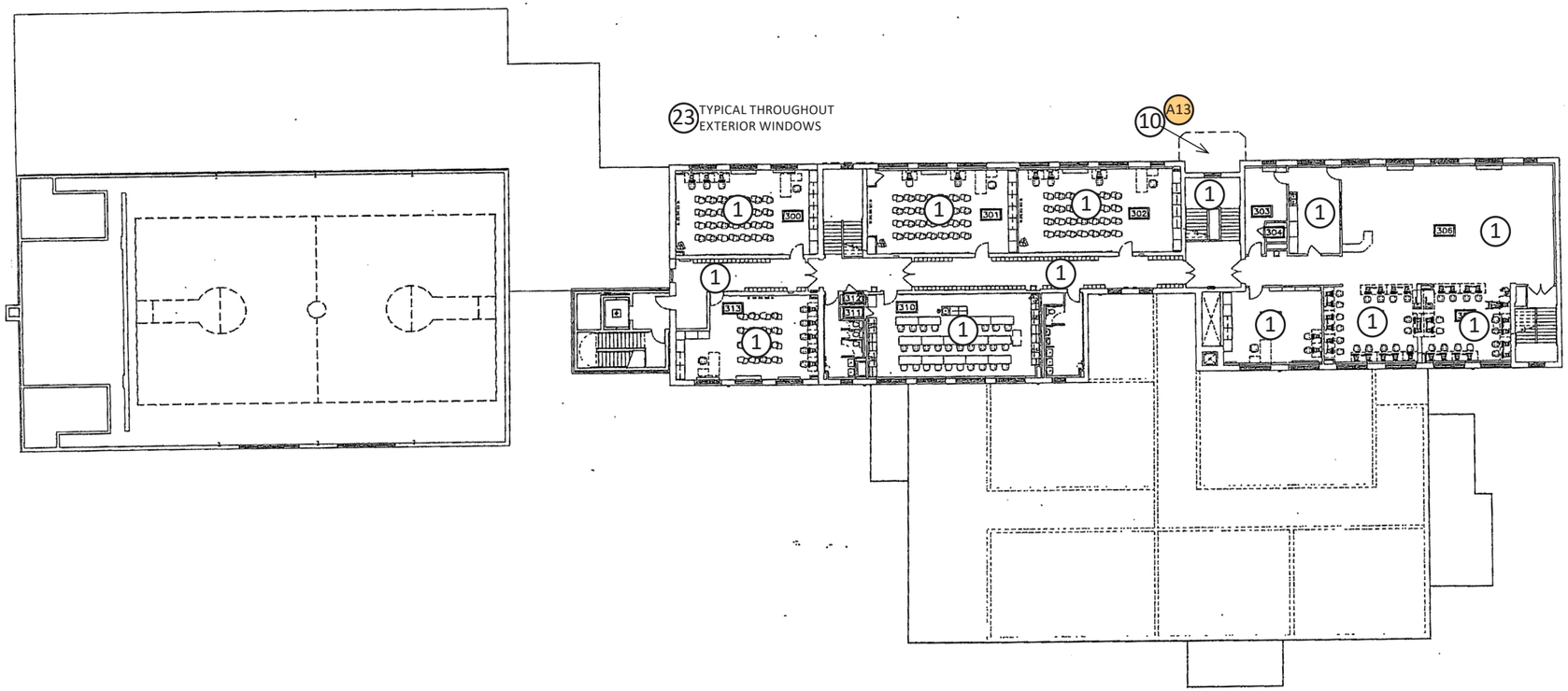


FIRST FLOOR



- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

SECOND FLOOR



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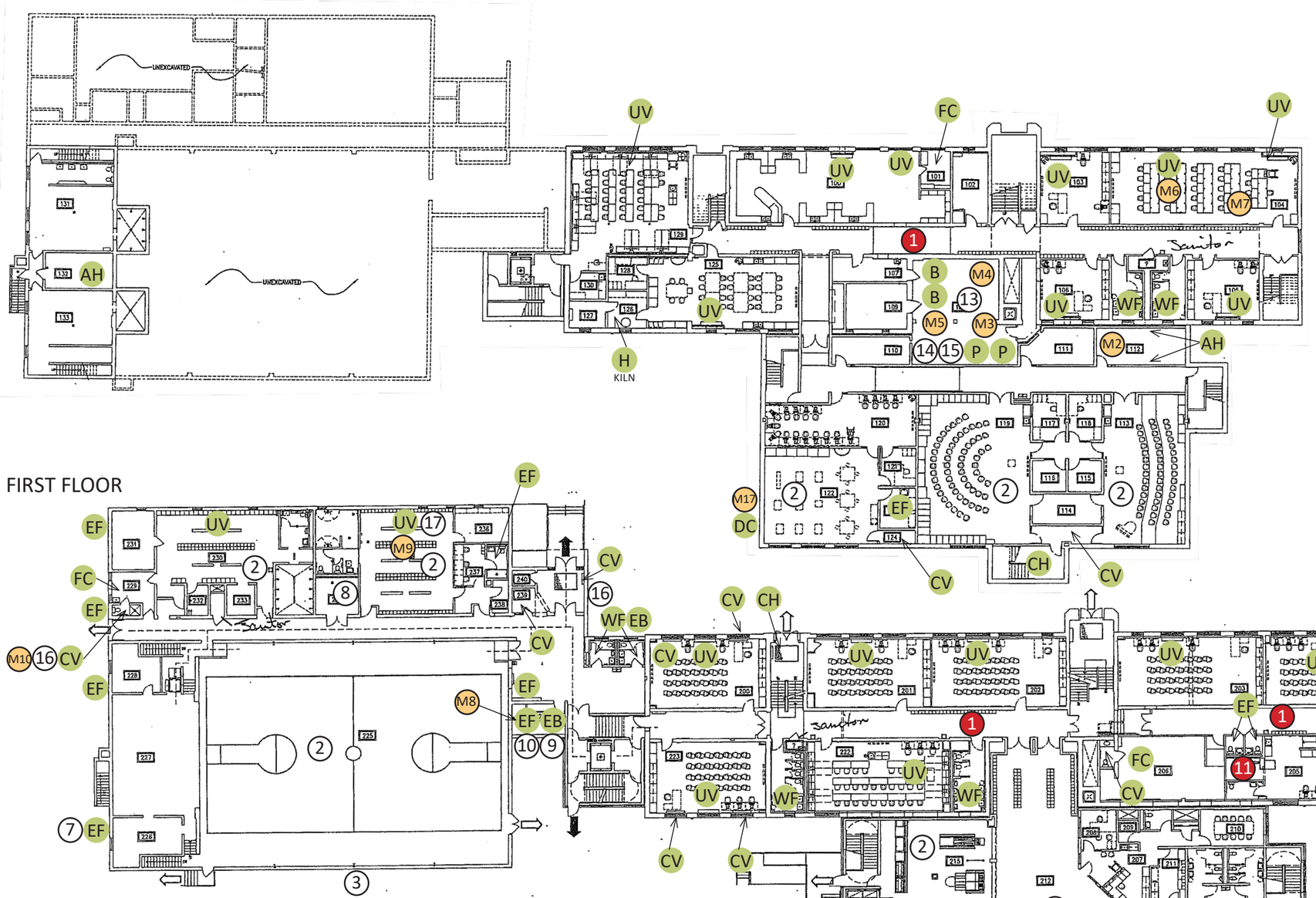
Mechanical Analysis

1. Corridor is being used as a relief air plenum with air transferring from rooms. Code compliant at time of work, not code compliant under current code.
2. No air conditioning
3. Abandoned relief air
4. Aging pipe insulation
5. Units approaching end of useful life
6. Condensing unit with R-22 refrigerant
7. Abandoned exhaust fan
8. Not Used
9. Residential electric heat
10. Failed damper
11. No exhaust for stove
12. Control issue - overheating
13. Not used
14. Pump seal needs replacement
15. Not used
16. Missing pipe insulation
17. Damaged pipe insulation

- AH Air Handling Unit
- B Boiler
- CH Cabinet Unit Heater
- CU Condensing Unit
- CV Convector
- DC Dust Collector
- EB Electric Base Board Heater
- EF Exhaust Fan
- FC Fan Coil
- H Hood
- HC Hot Water Coil
- KH Kitchen Hood
- P Pump
- RH Roof Hood
- RT Roof Top Air Handling Unit
- UH Unit Heater
- UV Unit Ventilator
- VV VAV Unit
- WF Wall Fin

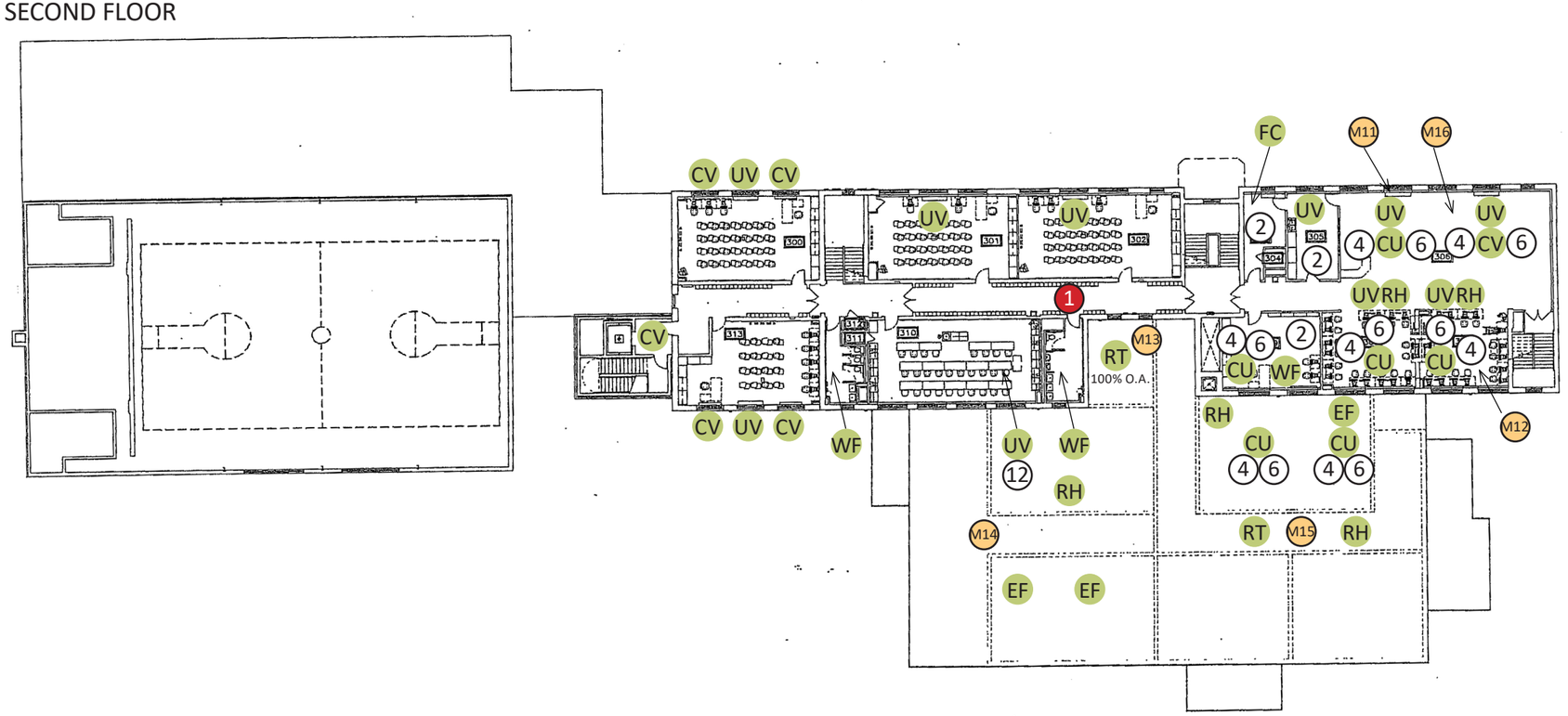
LOWER LEVEL



FIRST FLOOR

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

SECOND FLOOR



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- UV Unit Ventilator
- VV VAV Unit
- WF Wall Fin

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

Mechanical Analysis - HVAC Zones

MECHANICAL NARRATIVE:

BOILER SYSTEM: The facility is served by two gas-fired boilers. The oldest boiler (1999) is a Burnham Model V9 cast iron type standard efficiency boiler (B-1). The boiler and burner have been upgraded in the last 10 years. It appears to be in good working order. The second boiler (B-2) was installed in 2006 and is a DeDietrich cast iron high-efficiency boiler that appears to be in good working order. Combustion air is ducted into the room from the roof, terminating with an open-ended duct near the floor. The boilers are vented together to a masonry chimney. Two Taco base mounted pumps, with variable frequency drives (VFD), are located in this room which distribute heating water throughout the building. One circulating pump currently requires a new seal. The boilers each contain an inline circulating pump that provides the minimum gpm required for the boiler. The pump for B-1 has recently been replaced.

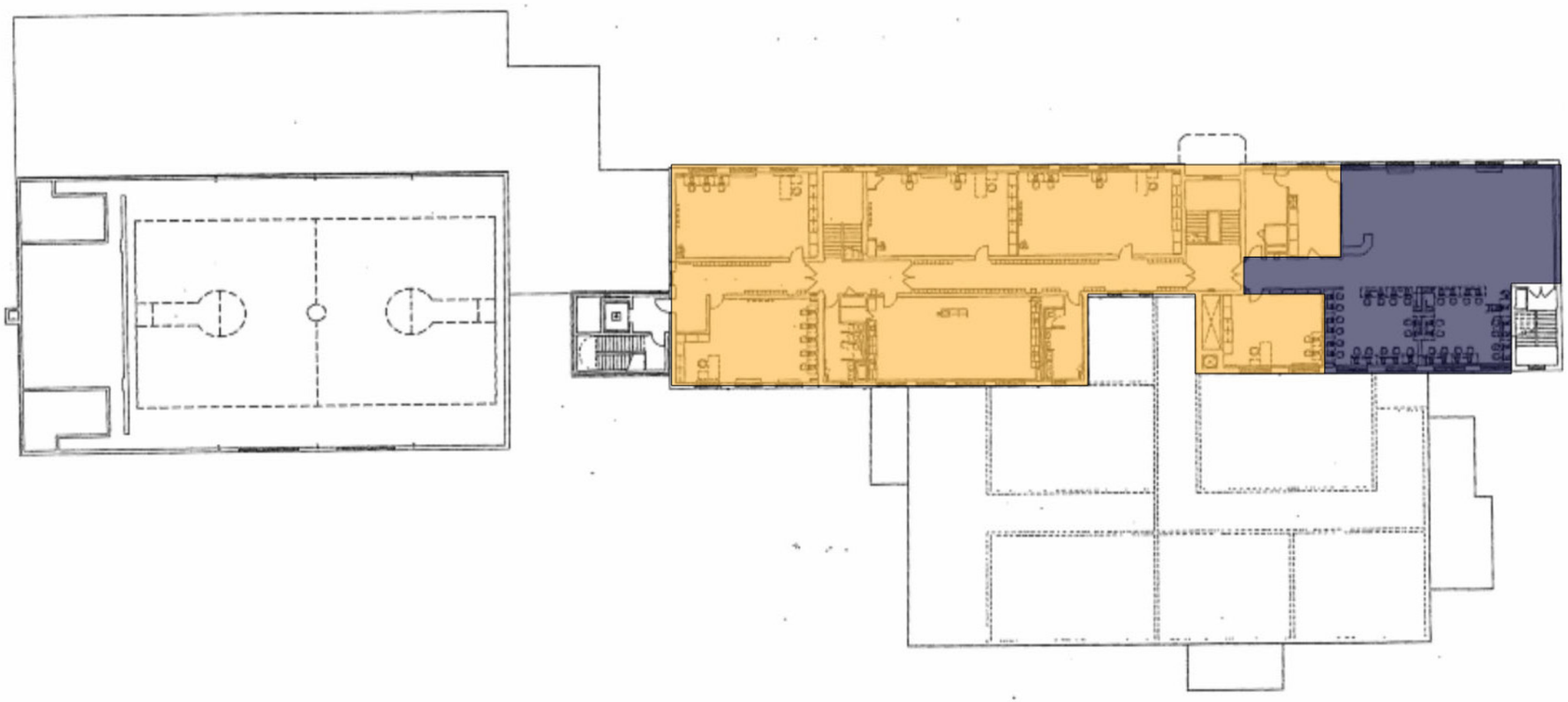
HVAC SYSTEM: The building is conditioned by various HVAC systems/ equipment ranging from central air handling units, rooftop air handling units, variable air volume boxes (VAV) with reheat coils, unit ventilators, fan coil units, cabinet unit heaters, wall fin, and convectors. One rooftop air handling unit serves a majority of the 2005 addition (commons, kitchen, music). Supply air distribution for this area of the building is ducted through the ceiling space to ceiling diffusers. Air is relieved from this portion of the building to ceiling grilles ducted to a roof hood. This unit does not have cooling. The other rooftop air handling unit is a 100% outside air unit that provides tempered (heated and cooled) outside air to the 3-story portion of the building. The outside air is ducted to each room and discharged through a ceiling diffuser. Two air handling units are located in the lower level with one serving the tech. ed. classroom and the data room, and one serving the 1st floor office area. Each of these units contains a hot water heating coil and a DX cooling coil (condensing units located on the roof). Supply air distribution for each unit is ducted through the ceiling space to ceiling diffusers. The gym is served by an air handling unit located below the stage area. This unit has a hot water coil for heating, and no air conditioning. Supply and return air are located on the stage end of the gym. Gym relief is through a sidewall louver and damper. This is currently disconnected. The main office area is served by an air handling unit that contains a hot water heating coil and a DX cooling coil (condensing unit located on the roof). Supply air distribution is through ceiling diffusers. Individual space conditioning is provided by VAV/reheats. Rooms 205 and 206 are served by a fan coil unit with a DX cooling coil (condensing unit located on the roof). Supply air distribution is through ceiling diffusers. The remainder of the classrooms and locker rooms are served by unit ventilators with hot water heating coils. A majority of the unit ventilators are vertical type located on the exterior wall. There are some horizontal unit ventilators located at the ceiling that are ducted to ceiling diffusers. DX cooling is provided for the unit ventilators in the library (condensing units located on the roof) and Room 104 (condensing units located at grade). All condensing units use R-22 refrigerant which is being phased out and is no longer available for

LOWER LEVEL

FIRST FLOOR

Mechanical Analysis - HVAC Zones

SECOND FLOOR



Zone 1: UV's w/ no AC

Zone 2: UV's w/ AC

MECHANICAL NARRATIVE CONTINUED:

new construction. Most of the insulation on the refrigerant piping is old, failing, and in need of replacement. Maintenance staff indicated that room 310 often has control issues that cause over heating in the space. Rooms 229 and 303 are each served by a fan coil unit with a hot water heating coil. Toilet rooms are exhausted through ceiling grilles. Make-up air for the toilet exhaust is transferred out of each classroom through overhead ducted ceiling transfer grilles. The Kitchen contains a Type 1 hood with fire suppression. The shop area wood working exhaust is provided by a grade mounted re-circulation type dust collector. This unit appears newer and in good working order. Maintenance staff indicated that this unit is lightly used. The art room contains a kiln hood that is exhausted to the outside. Vestibules and stairs are typically heated by hot water cabinet unit heaters. Many of the classrooms that are heated and ventilated by unit ventilators also contain hot water convectors for heating. Convectors and wall fin are also used in some toilet rooms and other small areas. Residential style electric baseboard has been installed to heat the elevator equipment room. This room is also exhausted by a through wall fan with make-up air provided from an exterior louver and damper. The damper is currently failed in the open position allowing outside air into the room. It is recommended that the damper should be fixed and a permanent commercial form of heating be installed. There is no exhaust provided for the residential stove located in the room 205 area.

CONTROLS: The building utilizes DDC controls installed in 2006. Maintenance staff indicated that upgrades in the system are needed.

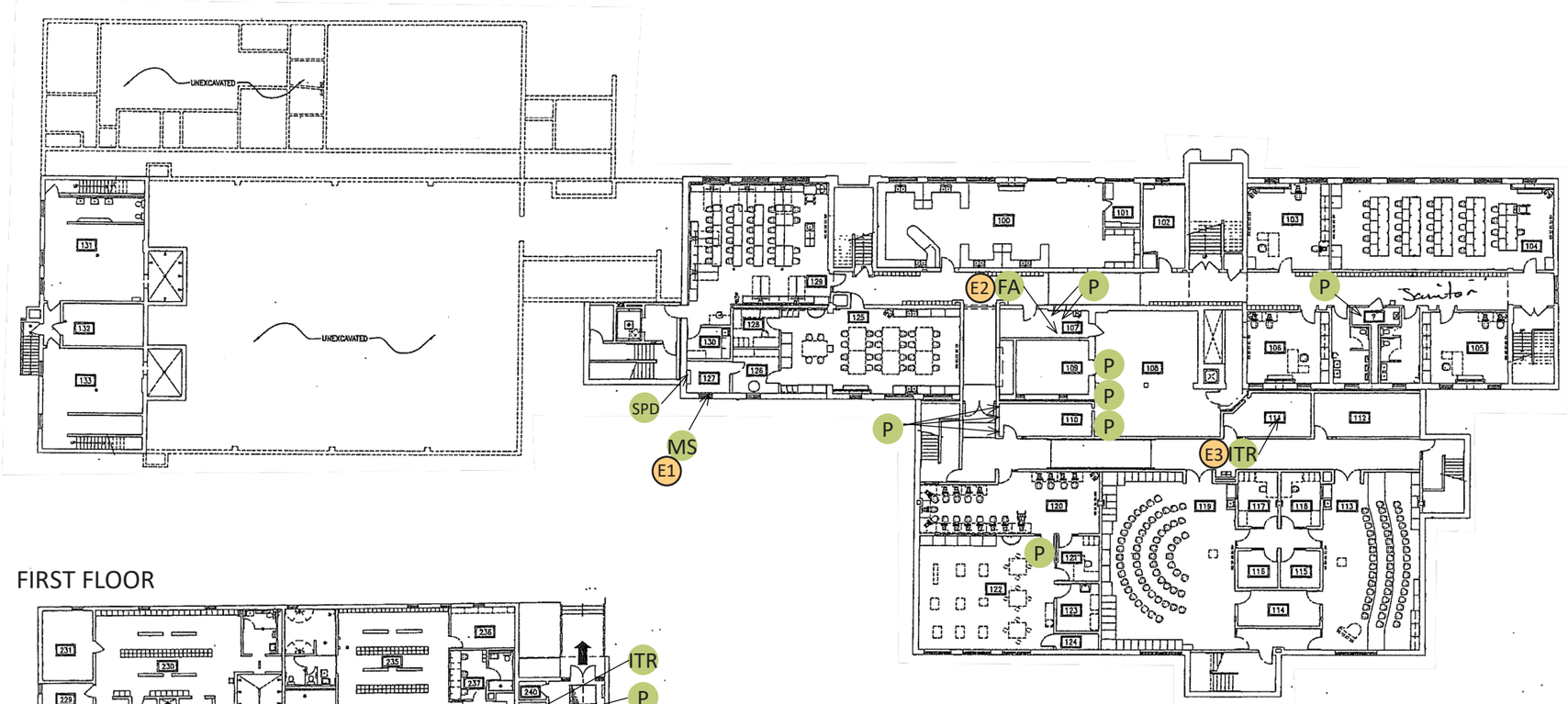
Electrical Analysis

1. Wheelchair does not have disconnecting means within line of site per code
2. Lockable switch to serve elevator cab lighting is not present in elevator equipment room

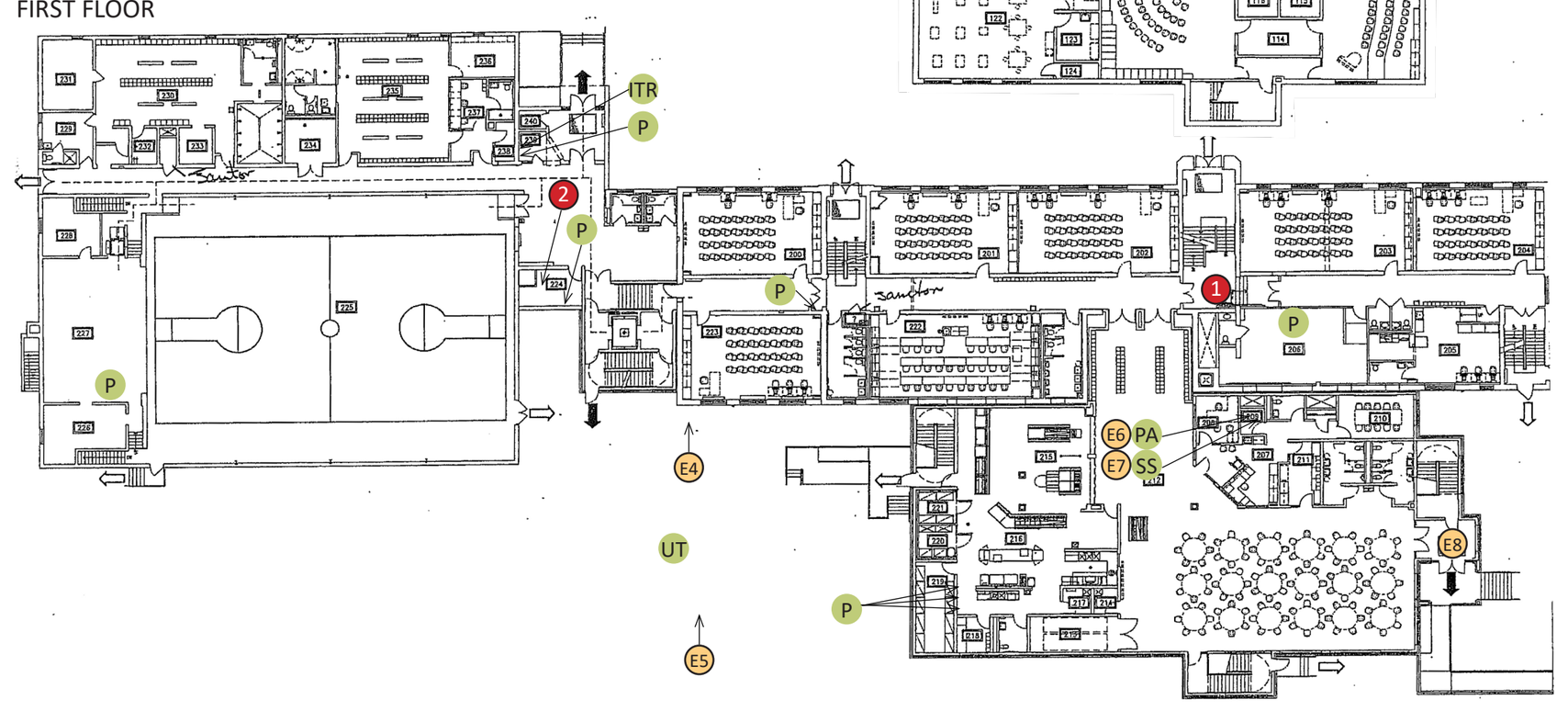
- FA Fire Alarm Control Panel
- ITR IT Racks
- MC Master Clock System
- MS Main Service
- P Panels
- PA Public Address System
- SS Security System
- SPD Surge Protection Device
- UT Utility Transformer

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

LOWER LEVEL



FIRST FLOOR



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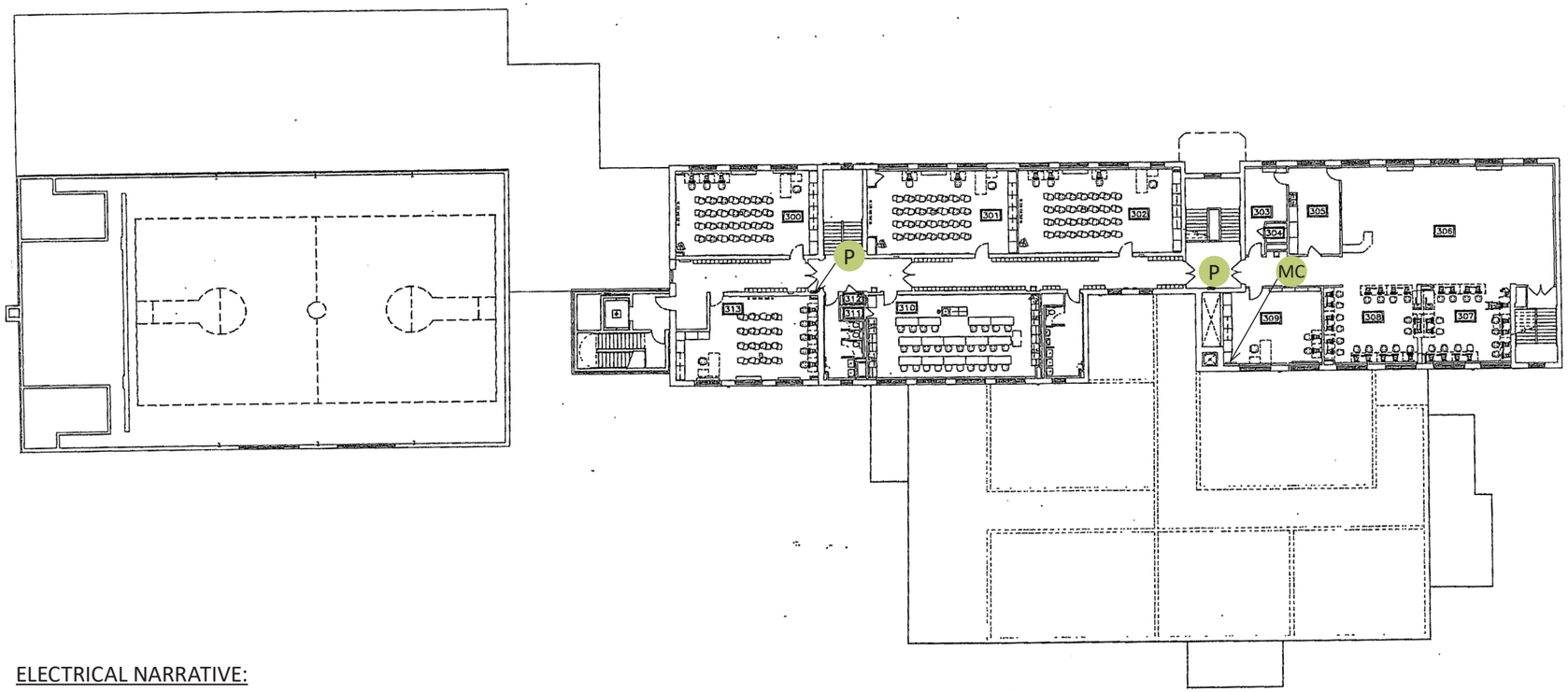

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- UT Utility Transformer

ELECTRICAL NARRATIVE:

Utilities: The building is served by a 1200A 120/208 Volt 3-phase service. The utility company pole mounted transformer is located South West of the level 100 electrical room. A CT cabinet with integral meter is mounted at the South West exterior of the building. The service is of newer vintage and parts are readily available.\

- # Photos
- # Code Issue
- # Safety/Health Issue
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POWER DISTRIBUTION: Panelboards are located throughout the building and serve various loads. The majority have been replaced and are of newer vintage. There are a select few that are beyond their life expectancy. Adequate power is provided to the classrooms and supporting spaces.

LIGHTING AND LIGHTING CONTROLS: Lighting is original fluorescent troffers with T-8 lamps throughout. Exit signs are newer LED. Emergency egress lighting fixtures are of a newer vintage. Linear fluorescent pendants found in the newest portion of the building are difficult to maintain based on conversations with maintenance personnel. Exterior lighting is on the process of being upgraded to LED.Automatic lighting control via occupancy sensors are the norm throughout the building. Exterior lighting is controlled through a timeclock.

SPECIAL SYSTEMS: The fire alarm system was installed in 2005. It is obsolete and does not meet current Code, although parts are still available for this system. Coverage of annunciating and initiating devices appears to meet current Code.

The clock system is fully functional and no concerns were presented by facility personnel.

The security system is relatively new and is currently serving the building adequately.

- # Photos
- # Code Issue
- # Safety/Health Issue
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The public address system is comprised of traditional speakers and call buttons in classrooms. The systems appears to be working well with no complaints noted from facility personnel.

The main IT server for the building is located in a separated data room located in level 100. The system is currently serving the building adequately, however further discussions with IT personnel is required to determine additional capacity if it is needed.

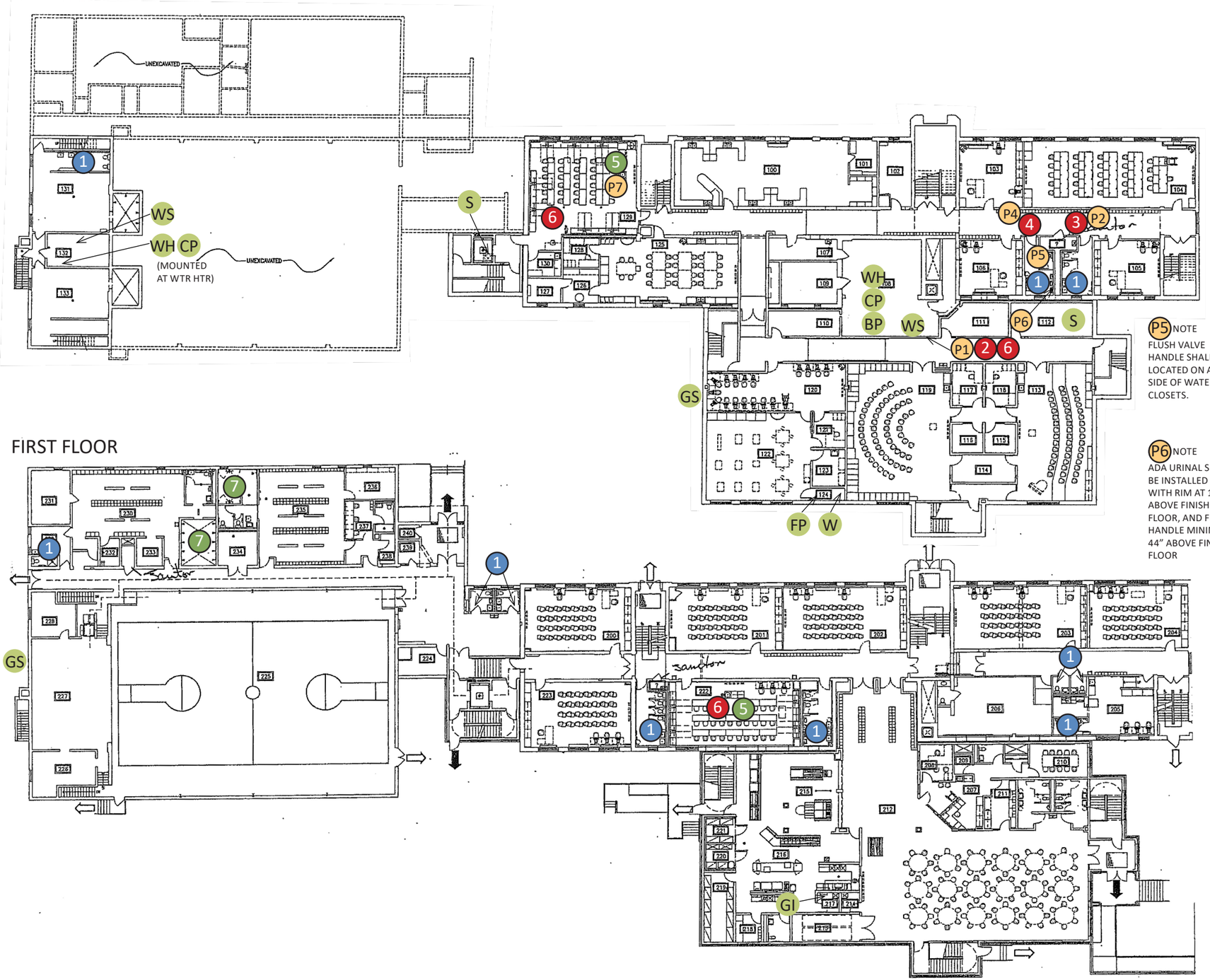
Plumbing Analysis

1. Plumbing fixtures are not compliant with ADA Standards for Accessible Design
2. Eye wash does not have code compliant clearance/access
3. Indirect waste discharging into mop sink; which is not an approved receptor
4. Indirect waste over 30” in length is required to be trapped
5. Time operated gas valve located at teacher’s station is not secured from general access
6. Eye wash and/or safety shower is cold water only, code requires tempered water be provided
7. Because the shower drains are centrally located, users have to pass through other user’s water drainage path

BP Backflow Preventer. Boiler Makeup
CP Domestic Water Circulation Pump
FP Fire Protection Riser
GI Grease Interceptor
GS Gas Service
MV Mixing
WH Water Heater
W Water Service
WS Water Softener
S Sump Pump

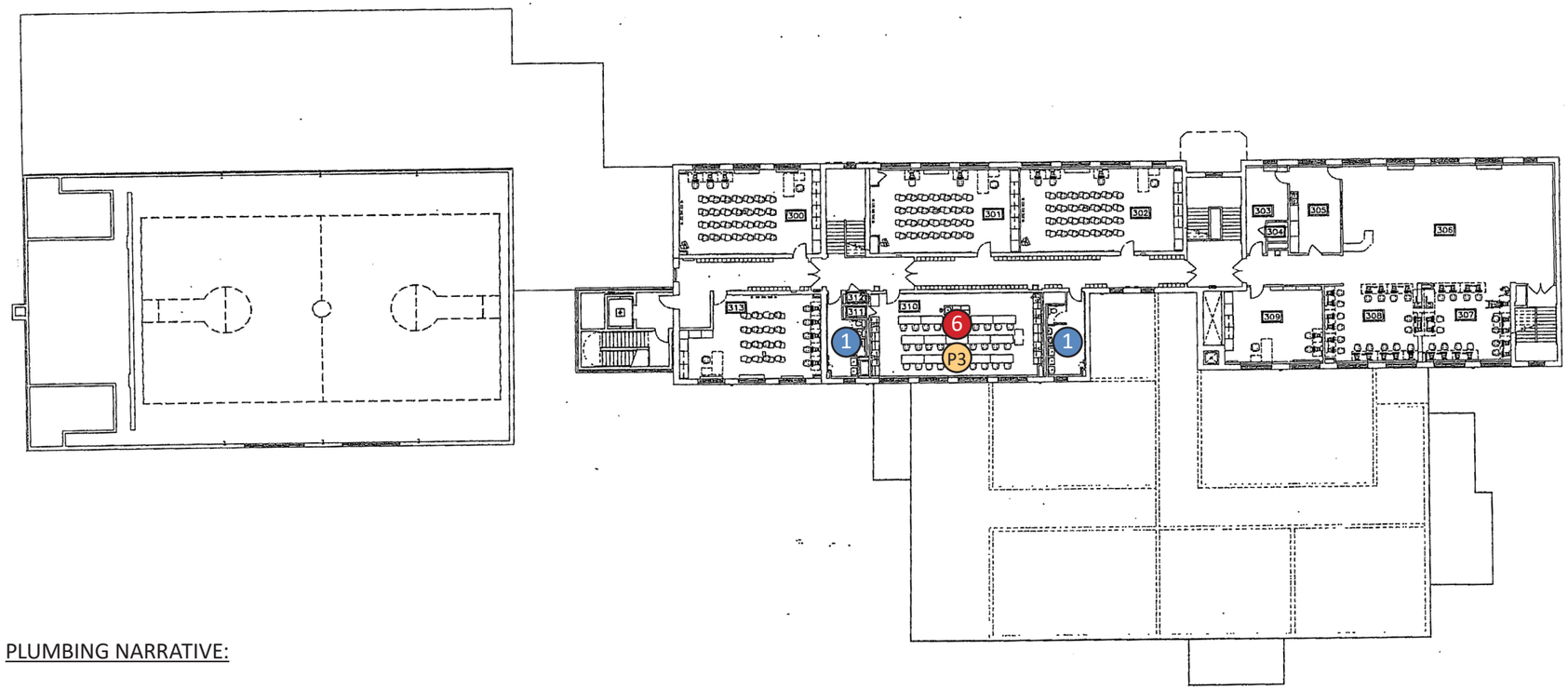
Photos
Code Issue
Safety/Health Issue
ADA/Accessibility Issue

LOWER LEVEL



FIRST FLOOR

SECOND FLOOR



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- BP Backflow Preventer. Boiler Makeup
- CP Domestic Water Circulation Pump
- FP Fire Protection Riser
- GI Grease Interceptor
- GS Gas Service
- MV Mixing
- WH Water Heater
- W Water Service
- WS Water Softener
- S Sump Pump

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

PLUMBING NARRATIVE:

UTILITIES: The facility is served by city supplied 6” potable combination water service with water pressure of 100 Psig static, 840 gallons per minute flow at 60 psig residual pressure. The water meter is 2” in size with 2” bypass piping and water filter. The water service enters the building on the Southwest side in the building near the shop area. The building is served by 8 main sanitary services.

GAS SYSTEM: The building is served with two natural gas utility service provided by St.Croix Gas. The main service is located on the Northwest side of the 2005 addition just outside of the shop Room. The gas utility is 2 psig pressure firm gas. The second gas meter is located on the Northwest side of the building outside of the Gym. The gas distribution in the building is black iron piping.

STORM SEWER: The 2005 addition roof system collects rain water via roof drainsand connected to the rain leader system and discharges on to grade on the Southwest side of the building towards the retention pond. The remaining roofs discharge thru rain gutter systems to grade. Elevator sump pump discharges to grade. The 2005 addition has foundation drainage to sump pump system.

SANITARY: All building sanitary is gravity drained with no lift stations or grinder pumps. Piping consist of Cast Iron and galvanized materials with PVC for areas that have been remodel or repaired. The 2005 addition is mainly PVC piping. The Cast Iron and galvanized piping that is visible appears to be in fair condition. The science rooms piping is PVC piping with no acid neutralizer.

POTABLE WATER DISTRIBUTION: Potable water is distributed throughout the building via a copper and galvanized distribution on piping located above grade. Piping condition on appears to be in fair condition. Asbestos insulation is likely in the older section of the building and in concealed locations that were not accessed during any remodel or repaired areas.

POTABLE WATER HEATING: The building is served by one high efficiency natural gas fired tank type water heater, producing 120-degree hot water with a hot water recirculation line/pump is present and operating, which were newly installed with the water heater upgrades in 2018. The water heater was installed in 2005 in appears to be in good condition. A second, high efficiency natural gas fire tank type water heater serves the locker rooms. This water heater was also installed in 2015. Water softener unit conditions the hard water for the main hot water system, no water softener for the Locker room hot water heater.

FIRE PROTECTION SYSTEM: This building has fire protection in the 2005 building. The remaining building has no fire protection system.

PLUMBING FIXTURES: Plumbing fixtures located in the facility are original to the building and its addition, or the time of the areas were last remodeled. Majority of the fixtures are in good condition. The toilet facilities consist of floor mounted tank type or pressure assisted water closets with 3 gallon per flush older models and 1.6 gallons per flush for the newer models. 2005 addition the water closets are wall hung with handle flush valves. Wall mounted urinals with sensor or handle flush valves. Lavatory sinks are wall mounted with handle faucets. Locker Room showers, hot and cold shower valves with fixed shower heads. Water coolers are wall hung units; newer models have water bottle fillers. Sinks located in classrooms are based on the classroom needs.

4 CHAPTER
PRESCOTT MIDDLE SCHOOL

Photographs

Unless noted otherwise, all photos were taken on May 22, 2019

A1

A2

A3

A4

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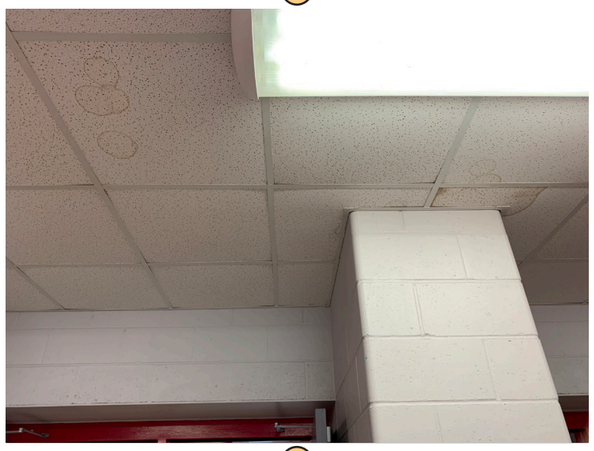
A8



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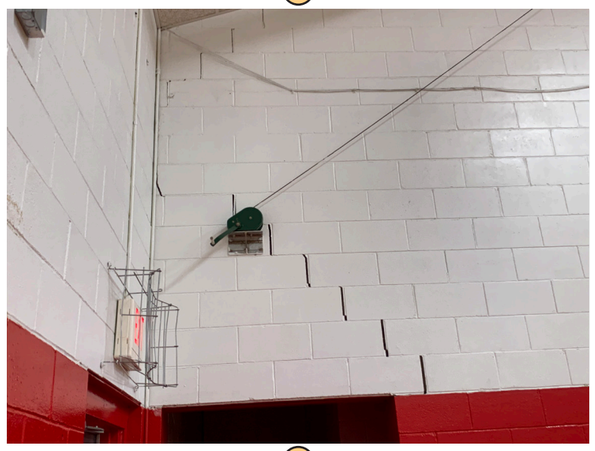

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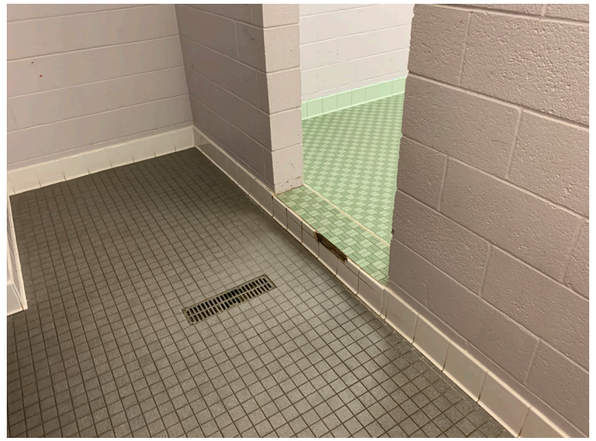

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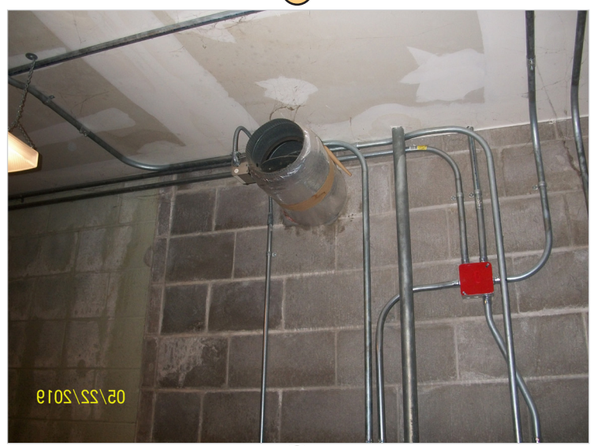

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Photographs

H13

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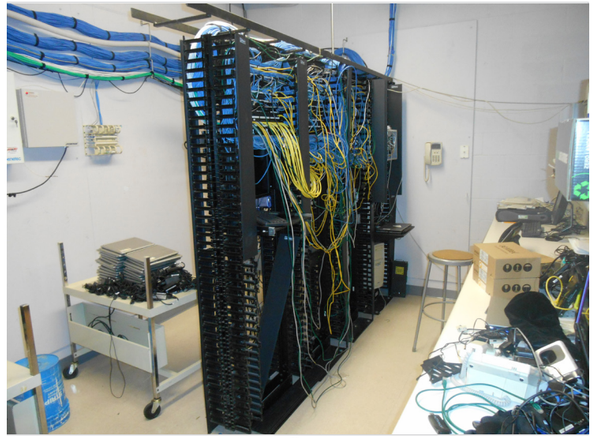
H18

E1

E2



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P1

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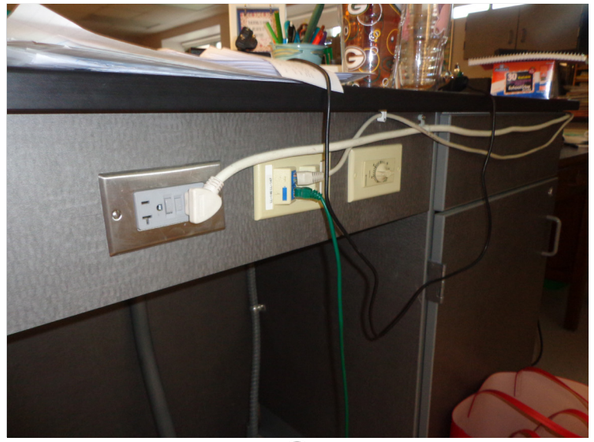
Photographs

P6



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