

## **WORKING MEETING OF THE BOARD OF EDUCATION - AGENDA**

### **Alma Public Schools**

**Wednesday, August 24, 2022**

- A. Call to Order and announce location of Open Meetings Act Poster
  - A.1. Verification of Receipt of Notice, which was published in the Harlan County Journal
  - A.2. Roll of Board Members - Excuse absent board members
- B. Action Items - Discuss, consider, and take all necessary action
  - B.1. Review and discuss the information in the Facilities Assessment as provided by Wilkins Architecture, Design, Planning.
  - B.2. Review and discuss the information received about school transportation needs.
  - B.3. Review and discuss the proposed 2022-23 school budget and property tax request
- C. Next Regular Meeting
- D. Adjourn

THE BOARD OF EDUCATION OF THE ALMA SCHOOL DISTRICT NO. 2 WILL DISCUSS, CONSIDER, OR TAKE ACTION ON ALL ISSUES MENTIONED IN THIS AGENDA.



# Alma Public Schools Facilities Assessment

April 11, 2022

DRAFT



# WILKINS

ARCHITECTURE | DESIGN | PLANNING

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Kearney, NE 68845

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WilkinsADP.com

On February 8, 2022 and March 31, 2022, Wilkins Architecture Design Planning, LLC (Wilkins ADP) along with consulting engineers from Engineering Technologies, Inc. (ETI) on February 22, 2022, separately performed an on-site facilities assessment of the main academic school building for Alma Public Schools (APS). It should be noted that the scope of this assessment did not include the Shop Building (since it's relatively new), the Greenhouse, and the Bus Barn. The assessment did include the athletic field, but recent updates to the facility have addressed many of the needs at that facility.

Current enrollment figures for the district buildings are as follows:

Kindergarten – 12th Grade (No Preschool) = 350 Students

The school district would like to add a section of Preschool, but there currently isn't enough space to do so.

Enrollment is trending upward over the last ten years from 288 students in the 2011-2012 school year to the current 350. The on-site evaluation observed the current condition of the buildings' envelope (walls, and windows), interior finishes and equipment, mechanical and electrical systems and also noted specific instances where the campuses are not in compliance with the Americans with Disabilities Act (ADA). The program and space utilization within the buildings were evaluated with input and assistance from Mr. Jon Davis, Superintendent of Alma Public Schools.

Alma Public Schools – the Board of Education, Administration and Staff have done a good job over the years with maintenance, providing updates to certain aspects of the buildings and are diligent with keeping all of the buildings clean. The school district has made significant efforts to improve the district facilities through smaller and manageable projects that didn't require any bond election or significant, large scale expenditures. As with all facilities of the age and history of large portions of the main school building, there are a number of items and conditions that are not in compliance with current codes and standards. Not all items observed and noted on the assessment fall into the category of needing immediate attention. Some of the items noted are "grandfathered" in and as such no immediate attention is required until the point at which a major overhaul of the building were to occur, or if an item was being replaced. Where possible, each identified item is given an explanation as to its degree of urgency. **If all of the noted items are addressed and the building are brought up to current codes and standards, the estimated cost of the work, if the work were to take place in one project is \$2,683,500.**

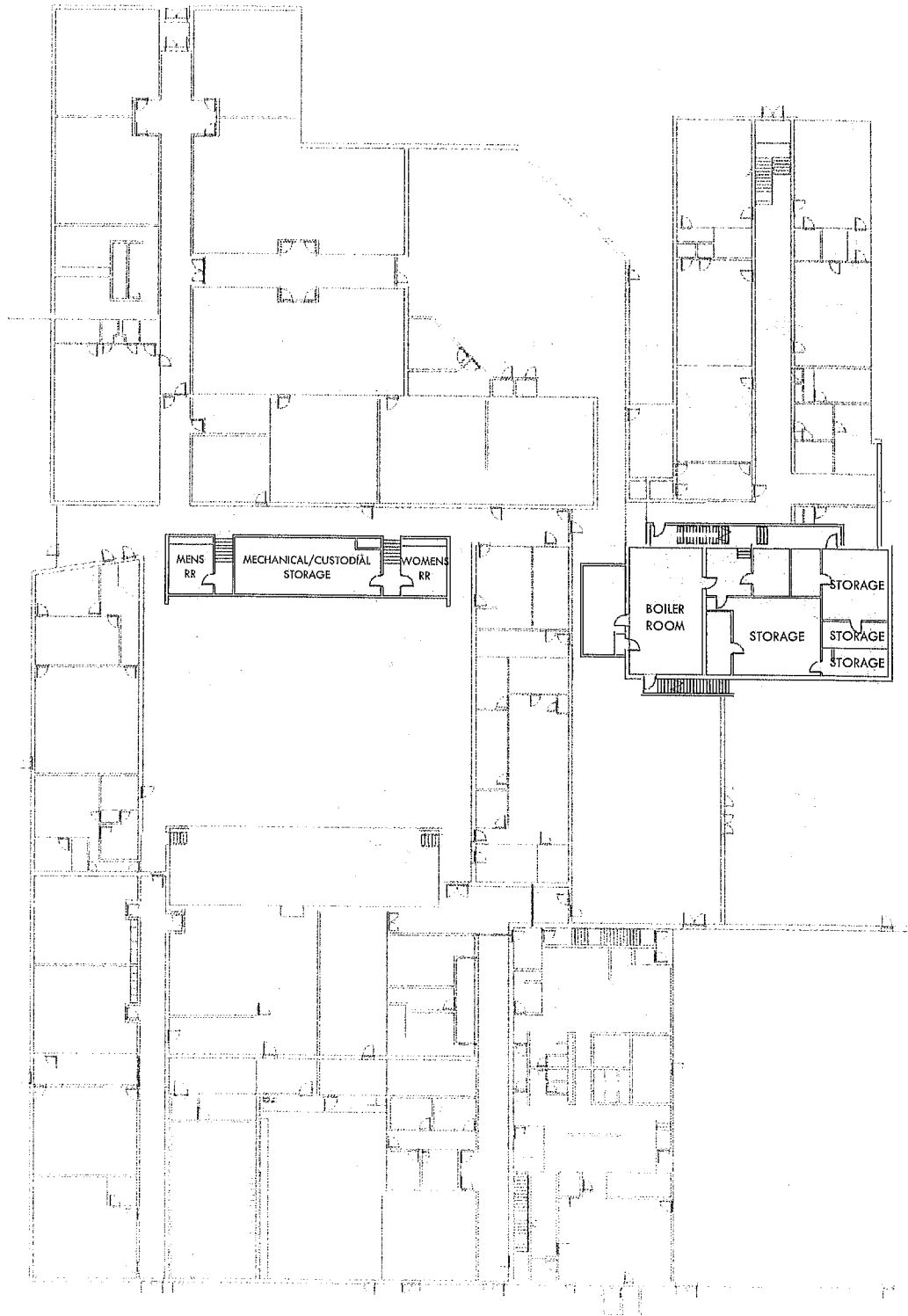
In evaluating the space programs for all of the district buildings, and based on current enrollment, enrollment trends and the current availability of educational programming space, there is clear need for additional classroom and instructional space for Preschool and elementary instruction along with programmatic deficiencies that can only be practically addressed with a construction project of some kind. On the building systems side, while some updates have been made in certain areas there are still fairly significant investments that need to be addressed.

1 | EXECUTIVE SUMMARY

BASEMENT

Main Building Basement Total SF = 4,813 SF

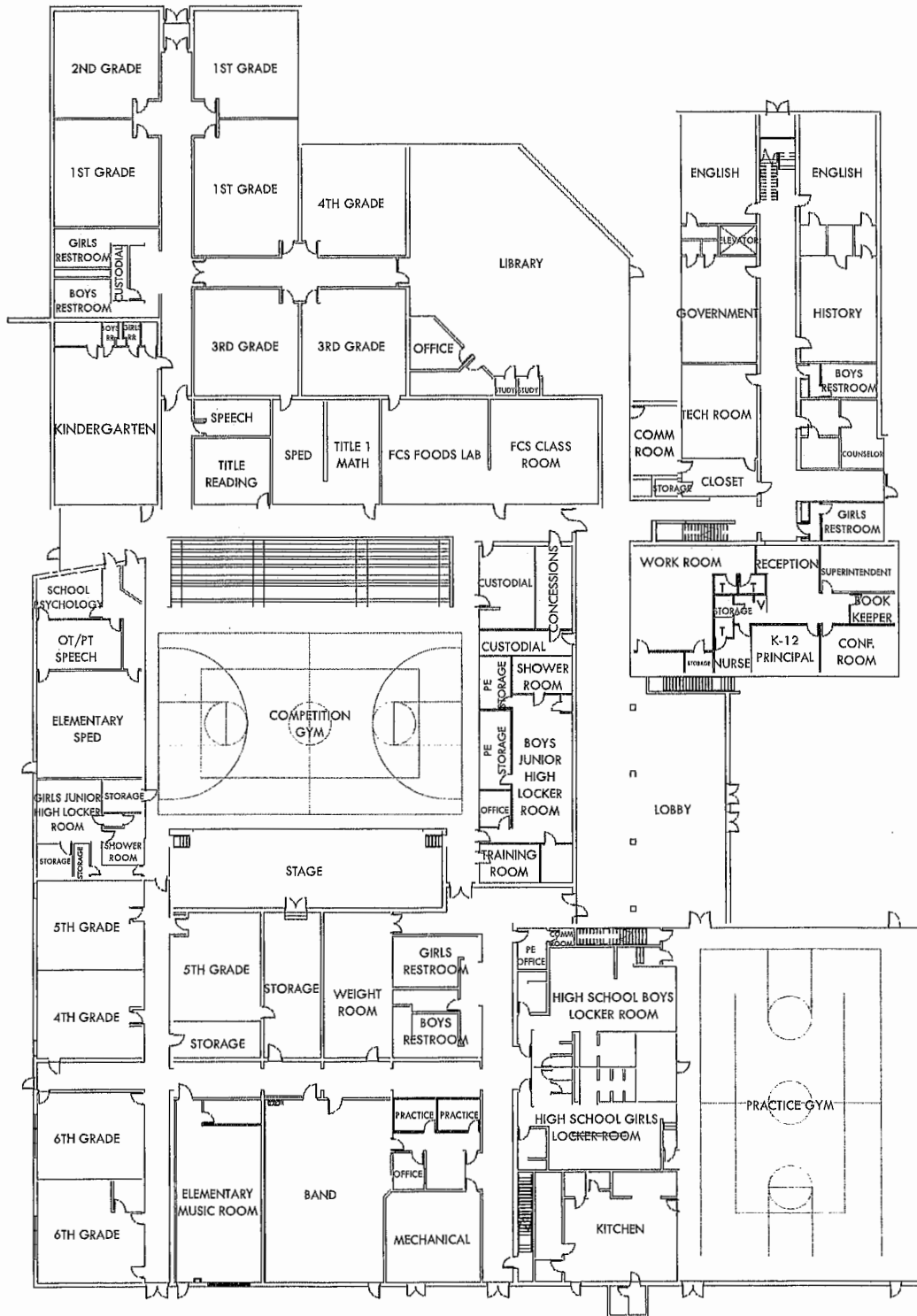
Main Building Campus Total SF = 93,790 SF



1 | EXECUTIVE SUMMARY  
MAIN FLOOR

Main Building First Floor Total SF = 74,604 SF

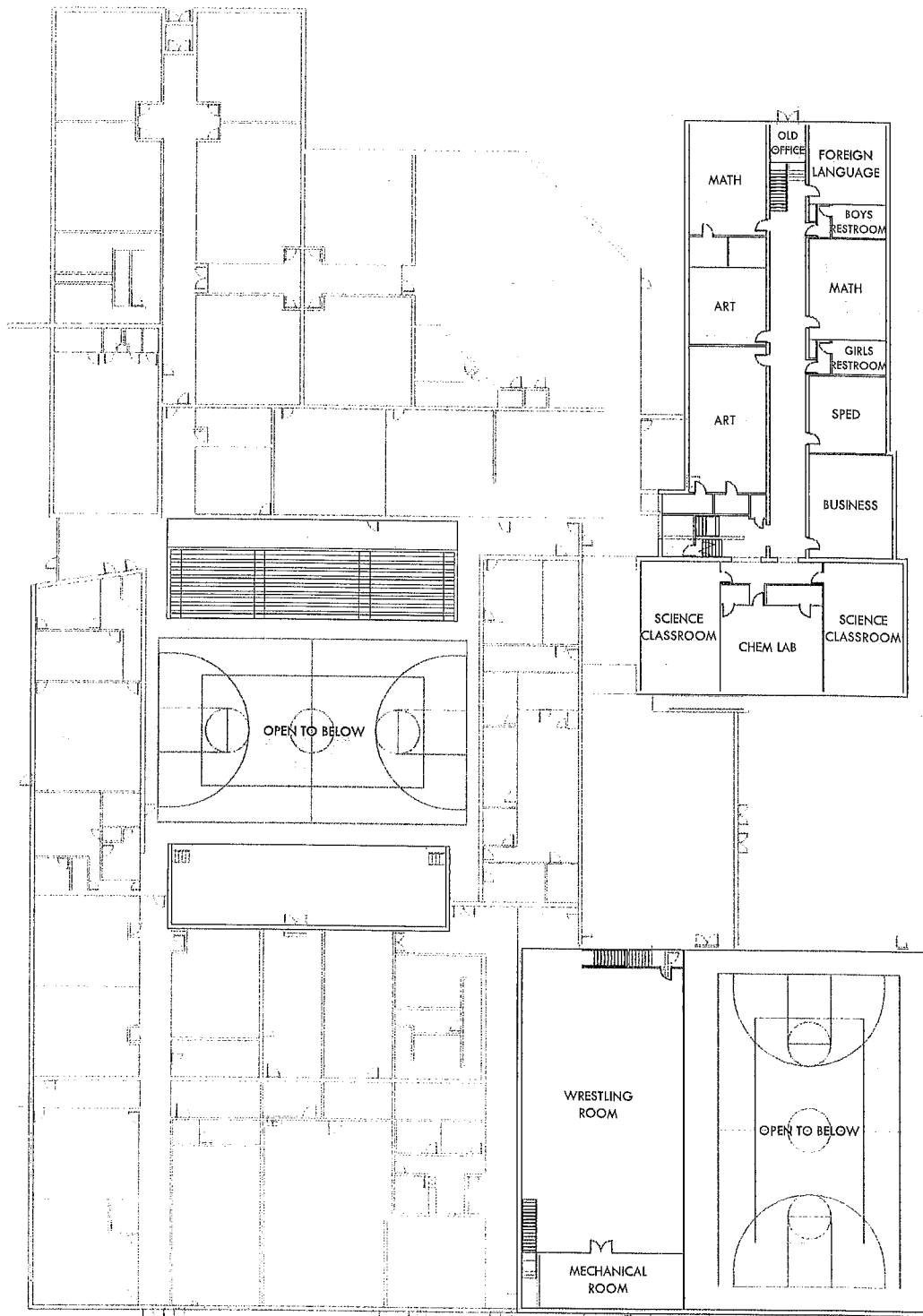
Main Building Total SF = 93,790 SF



1 | EXECUTIVE SUMMARY  
SECOND FLOOR

Main Building Second Floor Total SF = 14,373 SF

Main Building Campus Total SF = 93,790 SF



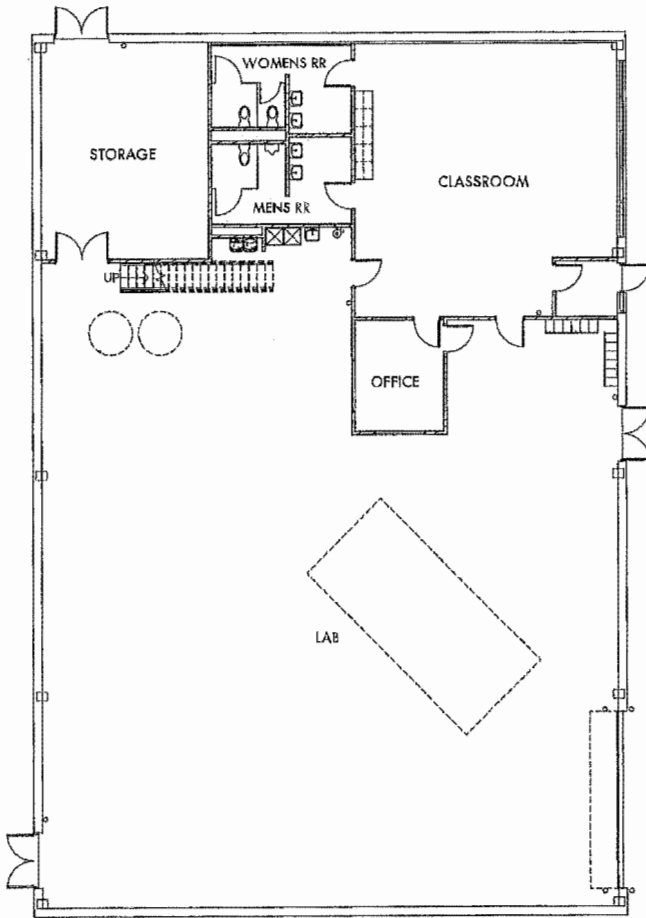
1 | EXECUTIVE SUMMARY  
SHOP

Shop Main Floor Building Total SF = **6,800 SF**

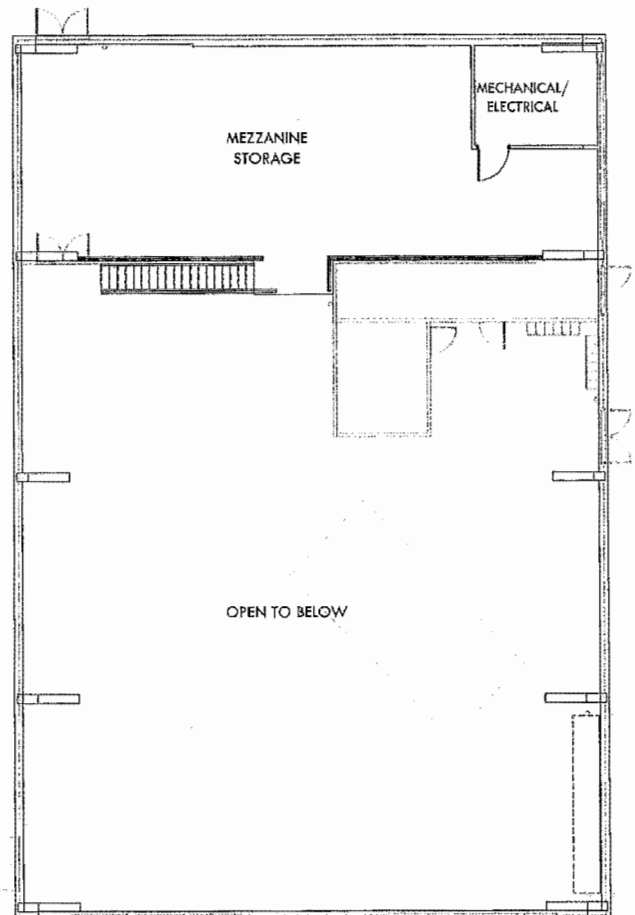
Mezzanine SF = **1,745 SF**

Shop Building Total SF = **8,545 SF**

**MAIN FLOOR**



**MEZZANINE**



2 | BUILDING ENVELOPE / ADA / MAINTENANCE / PROGRAM  
AERIAL VIEW



**EXTERIOR WALL ASSEMBLIES**

**> MAIN ACADEMIC BUILDING**

A majority of the brick on all of this building appears to be in fair to good condition. Of course as with all construction of this era and prior, none of the walls are insulated therefore the building is not energy efficient from a heat loss standpoint. Without furring out all of the walls either to the inside or to the outside with a new finish, there is no practical way to remedy this condition. Additional cosmetic and maintenance types of issues are identified elsewhere in this document.

**> ROOFS**

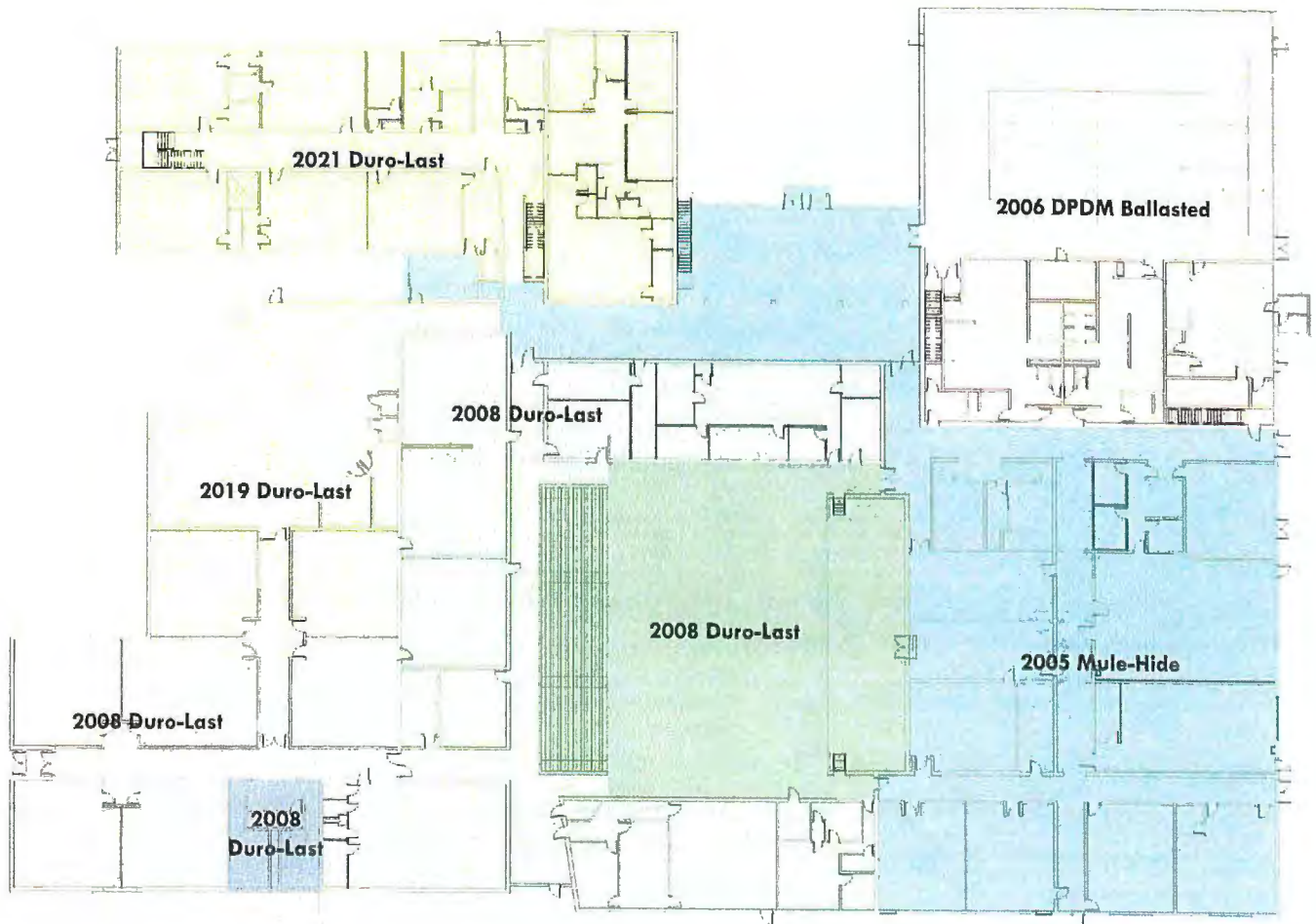
All of the various roofs (Reference Roof Graphic) are still under warranty and appear to be in fair to good condition. Some of the roofs are nearing the end of their warranty period so they should be placed on a schedule for replacement.

**> DOORS & WINDOWS**

Some of the windows on the building are wood windows that are in poor condition. It is recommended that all of the wood windows (and any older uninsulated windows) be replaced with double pane, insulated, thermally broken storefront systems.

**> FINISHES**

Finishes in this building are a mix of original and newer finishes. Specific finishes that are in need of replacement are noted separately in this document.



**IN THE ROOFING INDUSTRY, THERE IS A SPECIAL CONCEPT KNOWN AS THE "5 R'S" OF ROOFING". THESE ARE THE FIVE PHILOSOPHIES/ APPROACHES TO MANAGING YOUR ROOF ASSETS. THEY ARE:**

#### **REPAIR**

Invest dollars to extend the life and performance of the existing roof.

#### **RETROFIT**

Installing a new roof on top of the existing roof. This process typically cuts the intended life span of the new roof almost in half.

#### **RESTORE**

Invest about 1/3 to 1/2 the cost of a full replacement. Brings the existing roof back to a like new warrant-able status. Some diagnostic testing required. Not all roofs qualify for this.

#### **REPLACE**

Most expensive option. Tear off the existing roof, flashings, insulation and perimeter details down to the roof deck and install a new roof system.

#### **REFRAIN**

Happens most often when capital funds are short. However, at a minimum, roofing maintenance should be performed to slow down deterioration of the roofs.

#### **BUILDING USAGE**

It is my understanding that your facilities have a long term intended use. Therefore, it is my position that any **ANY** work recommended and performed should **drive down long-term building costs and maintenance.**

2 | BUILDING ENVELOPE / ADA / MAINTENANCE / PROGRAM  
 ROOF REPORT SUMMARY

System	Cost to Install	Pros	Cons	Life Span
<p><u>Restorative Coatings</u></p> <p>Single or two-part, possibly re-enforced system to extend roof life                      NOTE: See if warranty includes existing roof system.</p>	\$5 to \$15 per square foot	<ul style="list-style-type: none"> <li>• Low first cost</li> <li>• Provides a short-term solution</li> <li>• Eliminates unneeded waste</li> <li>• Extends life of existing roof</li> </ul>	<ul style="list-style-type: none"> <li>• Existing roof is not torn off</li> <li>• Many incorrect product compatibility issues</li> <li>• Requires maintenance</li> </ul>	5 to 20 years depending on system installed
<p><u>Single Ply System</u></p> <p>A single ply of usually vulcanized rubber or thermoplastic</p>	\$8 to \$14 per square foot	<ul style="list-style-type: none"> <li>• Lower first cost</li> <li>• Easy to install</li> <li>• Easy to maintain and repair</li> <li>• Can be difficult to restore</li> </ul>	<ul style="list-style-type: none"> <li>• Easily punctured</li> <li>• Shorter life span</li> <li>• Many reformulations</li> <li>• Requires much seam maintenance</li> <li>• Only one layer of weatherproofing</li> </ul>	8 to 20 years depending on system installed
<p><u>Modified Bitumen System</u></p> <p>A multi-ply modified asphalt system often with factory embedded granules</p>	\$12 to \$19 per square foot	<ul style="list-style-type: none"> <li>• Longer life span</li> <li>• Easy to maintain, restore and repair</li> <li>• Multiple layers of weatherproofing</li> </ul>	<ul style="list-style-type: none"> <li>• More expensive first cost</li> <li>• Sensitive installation</li> <li>• Can blister easily</li> </ul>	10 to 20+ years depending on system installed
<p><u>Built Up Roof</u></p> <p>Typically a multi-ply, asphalt, aggregate surfaced system</p>	\$18 to \$28 per square foot	<ul style="list-style-type: none"> <li>• Longest life span</li> <li>• Multiple layers of weatherproofing</li> <li>• Aggregate surface is best UV, foot traffic, and water protection</li> <li>• Easily maintained</li> </ul>	<ul style="list-style-type: none"> <li>• Expensive first cost</li> <li>• Technical details</li> <li>• Can be a challenge to find leaks</li> </ul>	20 to 30+ years depending on system installed
<p><u>Specialty Hybrid Systems</u></p> <p>Many varied systems mostly to accommodate energy efficient requirements</p>	\$20 to \$35+ per square ft	<ul style="list-style-type: none"> <li>• Can meet "green" standards</li> <li>• Well insulated</li> <li>• Environment friendly</li> <li>• Can reduce heat island effect</li> </ul>	<ul style="list-style-type: none"> <li>• Expensive first cost</li> <li>• Can be difficult to maintain</li> <li>• Can be costly to repair or replace</li> <li>• Newer technology</li> <li>• Controlling reflected light</li> </ul>	10 to 30 years depending on system installed
<p><u>Metal Roof Systems</u></p> <p>Many varied option to meet budget and longevity needs</p>	\$18 to \$50 per square foot	<ul style="list-style-type: none"> <li>• Long life span</li> <li>• Attractive</li> <li>• Can be easy to maintain</li> <li>• Good positive drainage</li> </ul>	<ul style="list-style-type: none"> <li>• Expensive first cost</li> <li>• Difficult to repair</li> <li>• Can be difficult to maintain</li> </ul>	15 to 30+ years depending on system installed

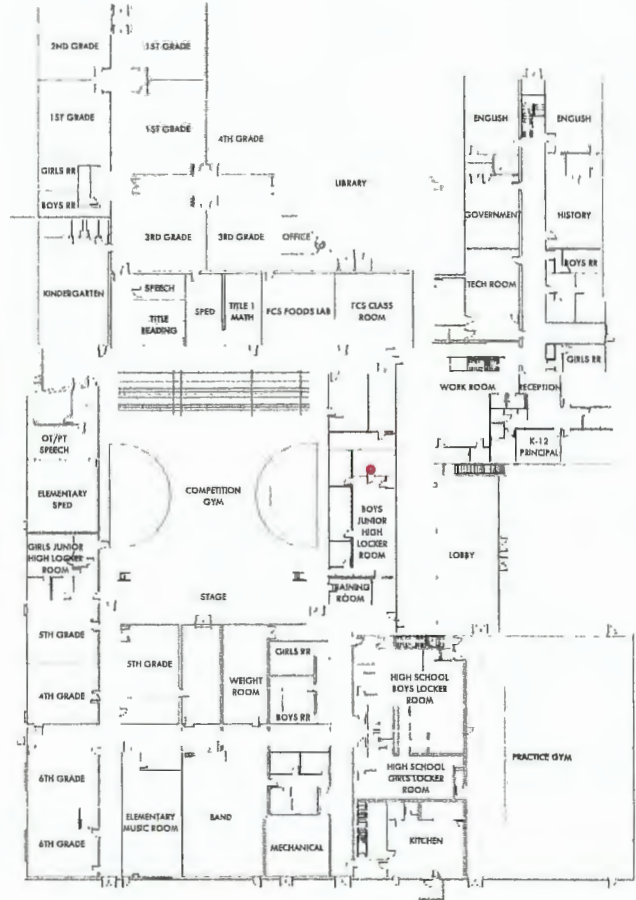
2 | BUILDING ENVELOPE / ADA / MAINTENANCE / PROGRAM  
MAIN FLOOR DEFICIENCIES

**AMERICANS WITH DISABILITIES ACT GUIDELINES**

The boys junior high locker room is not ADA accessible.

**RECOMMENDATION**

Renovate junior high locker room to meet ADA guidelines.

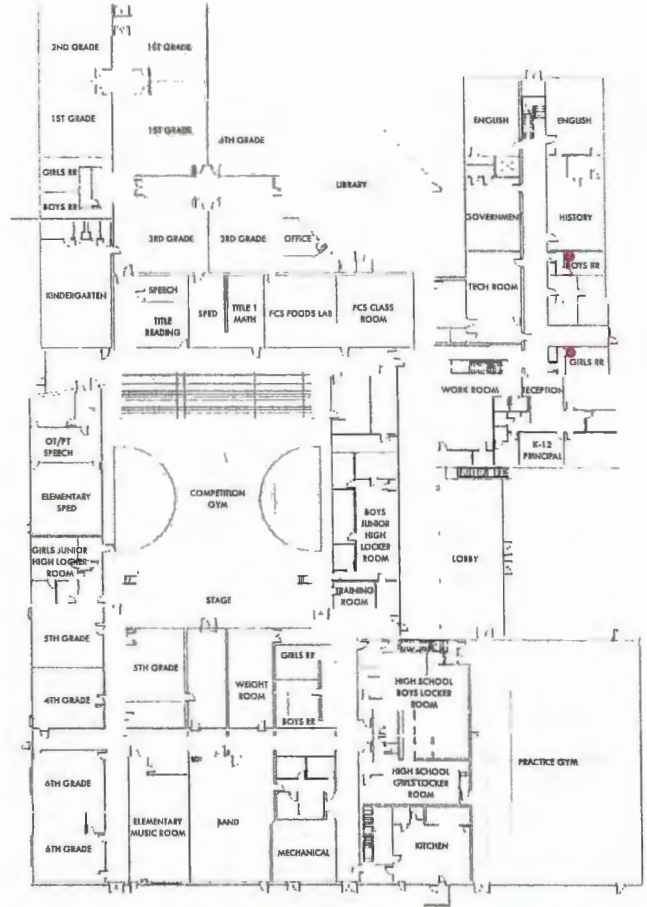


**AMERICANS WITH DISABILITIES ACT GUIDELINES**

The girls and boys restrooms are not ADA accessible.

**RECOMMENDATION**

Renovate the girls and boys restrooms to meet ADA guidelines.



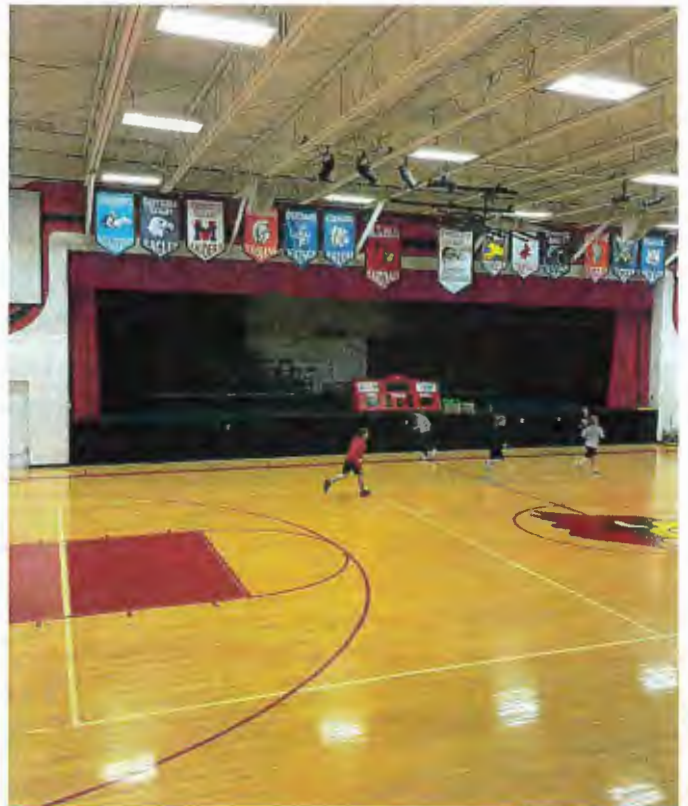
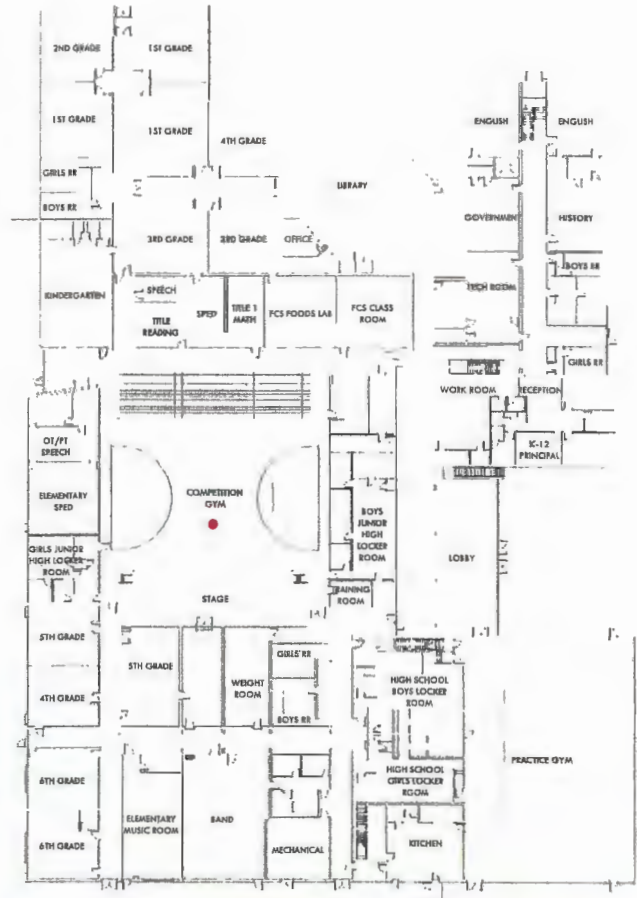
**AMERICANS WITH DISABILITIES ACT GUIDELINES**

At the Main Competition Gym there are a number of deficiencies including:

- No wheelchair seating areas.
- The clearances around the main basketball court do not meet current NFHS and NSAA standards/guidelines.
- The current seating capacity is not in line with a number of peer institutions and a lack of seating capacity is a limiting factor for hosting postseason NSAA tournaments.

**RECOMMENDATION**

While this is a costly solution, the only practical way to resolve most, if not all, of the noted deficiencies is to construct a new gymnasium.





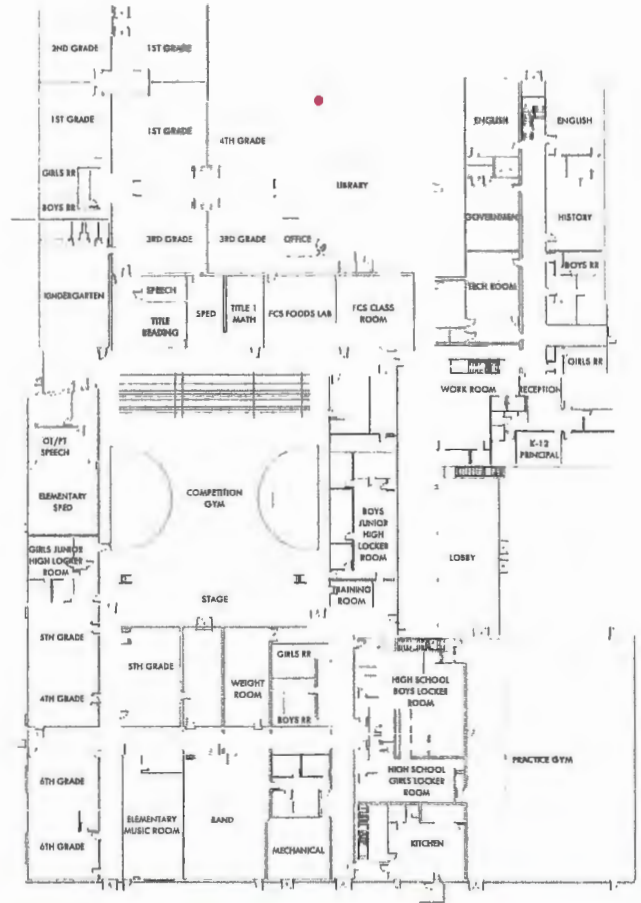
2 | BUILDING ENVELOPE / ADA / MAINTENANCE / PROGRAM  
MAIN FLOOR DEFICIENCIES

**FINISHES**

In the library, (and other places) the wood windows are rotting/deteriorating.

**RECOMMENDATION**

Replace all wood windows.



**FINISHES**

In the classrooms, the laminate is separating from the counter top. In general, many of the counter tops and some of the cabinets are worn and should be scheduled for replacement.

**RECOMMENDATION**

Replace counters. Consider replacing all original counter tops.





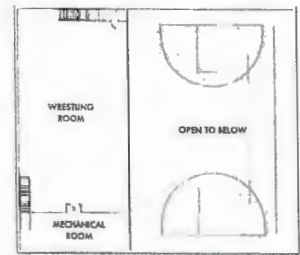
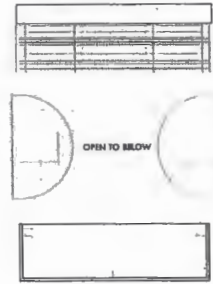
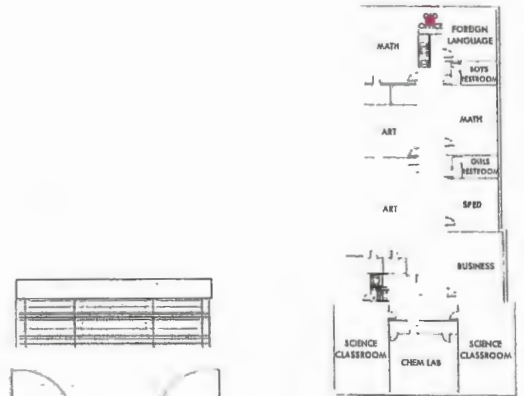
2 | BUILDING ENVELOPE / ADA / MAINTENANCE / PROGRAM  
SECOND FLOOR DEFICIENCIES

**FINISHES**

Office/resource room has outdated/worn finishes and wall paneling.

**RECOMMENDATION**

Replace carpet and wall paneling.

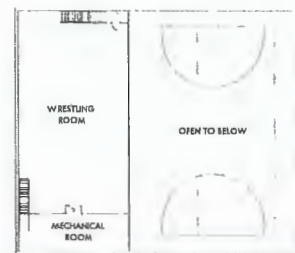
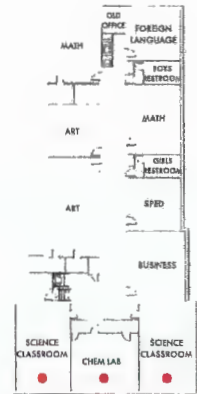
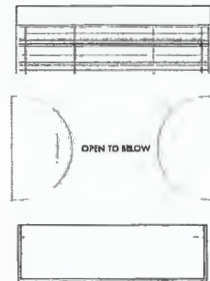


**FINISHES**

In the science room, the cabinets are worn and some are deteriorated. In addition, the lab lacks current/modern ventilation equipment.

**RECOMMENDATION**

Refinish and/or replace cabinet and install modern fume extraction equipment.



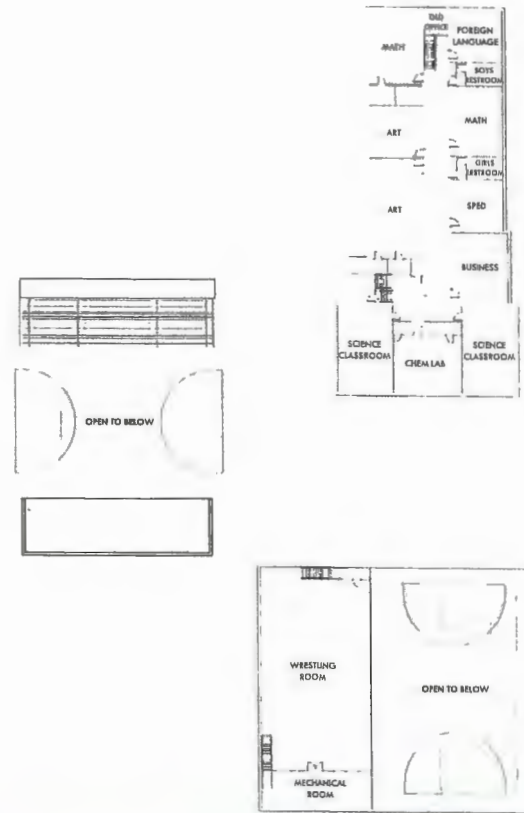
2 | BUILDING ENVELOPE / ADA / MAINTENANCE / PROGRAM  
SECOND FLOOR DEFICIENCIES

**LIFE SAFETY**

In the science room, the fume hood is inaccessible and there is no emergency eye wash station/safety station.

**RECOMMENDATION**

Make fume hood accessible and add an eye wash station and safety station where required.



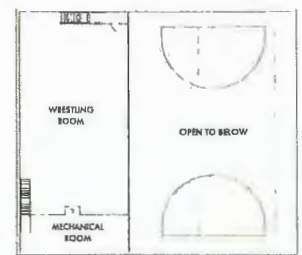
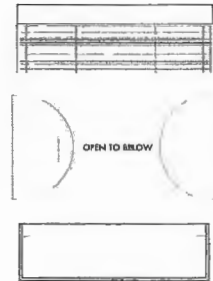
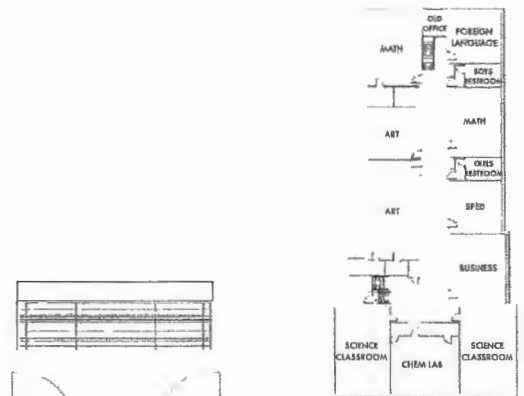
2 | BUILDING ENVELOPE / ADA / MAINTENANCE / PROGRAM  
SECOND FLOOR DEFICIENCIES

**FINISHES**

The second floor has outdated/failing florescent lighting technology.

**RECOMMENDATION**

Replace all non LED lighting throughout the campus with LED lighting.

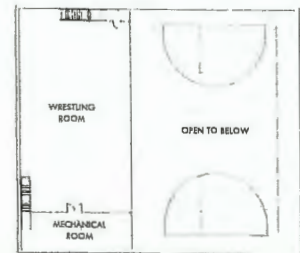
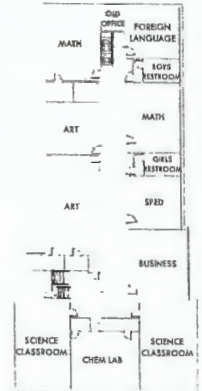


**FINISHES**

The second floor ceiling has water damage.

**RECOMMENDATION**

Replace ceiling tiles. If there are no roof leaks and/or mechanical issues.



2 | BUILDING ENVELOPE / ADA / MAINTENANCE / PROGRAM  
SECOND FLOOR DEFICIENCIES

**LIFE SAFETY**

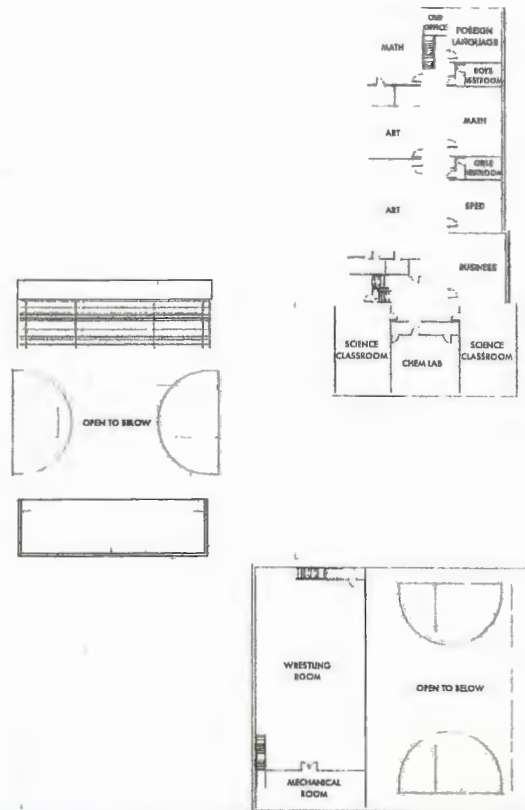
In the art room, the kiln is out in the open.

Also the lighting is poor.

**RECOMMENDATION**

Create a fire, rated kiln room.

Install new LED lighting in room.



2 | BUILDING ENVELOPE / ADA / MAINTENANCE / PROGRAM  
SECOND FLOOR DEFICIENCIES

**LIFE SAFETY**

There are no fire sprinklers throughout the main building.

**RECOMMENDATION**

Install fire sprinklers.

**LIFE SAFETY**

The wrestling room is does not meet ADA guidelines.

**RECOMMENDATION**

Install lift to make wrestling room accessible.

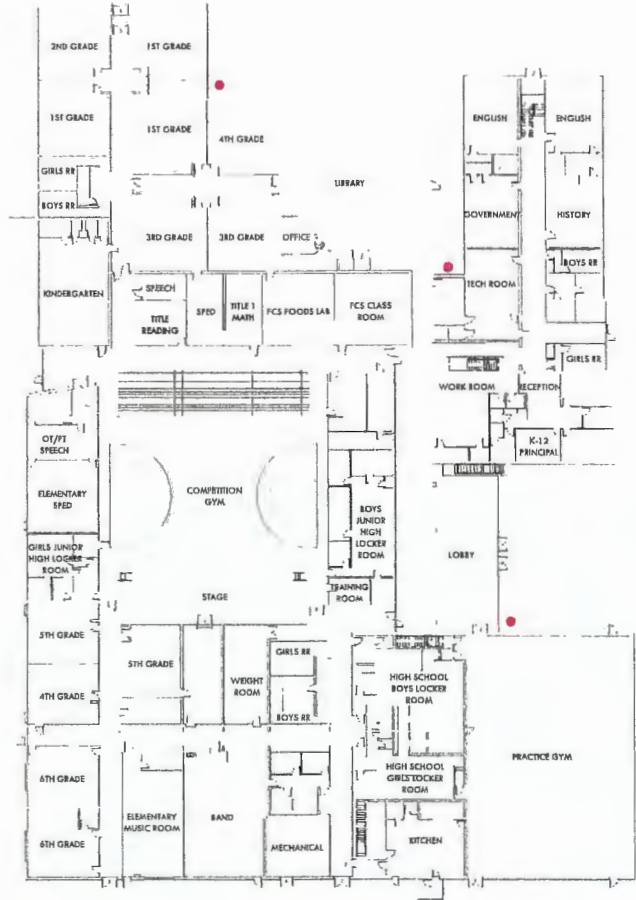
2 | BUILDING ENVELOPE / ADA / MAINTENANCE / PROGRAM  
EXTERIOR DEFICIENCIES

**EXTERIOR**

The area between the high school and the library does not drain effectively.

**RECOMMENDATION**

Look into installing storm sewer/drain tile around building and connect downspouts to the drain tile to convey storm water away from the building and to prevent ice buildup.

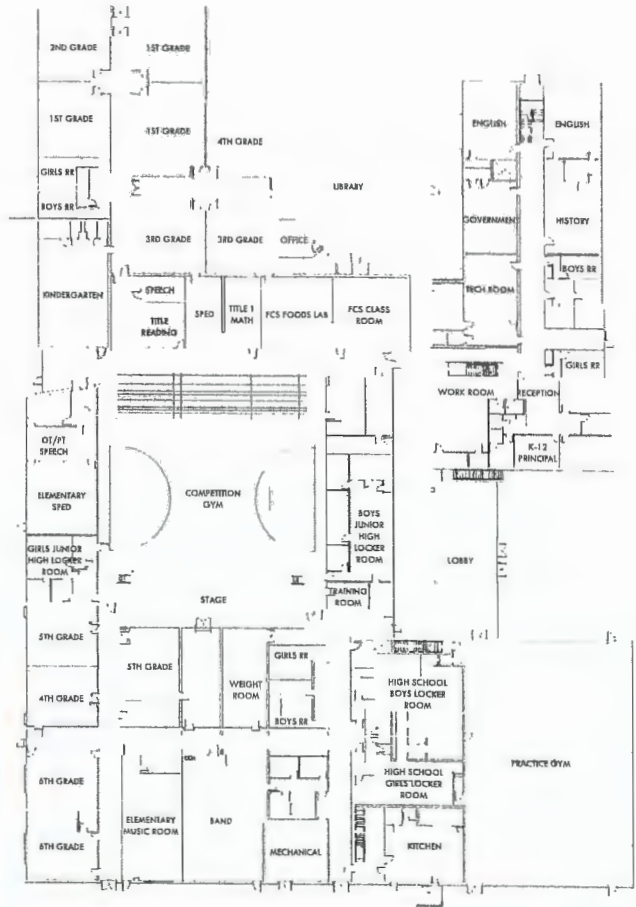


**EXTERIOR**

A number of primary roof drains are plugged with debris.

**RECOMMENDATION**

Remove debris from drains.



**EXTERIOR**

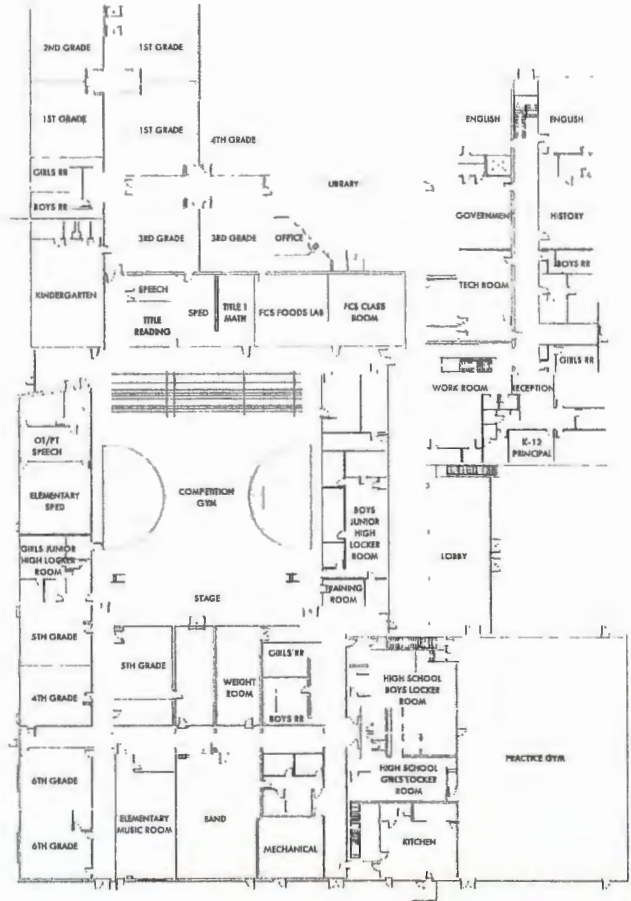
Gas piping on roof is not properly supported.

**RECOMMENDATION**

Repair supports for gas piping.

This does not look like gas pipe  
It is Electrical conduit

Definitely needs to be checked to be sure conduit  
is still sealed and water will not enter  
we will take look at it when we do the Mechanical  
Electrical Upgrades the District just contracted with  
Rasmussen Mechanical  
Ron Paul



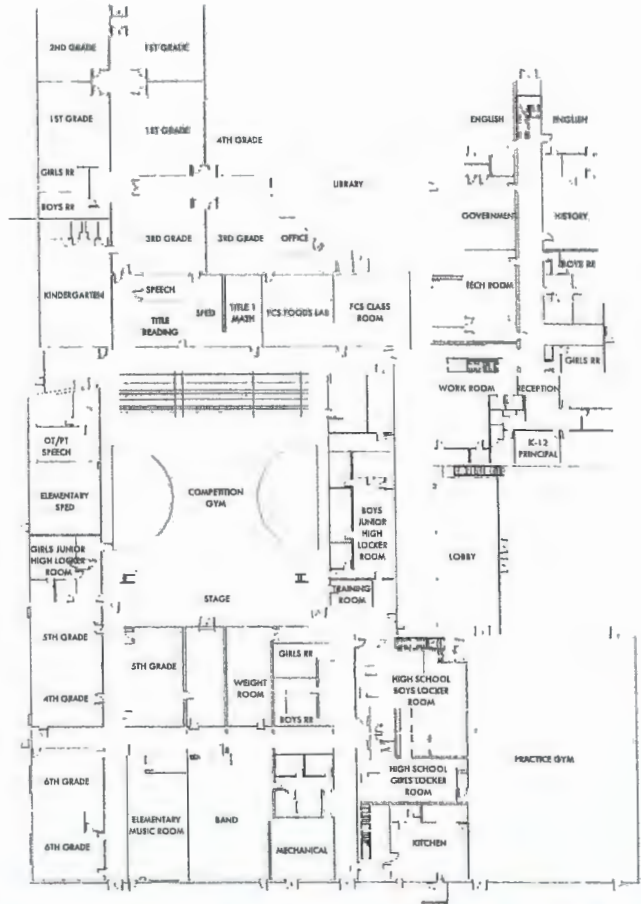
2 | BUILDING ENVELOPE / ADA / MAINTENANCE / PROGRAM  
EXTERIOR DEFICIENCIES

**EXTERIOR**

At control joint there is missing sealant.

**RECOMMENDATION**

At control joint, replace/install sealant.



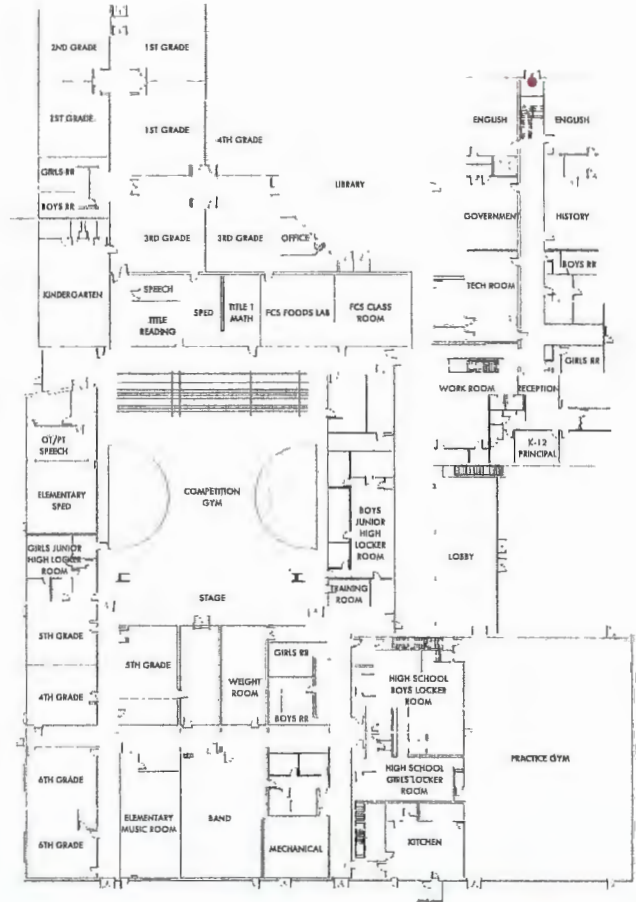
2 | BUILDING ENVELOPE / ADA / MAINTENANCE / PROGRAM  
EXTERIOR DEFICIENCIES

**EXTERIOR**

Light fixture damaged/not functioning.

**RECOMMENDATION**

Replace light fixture with new LED light fixture.



### PURPOSE OF EVALUATION

Engineering Technologies, Inc. was retained to do an evaluation of the existing mechanical and electrical systems at the High School and Elementary School facility in Alma, Nebraska.

Information contained in this report relates to the adequacy of the existing mechanical and electrical systems, condition of equipment, code deficiencies, life safety issues, and suggested recommendations to upgrade the existing mechanical and electrical systems.

Data for this report was based on casual field observation; and information obtained from existing drawings. Existing conditions were documented and our findings and recommendations have been included as a part of this engineering evaluation.

### GENERAL INFORMATION

The original northeast 2-story classroom structure was built in 1938 with the west gym and classroom addition built in 1952. In 1990, additions were done to the north and south. Some of the older HVAC equipment and controls were upgraded in 2008 and the southwest corner of the building was renovated in 2017. A new shop building was built across the street to the west in 2017.

### MECHANICAL DEFICIENCIES

#### > HEATING SYSTEMS

The facility has two hot water heating systems that serve it. The first system is in the boiler room at the south end of the facility and it has three natural gas fired LES VW-135 vertical firetube hot water boilers, each with 1000 MMBH heating capacity. They were installed in 1990, so they are nearing the end of their useful life. This system serves the areas served by the south air handling unit, the north classroom air handling unit, and the southeast gym air handling unit. These units all have hot water heating coils and have some amount of outside air being able to be brought in by the units. The second system is in the boiler room in the basement of the 1936 structure and it has three natural gas fired LES VW-100 vertical firetube hot water boilers, each with 750 MMBH heating capacity. They were installed in 2008, so they should have about 25 years of useful life left. This system serves the two pipe heating/cooling system in the 1936 structure.

The HVAC piping systems appear to still be in good condition. The air handling units that were installed in 1990 are nearing the end of their useful life and it is very hard to know how well the ducts are sealed and how clean the ducts are. Duct cleaning may not be a bad idea if you do a project / Ron  
Air handling units can be upgraded without replacing / Ron

The south air handling unit, located in the south boiler room, is a 7-zone multizone unit. The north air handling unit, located up on a mezzanine above the restrooms, is an 8-zone multizone unit that serves the north classrooms. The old gym air handling unit, is located up on a mezzanine at the north end of the gym. The 1990 gym air handling unit is located up on a mezzanine at the south end of that gym. The gym units are single zone, constant volume units. The 1990 locker room area is heated by a gas fire rooftop unit, which is scheduled for replacement this summer. There is also a gas fired rooftop unit that serves the old girls locker room area and one that serves the area south of the old gym. THIS AIR HANDLER IS ACTUALLY IN THE LOWER LEVEL OF THE GYM  
Ron

The east commons/entry has two gas fired furnaces that heat it and the office area just north of that also has two gas fired furnaces. This heating equipment has 80% thermal efficiency and still appears to be in good condition and should have another 10 years of useful life.

The 1936 two story building has two-pipe fan coil units which heat and cool the classrooms in that part of the facility. These units are approximately 14 years old, so there are still in decent condition. The main issue with a two-pipe system is not being able to provide simultaneous heat and cooling between zones as a system switchover has to occur between heating and cooling.

The heating system and air handling systems in the facility are controlled by a Siemens electronic temperature control system, installed in 2008, but I understand that it is being upgraded this summer to a **new Honeywell control system.**

#### > COOLING SYSTEMS

There is no single central cooling system providing in the school facility. However, the two large classroom air handling units have direct expansion (DX) cooling coils with outdoor condensing units and the four furnaces, serving the commons and offices, also have DX coils and condensing units on the roof. **The 1990's gym unit does not have cooling.** The 2-pipe hot and chilled water system serving the 1936 two-story structure has cooling through that system and a 65-ton chiller that was installed in 2008. The chiller should have about 5 more years of useful life. [This Gym unit will have Cooling with the Project Rasmussen Mechanical is doing Ron](#)

During the 2017 renovation, a variable refrigerant flow system was installed in about 6 rooms in the southwest portion of the building. This system has approximately 16 tons of cooling capacity and is still in good condition. The unit is coupled with cassette type of fan coils in the classrooms that cool those spaces.

#### > VENTILATION SYSTEMS

In the air handling systems in the building, there are fresh air dampers that are controlled by the control system. Exhaust systems are also not in very good condition, therefore only minimal exhaust is provided from the main restrooms and **locker rooms.** These systems do not meet current Indoor Air Quality guidelines. Prescriptive amounts of fresh air should be provided to the spaces. Proper exhaust in all restrooms, locker rooms, science rooms, etc. has not been fully provided in the facility. The overall air exchange rate is not adequate to remove moisture and odors. [We are addressing the Locker Rooms on the south addition with the Rasmussen Project Ron](#)

The 2017 Shop Building does have some ventilation but there are not systems at welding locations to capture welding smoke down at the work surfaces, though it does provide some general exhaust in the area. It is doubtful that adequate welding smoke removal is occurring. There is no duct collection system for the wood working equipment.

The Kitchen exhaust hood construction appears to meet the current Mechanical Code and NFPA fire codes. The dishwasher does have an exhaust grille/fan, but it does not appear to be moving air and taking moisture away from the space. **There is also not a makeup air system provided to replace exhausted air streams.**

[There is make-up air to the Kitchen and we are going to upgrade and temper the air with the Rasmussen Project / Ron](#)

#### > PLUMBING SYSTEMS

Much of the soil, waste and vent piping and domestic water piping is as originally installed. It appears that copper domestic water piping and cast iron soil and waste piping was installed throughout most of the facility, but it should be verified that there is no galvanized water piping still in the 1936 structure. The plumbing piping in the facility appears to in fair condition. Not all of the required existing restrooms appear to fully meet the Americans with Disabilities Act Guidelines and the restrooms in the building have a mix of old and newer fixtures, some of which are in need of replacement, especially in the old locker rooms.

The original water service for the high school is a 4" ductile iron service which enters the south side of the building at the boiler room. There is a water meter installed and a reduced pressure principal backflow

preventer installed on the boiler water fill system.

A Lochinvar domestic hot water boiler, which is natural gas fired at a rate of 999 MBH, and a storage tank are installed in the south boiler room, providing hot water to the fixtures in the 1990 additions and the 1952 locker rooms. A 100 gallon Rheem water heater is installed in the 1936 basement boiler room.

None of the facility has fire sprinkler coverage. A fire sprinkler system is recommended and can save insurance costs for the District.

#### **ELECTRICAL DEFICIENCIES**

##### **> ELECTRICAL SERVICE & EQUIPMENT**

There is one electrical service into the facility, installed in 1990 and fed from the pad mounted transformer by the south boiler room. The main service gear is a 1,600-amp, 208-volt, 3-Phase switchgear. This is all Square D equipment, and it appears to be in good condition. This switchgear also has a motor control center for the larger motors. There appears to be a couple of spare switches that can be used to add additional loads. There were no amperage interrupting capacity (AIC) ratings on the service equipment, due to the age of the system, it is assumed that the equipment does not meet current AIC rating requirements.

There are a few newer Square D panelboards located around the school that were added during the 1990 project. These panelboards are in good condition and do have some additional space for future loads.

##### **> LIGHTING & RECEPTACLES**

The majority of the building has T-8 fluorescent lighting, but some of the fixtures have been upgraded to fluorescent bypass LED lamps in the last 2-3 years. The gyms have T-5 high bay fixtures. Compared with current LED technology, the fluorescent fixtures are significantly less efficient. The lighting levels in some spaces in the original building are not at acceptable levels for a learning environment. Exit lights were present marking egress routes with combination type exits signs and some emergency wall pack lights were present. The coverage and quantities of emergency lighting fixtures seemed to be inadequate to cover the spaces in the facility. It appears that some of the old exterior fixtures have been replaced with LED fixtures.

The lighting controls of the majority of the spaces are basic ON/OFF toggle switches. Some of the upgraded LED areas have had dimmer switches installed. There seemed to be no interior automatic lighting controls in the original building. A few areas have motion sensor control in the 2007 addition, the majority are basic switches.

Electrical receptacles throughout the school are of the grounding type, but do not appear to be tamper-resistant type. The original building classrooms are in need of additional quantities of receptacles and circuits due to new computers, visual aids and other equipment which has been added in the facility throughout the years. Required new circuits cannot be accommodated at this time due to the lack of spaces available and capacity in the branch circuit panelboards.

##### **> FIRE ALARM SYSTEM**

An older Notifier Fire Alarm System is installed in the east commons area. The notification devices are not up to current codes and are needed in more locations. Smoke and heat detectors were observed throughout the building; however, they are older devices. No voice evacuation systems are provided in the large assembly areas, like the gymnasiums.

##### **> SPECIAL SYSTEMS**

The existing main data rack is located in the north 1990 addition. For the most part, the cabling seems to be

well organized.

The data cabling is CAT 5E and telephone cabling is CAT 3.

A school-wide combination bell and security system is installed and is only a few years old. It runs through the computer system in the office and seems to be adequate for the building. The intercom system is through the phone (IP system) but it is older and does not cover the entire facility.

The facility doesn't seem to be well covered with wireless access points (WiFi).

Classroom audio/visual equipment consisted of projectors.

#### > SECURITY SYSTEMS

Access controls are present at some exterior doors. Access controls are minimal as card readers with electrified locks.

A closed-circuit video surveillance system is present consisting of cameras in corridors and other common spaces for coverage throughout high traffic areas, the exterior of the building, and entrance / exit doors. The coverage of the video surveillance seemed adequate throughout the school.

#### > CODE COMPLIANCE ISSUES

The facility does not fully meet ADA accessibility guidelines. Handicapped door openers are provided at the entrances of the school, but restroom layouts and plumbing fixture heights and accessibilities do not fully meet current guidelines in the original building.

The ventilation systems for the facilities do not meet current ASHRAE Indoor Air Quality guidelines throughout, especially in the older areas of the facility. Adequate exhaust and fresh air is not provided to fully ventilate all of the spaces for a healthy learning environment.

Emergency lighting is not adequately provided as required to safely allow egress from the facility.

Lighting controls throughout the building do not meet the current IECC requirements for automatic control.

The Fire Alarm System and panel do not meet current ADA guidelines and NFPA Code. The fire alarm system is not a voice-evacuation system as required by the NFPA.

There are not boiler emergency shutdown switches located inside the boiler room, adjacent to the boiler room doors. These switches are required to meet the current State Boiler and Pressure Vessel Code.

I cant imagine these are not in place / i will look next time i am at the school / Ron

The existing kitchen does not have makeup air for the kitchen hood as required by current NFPA and Mechanical Codes. There is make-up air to the kitchen space. Not sure it is a requirement that the Kitchen Hood have its own make up air as some are built that way / Ron

The existing kitchen does not meet current ground-fault protection (GFCI) requirements. Equipment located under the hood does not meet shunt-trip protection requirements.

The receptacles throughout the building are not tamper-resistant type per current NEC requirements.

The building is not covered by a fire sprinkler system as possibly mandated by the Fire Marshal if any work is to

be done in the facility. Fire sprinkler systems can also help save insurance costs for the District.

**> MECHANICAL RECOMMENDATIONS**

A. Replace the HVAC air handling equipment and boiler equipment installed in the 1990's. Provide a new electronic DDC temperature controls system for the entire facility to allow better comfort control for all areas in the facility and increase system energy efficiencies. Modify the air handling systems to provide prescriptive ventilation for the facility by exhausting contaminated air streams and introducing fresh, outdoor air into the spaces as recommended by ASHRAE Standard 62 for Indoor Air Quality.

New Honeywell DDC System will be going in / Ron

B. Install a second piping system in the 1936 building for a four-pipe system for those fan coil units, which should already have second coils in them.

C. Remove the old plumbing fixtures in areas which have not been remodeled and provide new fixtures which are operational and meet ADA accessibility guidelines.

D. Provide a new fire sprinkler system to cover all floor areas of the facility, if required by the Fire Marshal and/or code review of the facility.

E. Provide a makeup air system for the kitchen that complies with current fire and mechanical codes.

we are providing a make up air system for the Kitchen, not sure of codes he is referring to / Ron

**> ELECTRICAL RECOMMENDATIONS**

A. Install new branch circuit panelboards in the building to meet the demand needs of any new HVAC equipment and new receptacle loads added.

B. Provide additional electrical receptacles and circuits in classrooms to meet the current and future power usage demands. Replace existing receptacles with tamper-resistant type per current code regulations.

C. Provide proper GFCI protection of kitchen equipment and proper shunt-trip control of required loads located under the hood.

D. Provide new efficient LED lighting systems in the areas that have yet to be upgraded. This will supply better lighting levels designed for the specific tasks and use less energy than the current fixtures. Light fixtures shall be selected for the most cost effectiveness and appropriate style for the area served. Provide a reliable emergency lighting system to safely light paths of egress for the facility and replace all exit signage in the building.

E. Provide new lighting controls throughout the building to meet current IECC 2018 requirements. This will entail adding motion sensors, dimming, daylight harvesting, and time-clock control to required fixtures.

F. Replace the fire alarm system with a voice-evacuation system. Provide new notification devices and detection devices to meet current NFPA code and ADA accessibility guidelines.

G. Upgrade the phone and intercom system to cover the entire facility with a fully digital system.

H. Install wireless access points throughout the facility to enable WiFi coverage throughout.

**OPINION OF PROBABLE CONSTRUCTION COSTS**

**Costs do not include project contingency or design fees**

1. Replace air handling equipment / boilers in the 1990's additions <i>as long as the air handler cabinets are good we can upgrade without replacing boilers could be high efficient, i would not replace until we have to / Ron</i>	\$555,000
2. Provide ventilation for the areas in the 1952 and 1936 buildings	\$225,000
3. Provide New Temperature Controls System	<b>(being done in current project)</b>
4. Provide a Fire Sprinkler System throughout the facility	\$ 305,000
5. Provide a Kitchen Make-up Air System <i>we are addressing / some hoods have make-up air on them if that is what Marty means / Ron</i>	\$ 65,000
6. Replace old plumbing fixtures	\$45,000
7. Add New Panelboards, circuits, & Receptacles in 1952 and 1936	\$270,000
8. Replace non-LED Light Fixtures throughout Building with LED	\$355,000
9. Upgrade Lighting Controls throughout Building	\$145,000
10. Upgrade Fire Alarm System	\$165,000
11. Upgrade Phone and Intercom Systems <i>Done</i>	\$60,000
12. Add wireless access points throughout facility <i>Done</i>	\$35,000
<b>Total</b>	<b>\$ 2,225,000</b>

5 | OPINION OF PROBABLE COSTS  
PROJECT COST EVALUATION

Assumes 2022 Construction Start - Add 6% to Construction  
Costs for Each Year Thereafter for Inflation

INTERIOR FINISHES, CABINETS, DOORS & EQUIPMENT	\$403,500
ROOF	\$5,000
SITE & EXTERIOR	\$50,000
MECHANICAL	\$1,195,000
ELECTRICAL	\$1,030,000

**PROJECT TOTAL**

**\$2,683,500**

NOTE: ALL PROJECTED COSTS REPRESENT 2022 CONSTRUCTION COSTS  
NOTE: DESIGN AND ENGINEERING COSTS ARE NOT INCLUDED

6 | APPENDIX  
SITE PLAN

6 | APPENDIX  
FLOOR PLAN

6 | APPENDIX  
RENDERINGS