

1 CLAYTON ELEMENTARY

Clayton Elementary provides a comprehensive program for Kindergarten and 1st through 5th grade students.

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LAYTON KIDS CARE

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Interventions and Supports



2916

MAIN
ENTRANCE

BUILDING AREA: 36,150 sq. ft.

STUDENT POPULATION: 243 STUDENTS

SITE SIZE: 5.57 ACRES; 43% IMPERVIOUS SURFACE

GRADES SERVED: KINDERGARTEN, GRADES 1ST-5TH

PARKING: 48 STALLS (3 HANDICAP, 45 REGULAR)

BUS QUANTITY: 5 BUSES / 5 BUS ROUTES

CLAYTON ELEMENTARY: BUILDING EVOLUTION

Clayton Elementary was originally constructed in 1957. An office and classroom addition was added in 1970, with the most recent being a gymnasium and classroom addition in 1992.

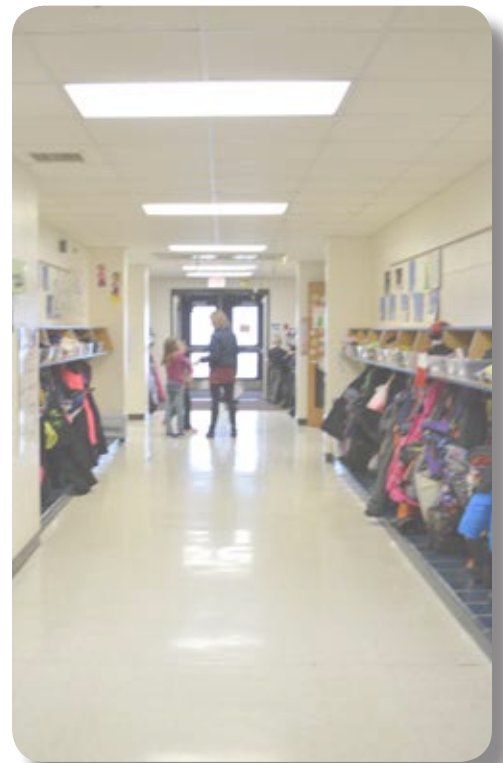
The following building evolution diagram outlines the additions made to the original building over time due primarily to student enrollment growth.



Clayton Elementary Main Entrance & Main Office

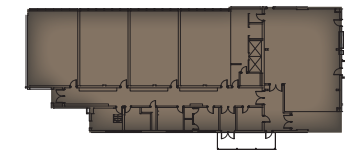


Clayton Elementary Classroom

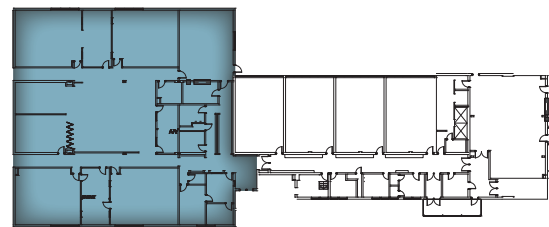


Clayton Elementary Corridor

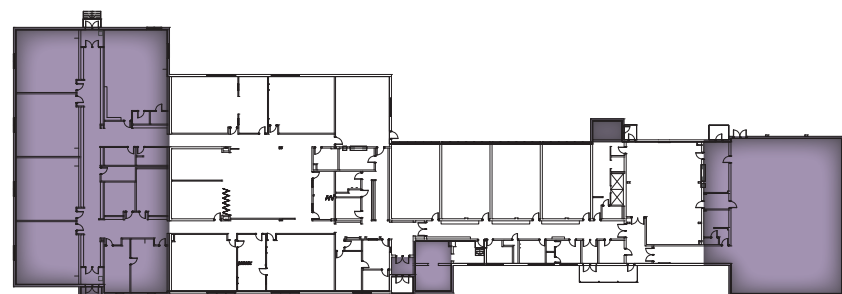
CLAYTON ELEMENTARY: BUILDING EVOLUTION



1957






1970



1992



-  = 1957 - Original
-  = 1970 - Office/Classroom Addition
-  = 1992 - Gymnasium/Classroom Addition



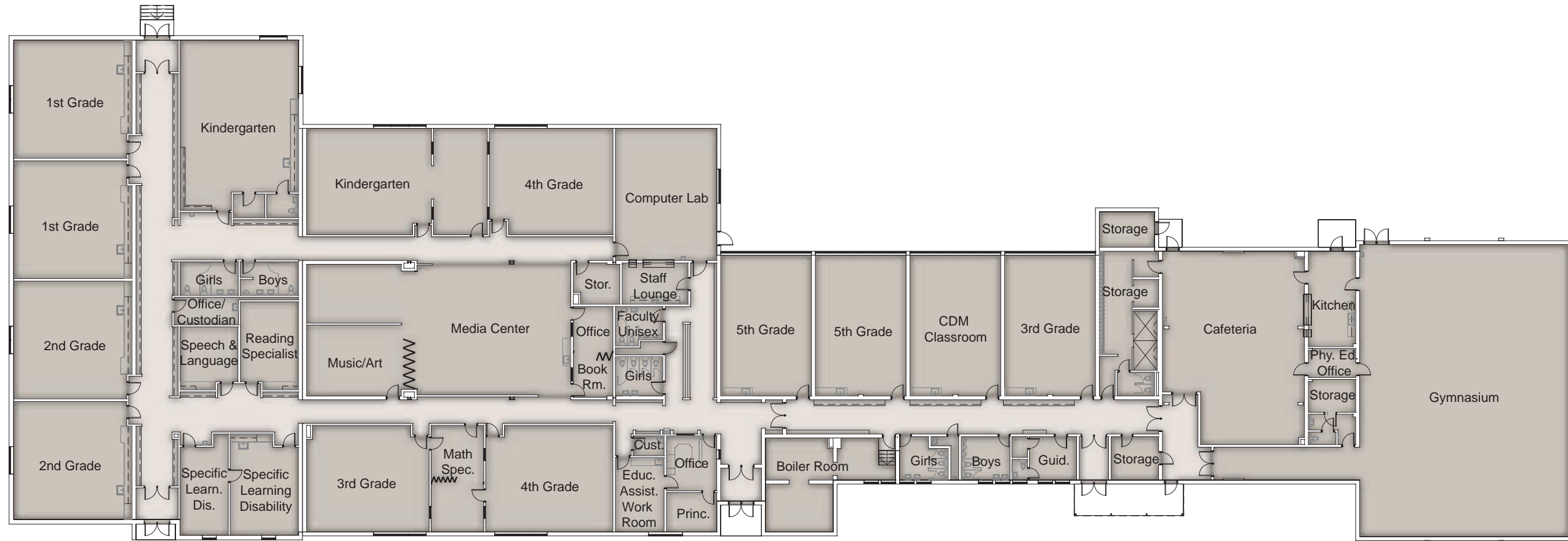
CLAYTON ELEMENTARY: EXISTING SITE PLAN



** Note: Assessment reflects the site as it existed at the time of its analysis and does not reflect any subsequent projects or renovations.*

SITE PLAN
not to scale

CLAYTON ELEMENTARY: EXISTING FLOOR PLAN



FIRST FLOOR PLAN
not to scale



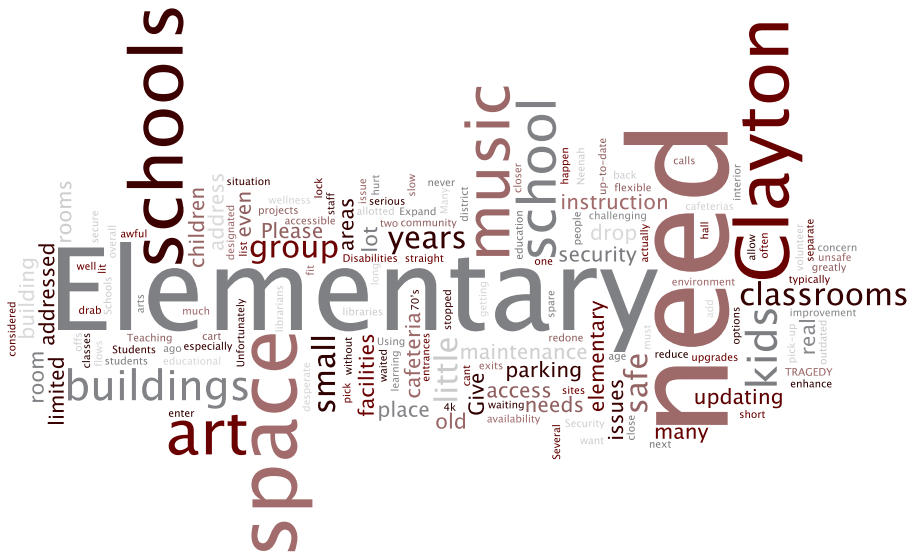
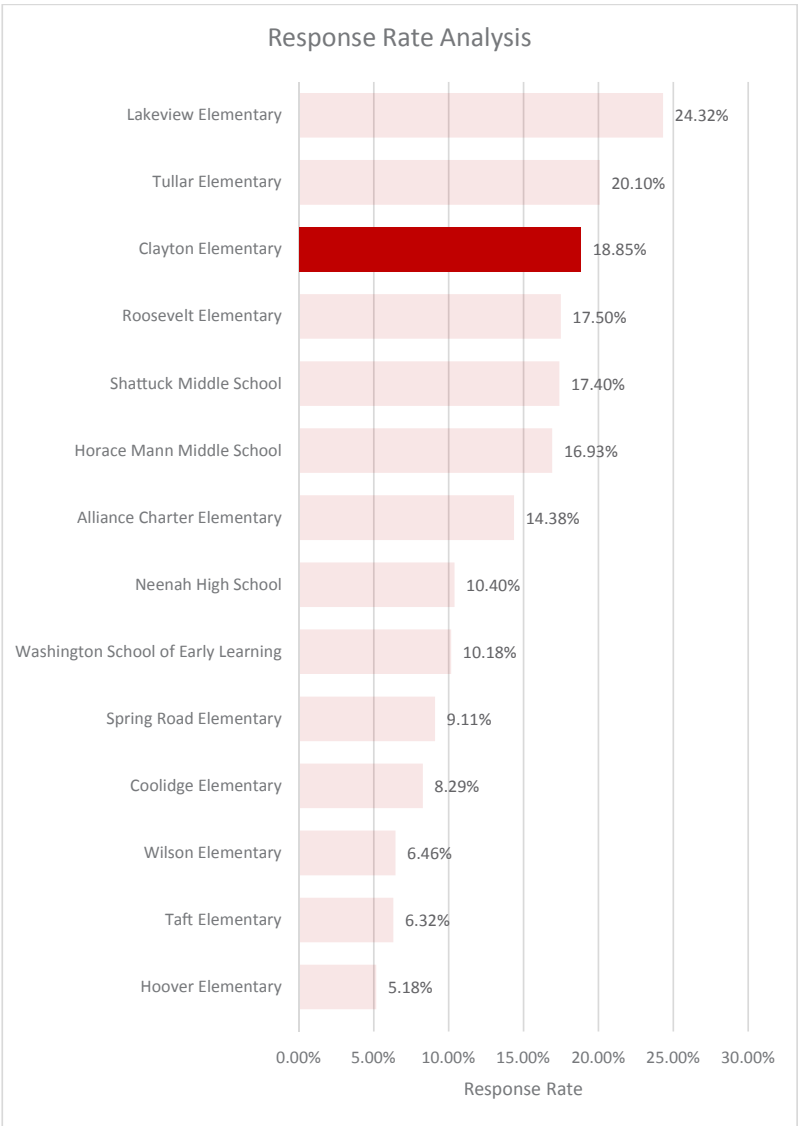
CLAYTON ELEMENTARY: PARENT SURVEY FEEDBACK

In February 2017, the District sent out a survey via email to all parents of students within the District with the focus on identifying and prioritizing needs at each school. Parents were asked to respond to a series of questions, as well as provide open-ended comments if desired.

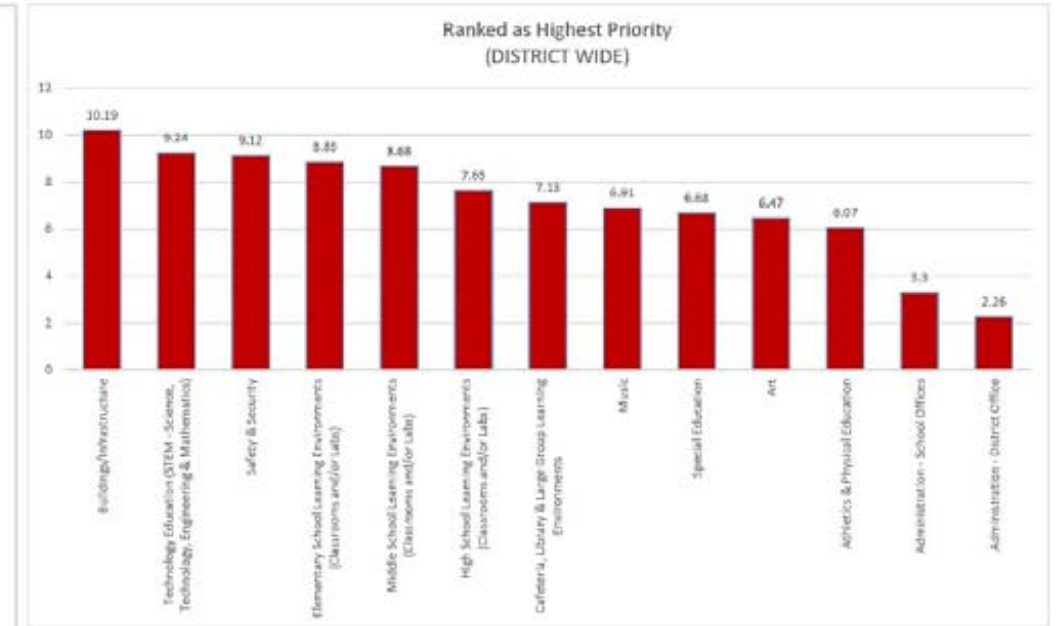
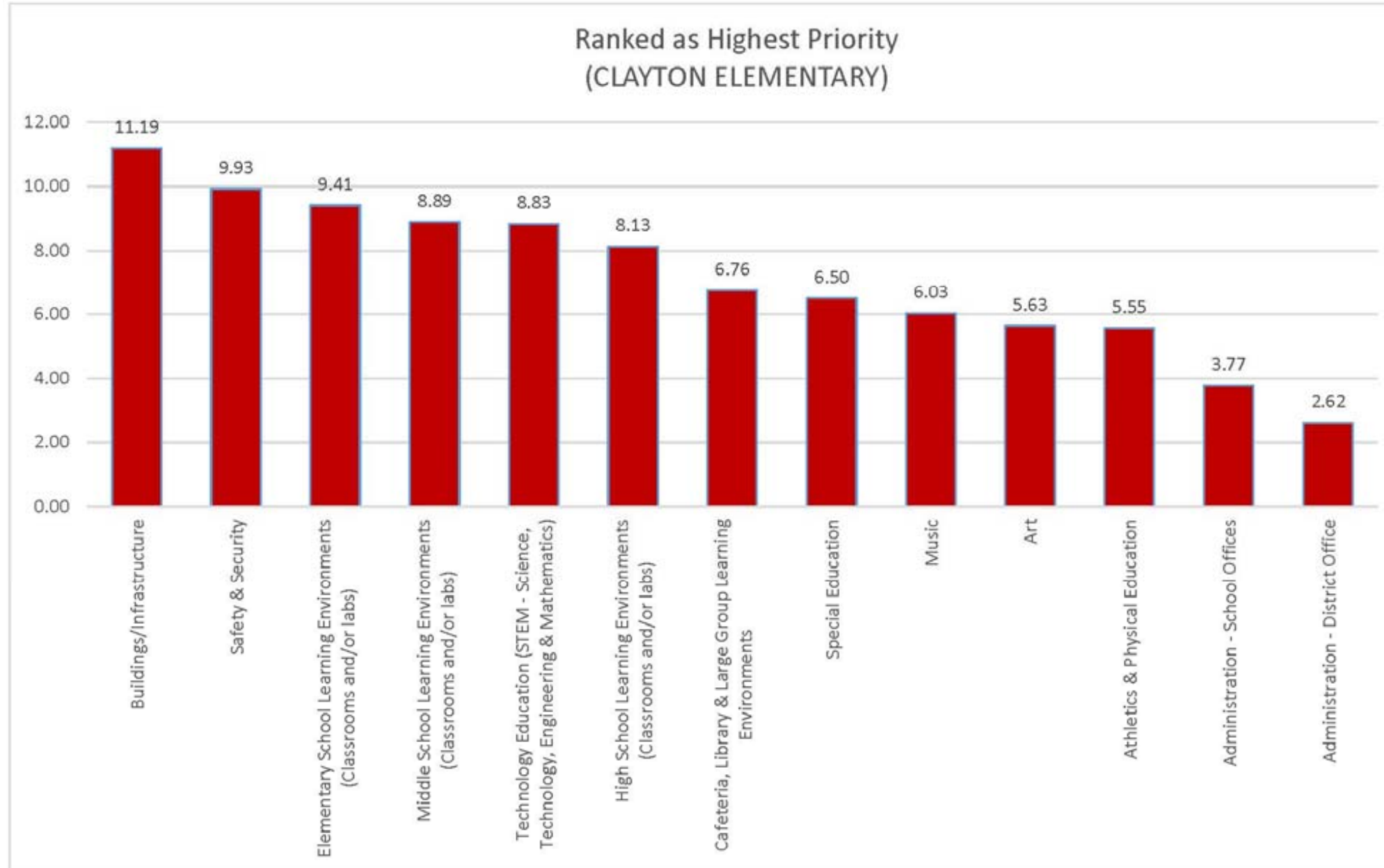
The following information reflects feedback and response rate for Clayton Elementary.

TOTAL PARENTS TO RECEIVE SURVEY: 244
TOTAL NUMBER OF RESPONSES: 46
RESPONSE RATE: 18.85%

- ADDITIONAL NOTES**
- Clayton Elementary had the third highest response rate in the District
 - Clayton Elementary accounts for 8.03% of all parent survey feedback



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CLAYTON ELEMENTARY: SUMMARY OF STAFF SURVEY FEEDBACK

The following is a summary of potential improvements at Clayton Elementary. This is not intended to be a comprehensive list, but a summary of possible upgrades as identified by staff. The following information was obtained from staff survey responses and numerous meetings and listening sessions held by district leadership and Bray Architects with the objective of casting a broad net to try and gather as much feedback regarding needs as possible.

1. Academic & Educational Improvements:

CLASSROOMS

- Undersized; Pod/house configuration of classrooms desired to better support curriculum
- Additional wall space desired for hanging items and projects
- Variety of flexible/movable/modular furniture desired
- Additional outlets desired
- Sinks
- Additional storage desired within the classroom

CONFERENCE ROOMS & LARGE/SMALL GROUP INSTRUCTION

- Large group instruction/multi-purpose/commons space desired

MAIN OFFICE

- Safe and secure entry sequence that requires entrance into the main office/reception prior to being released into the main building desired

MUSIC

- Separate, dedicated classroom desired

ART

- Separate, dedicated classroom desired
- Flexible/movable furniture desired that can accommodate students of multiple age levels
- Sink(s) with multiple faucets desired for student clean-up; utility sink(s) desired for material clean-up
- Secure storage desired for larger materials and project storage
- Ceramic kiln desired

STAFF WORK ROOM & LOUNGE

- Larger staff work room desired
- Larger staff lounge desired

HEALTH ROOM/ NURSE

- Undersized; dedicated room with ample space to accommodate the health aide desired
- Privacy for ill students desired
- Restroom and/or sink within the health room desired

CAFETERIA

- Undersized; inefficient sequence for food pickup/receiving
- Sound/noise control is a concern; can be overwhelming for students
- More welcoming/less institutional atmosphere desired

GUIDANCE

- Additional Offices (current offices are doubled up)

SCIENCE

- Additional science rooms desired (currently lacking (1) classroom for science)

2. Facility & Site Improvements:

TECHNOLOGY

- Improved WiFi capabilities
- Smartboard
- Better access to computers for all students

BUILDING SYSTEMS

- HVAC
 - Air conditioning desired

INFRASTRUCTURE

- Windows
 - Additional and new/updated windows desired
- Doors
 - New/updated doors desired
- Lighting
 - Improved fixtures with motion sensor technology desired

MISCELLANEOUS

- Bathrooms
 - Additional student/group bathrooms desired
 - Dedicated unisex bathroom for Special Ed. desired
 - Dedicated staff bathrooms desired

SITE

- Improved accessibility, surface, and equipment at the playground area desired; current condition is difficult for special needs students.
 - Handicap accessible entrance to playground/pick up area
- Updates and improvements to blacktop/parking areas desired
- Additional parking stalls desired
- Storage to support outdoor activities (soccer, track, etc.) desired

CLAYTON ELEMENTARY: SUMMARY OF STAFF INTERVIEW FEEDBACK

The following is a summary of potential improvements at Clayton Elementary. This is not intended to be a comprehensive list, but a summary of possible upgrades as identified by staff. The following information was obtained from staff interviews and numerous meetings and listening sessions held by district leadership and Bray Architects with the objective of casting a broad net to try and gather as much feedback regarding needs as possible.

1. Academic & Educational Improvements:

CLASSROOMS

- Flexible seating desired; allowing for multiple configurations for desks/tables
- Limited space makes it hard to collaborate with other classes
- Kindergarten classroom is undersized; a toilet is needed
- Cubbies desired over lockers
- Sinks desired in all classrooms
- PT/OT dedicated room desired
- PLTW space is undersized
- Additional table space, and storage for PLTW desired
- E.L.L. dedicated space desired

CONFERENCE ROOMS & LARGE/SMALL GROUP INSTRUCTION

- Large group instruction/multi-purpose/commons space desired

MAIN OFFICE

- Safe and secure entry sequence that requires entrance into the main office/reception prior to being released into the main building desired

MUSIC

- Larger room and better sound proofing/acoustics desired

ART

- Sinks desired

STAFF WORK ROOM & LOUNGE

- Larger staff work room desired
- Larger staff lounge desired

HEALTH ROOM/ NURSE

- Privacy for all ill students desired
- Small waiting area desired
- Visibility from secretary
- Traveling nurse occasionally visits

CAFETERIA

- Undersized; inefficient sequence for food pickup/receiving
- Additional lighting needed
- Sound/ noise control is a concern; acoustics desired
- Seating is tight; 150 students per lunch period
- Access to storage in ceiling is by ladder and unsafe

GUIDANCE

- Want to be centrally located in building

PSYCHOLOGIST

- Dedicated office desired

SCIENCE

- Science room with lab stations desired

LIBRARY/MEDIA CENTER

- Soundproofing desired
- Difficult to monitor students due to shape of space
- Separation from hallways and library desired
- Storage for Ipad carts desired

GYMNASIUM

- Undersized
- Wood floor desired
- P.E. instructor office desired
- Additional storage desired

2. Facility & Site Improvements:

BUILDING SYSTEMS

- HVAC
 - Air conditioning desired

INFRASTRUCTURE

- Windows
 - Screens need to be replaced
 - Windows open outwards; students often walk into them
- ADA accessibility desired; especially at entrances

MISCELLANEOUS

- Bathrooms
 - Additional student/group bathrooms desired
 - Dedicated unisex bathroom for Special Ed. desired
 - Dedicated staff bathrooms desired

SITE

- Improved accessibility, surface, and equipment at the playground area desired; current condition is difficult for special needs students
- Fence in playground with gates desired
- Updates and improvements to blacktop/parking areas desired

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CLAYTON ELEMENTARY: NEEDS ASSESSMENT

The following is a summary of potential improvements at Clayton Elementary. This is not intended to be a comprehensive list. The following information was obtained through notations made by Bray Architects at extensive tours of the building and grounds, as well as needs identified by school maintenance personnel.

1. Interior Infrastructure/Maintenance:

WALLS

- a. Water leaks into the building at the foundation wall in the tunnels.

CEILING

- b. Gymnasium ceiling is stained and shows signs of water damage; staff reported that during winter months, condensation and snow on the roof cause leaks into the ceiling below
- c. Staff indicated areas of potential asbestos ceiling tile in the IMC/Library

FLOORING

- d. Much of flooring is stained, worn, cracking and in need of repair; excessive tile cracking present within interior entry to school
- e. Staff indicated areas of potential asbestos tile in classroom areas

2. Building Envelope:

WALLS

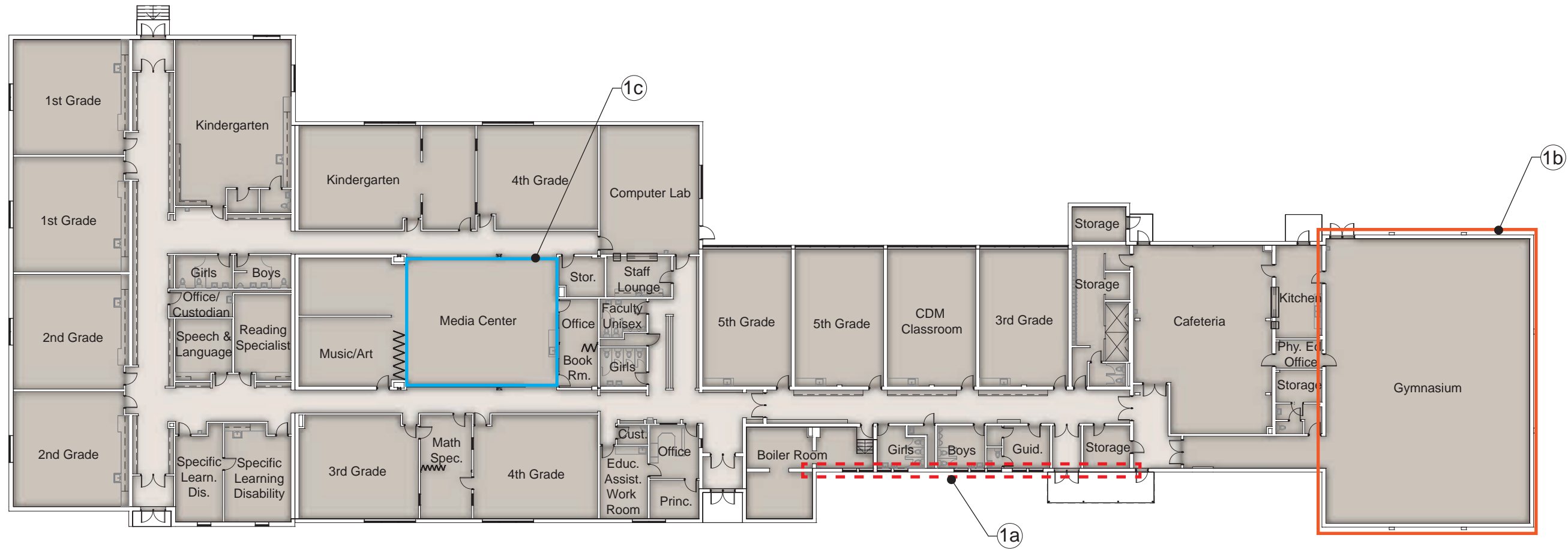
- a. There are multiple areas of discoloration and staining present on the exterior of the building, possibly due to water damage; this is especially present at sills, gutters, and on brick in the back of the building
- b. Concrete masonry block walls have areas of discoloration and paint peeling

DOORS

- c. Some exterior doors are worn/faded and peeling

ROOFS

- d. New roofs needed for some portions of the building
- e. Sand from roofs is often blown into gutters and becomes trapped
- f. Many gutters have large openings along the front of the downspout and appear to have trouble directing water as intended



FIRST FLOOR PLAN
not to scale



CLAYTON ELEMENTARY: BUILDING SYSTEMS SUMMARY

The following is summary of Plumbing, HVAC and Electrical needs. This is not intended to be a comprehensive list, but a summary of existing building system needs and possible recommendations as identified by the engineering team. Full engineers' reports are located later in this document.

Plumbing:

- Water is well supplied with a 2" water service and well tank and is unable to support future additions; new additions or major renovation would require a new larger water service.
- Water distribution piping in the original building is galvanized pipe and copper, in fair condition, and nearing the end of its life expectancy; replacement of existing pipe and fittings with new type "L" copper tube and fittings is recommended.
- There is no fire suppression system; if a complete fire sprinkler system is desired, a new 6" water service is required.
- Sanitary waste flows by gravity out the building to a field system. Sanitary sewer system in the original building is nearing the end of its life expectancy, and inspection of the existing sewer located below the floor is recommended; replacement pending outcome of scope.
- Roof water is collected by gutter and downspout flow by gravity out of the building to drainage field.
- Prep kitchen has two single compartment sinks, a dishwasher, and no disposal.
- Classroom sinks do not have solids traps installed on the waste piping.
- Storm sewer system in the original building is nearing the end of its life expectancy, and inspection of the existing sewer located below the floor is recommended; replacement pending outcome of scope.
- Clear water sump pump is in fair to good condition, and should be monitored and repaired/replaced as necessary.
- The domestic water heater was installed in 1990, is in fair condition, and is not energy efficient; replacement with a high efficiency unit is recommended.
- Domestic water is softened for hot water only.
- Plumbing fixtures are a combination of various styles and ages, with most of the fixtures original to the building age they were installed and some of the fixtures having been replaced with newer water efficient and ADA compliant fixtures. Water closets, urinals, and lavatories should be replaced with new water conserving and ADA compliant fixtures, and older drinking fountains should be replaced with new ADA compliant fixtures with a bottle filler. Faucets on classroom sinks should be replaced with new ADA compliant faucets.

HVAC:

- Steam boiler plant was installed in 1957 and has two Kewanee steam boilers that are original to the building, are fired with natural gas, are in fair condition, and have exceeded their estimated life expectancy. Owner indicated that the boiler plant has some reserve capacity, and the smaller boiler has had maintenance problems. Continue preventative maintenance and plan to replace the Kewanee boilers with a hot water system, and any future additions or construction will most likely require the addition of boiler capacity.
- Steam piping is original to the building, runs in the tunnels and ceilings throughout the building, is in fair condition, and has pipes in the gymnasium that leak. When the existing boilers are replaced with hot water boilers, all steam and condensate piping will be replaced with hot water piping.
- Plan to replace the aging unit ventilators in the classrooms, gymnasium and multi-purpose room with hot water unit ventilators, as they are original to the building and have exceeded their estimated life expectancy of 25 years.
- Plan to replace the aging constant volume air handling unit serving the IMC with a hot water air handling unit, as it is original from 1970 and has exceeded its estimated life expectancy of 30 years.
- Offices are also served by convectors and receive code required outside air from operable windows; current WI code does not allow natural ventilation for school offices.
- Only the office, computer room and workroom are air conditioned with air conditioning units.
- With any renovation, plan to replace the door transfer grille relief system with a code approved system, as door transfer grilles are currently used to transfer relief air from the classrooms to the corridor, and current building code does not allow transfer air into a path of emergency egress.
- With a change to a hot water system, all supplementary heat (convectors, cabinet heaters, etc.) will need to be replaced with hot water units.
- The pneumatic control system has limitations that result in comfort complaints and requires frequent calibration to maintain accuracy; continue to maintain and operate the system as long as the current mechanical equipment remains. When renovations to the existing equipment are made, a changeover to digital controls is strongly recommended.

CLAYTON ELEMENTARY: BUILDING SYSTEMS SUMMARY

Electrical:

- Main electric service has been recently replaced, is in good working condition, and has capacity for 1 additional breaker; exercising of circuit breakers and performing thermal imaging analysis for predictive maintenance purposes is recommended. Provide surge suppression, as none exists.
- Panelboards vary in age, with some nearing the end of their useful lifespan, and some having been replaced or added during the most recent service upgrade and are in good condition; vintage circuit breaker panelboards should be scheduled for replacement within the next 10 years.
- Utility service consists of pole mounted transformers with an overhead electrical service.
- Provide a new emergency generator system if desired, as there is no emergency backup power available in the building.
- Ensure proper working clearances are maintained in front of all panelboards at all times by using safety tape to physically indicate clearances on floor/wall around panelboards.
- Much of interior lighting throughout the building consists of a variety of T8 fluorescent or incandescent light fixtures that range in age and are in good condition, while the cafeteria and gymnasium have high bay metal halide fixtures with 1 fluorescent fixture with emergency battery backup; replace fixtures with LED equivalents and provide dimming controls and occupancy sensors to maximize on energy savings.
- General lighting controls in rooms consist of toggle switches with no occupancy sensors or dual level lighting, most classrooms utilize split area zones and some have dual level lighting controls, and corridors have toggle switches with no occupancy sensors. Provide corridors with occupancy sensors and remove light switches.
- Schedule exterior light fixtures with LED equivalents and control via existing timeclock/photocell controls.
- If new LED lighting is provided, emergency lighting should be provisioned through back up batteries to normal light fixtures through egress paths and rooms with an occupant load greater than 50 people. An alternative option would be to provide a new emergency generator system. Currently there are no provisions for emergency lighting, except for a handful of wall mounted battery packs throughout the facility that provide minimal, non-code compliant light levels.
- Replace existing 15A rated receptacles with 20A rated type and provide additional receptacles throughout working spaces as necessary, as there is currently a general lack of receptacles throughout the building.
- ShoreTel IP based phone system is in good working condition; no recommendations.
- Data service is provided via fiber optic utility service, is in good working condition, and fiber optic wiring interconnects all schools to the main district network. While it is unknown if the facility has ceiling plenums, riser rated data cabling should be replaced with plenum rated cabling if there are plenums in the ceiling.
- Data cabling consists of a variety of Cat5e and Cat6 cabling, in plenum and riser rated varieties, and the 1 data rack has spare rack capacity for future needs. Data cabling at the data rack should be reinstalled in a clean workmanlike manner with proper labeling.
- Provide a UPS battery backup system to provide battery backup power to the data rack, as there are no provisions for backup power.
- Keyless entry system is in good working condition; access controlled doors are controlled via electric strikes and card readers, and none of the exterior doors have door position contacts. Provide door monitor contacts on all exterior doors to help monitor and control access to the facility.
- Dukane intercom system is nearing the end of its useful lifespan and does not have the capacity to cover the entire school, intercom speakers are nearing the end of their useful lifespan, and staff reported faulty call-in switches getting stuck in the "call" position. Bell schedule system is controlled via timelock and has no reported issues. Schedule the existing intercom system for full replacement with a new IP-based intercom system, schedule speakers for replacement, and provide additional speakers in areas lacking coverage.
- CCTV system has 2 cameras, seems to be in good working condition, and the District plans to add about 18 more cameras to the system in the future; provide new cameras where additional coverage is necessary.
- Faraday fire alarm system is 15 years old and in good working condition, but lacking in notification coverage and smoke detectors; provide additional fire alarm notification devices in areas where coverage is lacking.

Electrical (cont.):

- Add a security system to control and monitor access to the facility, as none exists.
- Replace existing clocks with a synchronized clock system such as a GPS wireless clock system.
- Building has a monitoring system to ensure boilers in the facility are operational.

CLAYTON ELEMENTARY: SITE SUMMARY

The following is a summary of potential improvements at Clayton Elementary. This is not intended to be a comprehensive list, but a summary of possible upgrades as identified by Bray Architects and the engineering team. The following information was obtained through notations made by architects and engineers at extensive tours of the building and grounds, as well as needs identified by maintenance personnel.

Site Improvements:

AREA 1 - ASPHALT PLAY AREA

- Distresses Present:
 - Thermal cracking
 - Depressions due to the base settling
 - Raveling
 - Surface weathering
- Recommended Repair:
 - Remove the existing pavement and 12 inches of base and/or subgrade
 - Place 12 inches of base aggregate dense
 - Pave 3.5 inches of asphaltic pavement
 - Paint all pavement markings for a parking lot

AREA 2 - STAFF/VISITOR PARKING; STUDENT DROP-OFF/PICK-UP

- Distresses Present:
 - Thermal cracking
 - Depressions due to the base settling
 - Fatigue cracking due to base failure
 - Raveling
 - Surface weathering
- Recommended Repair:
 - Remove the existing pavement and 12 inches of base and/or subgrade
 - Grade for better drainage to the inlet
 - Place 12 inches of base aggregate dense
 - Pave 3.5 inches of asphaltic pavement
 - Paint all pavement markings for a parking lot
 - Tie in roof drains to drain into the inlet through a drainage system

AREA 3 - EXISTING ON-STREET PARKING

- This is a project that will be completed by the school and is currently set to take place within the next year.
- Parking will move from Fairview Road to Borchert Road.

AREA 4 - TIMBER BORDER ON PLAYGROUND

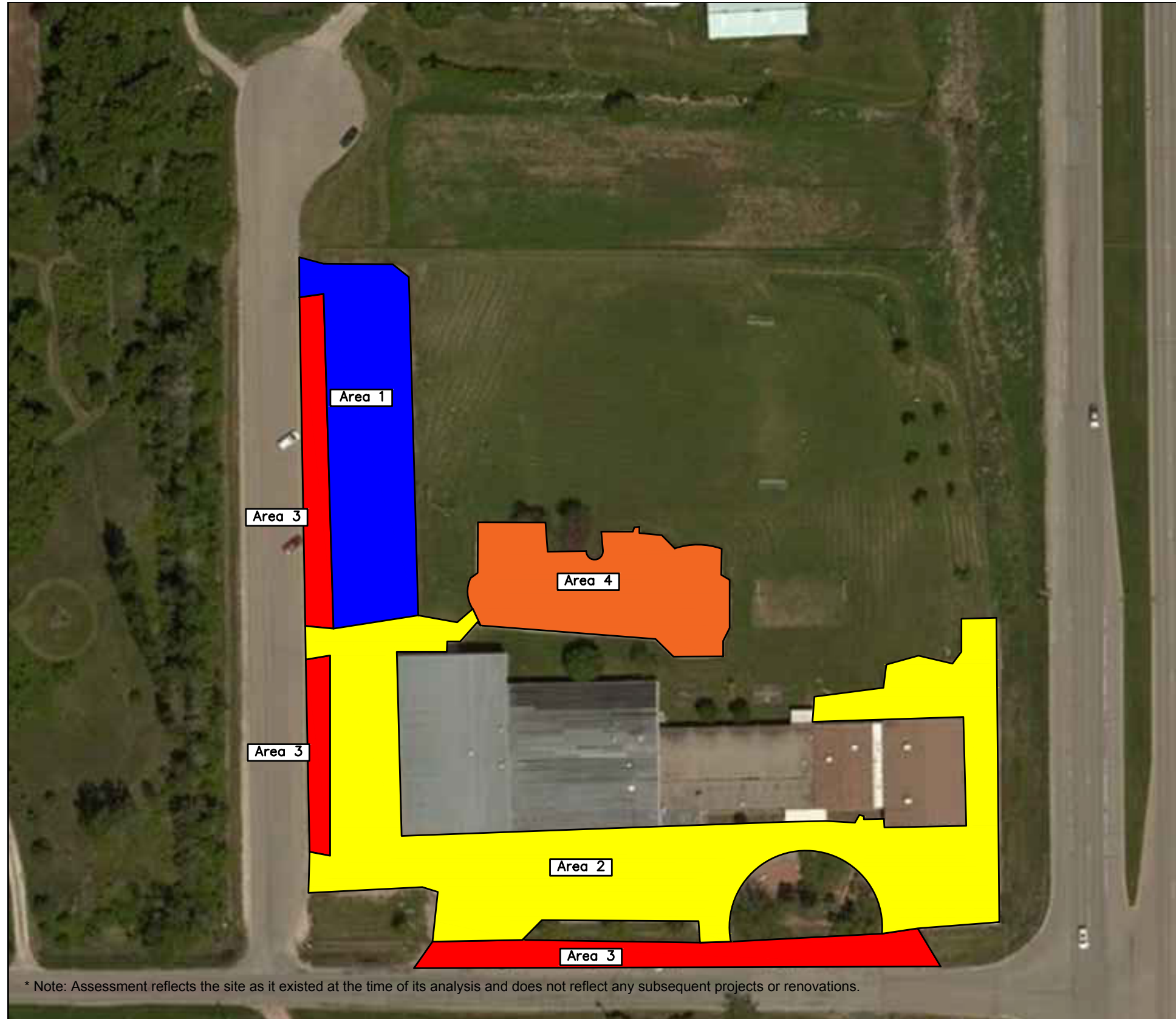
- Concerns:
 - Timbers are leaning outward and pose a tripping hazard, and they are no longer in line with each other in some areas
- Recommended Repair:
 - Replace the timbers with a 6 inch wide concrete border

SITE CONCRETE

- Distresses Present:
 - Spalling on the edges of some sections of sidewalk
 - Rebar under the patio area is causing cracking and visible rust stains
 - Stairs on the north side of the gymnasium are spalling on the edges and corners
 - ADA panels need to be added to the ramped area under the patio
- Recommended Repair:
 - Remove and replace the areas of sidewalk that are cracked
 - Fix the stairs on the north side of the gymnasium by removing the steps and pouring new steps
 - Add ADA panels to the ramped area

ADDITIONAL NOTES

- No dumpster enclosure exists
- Playground equipment appears newer; swing-set is dated



* Note: Assessment reflects the site as it existed at the time of its analysis and does not reflect any subsequent projects or renovations.

SITE PLAN
not to scale

CLAYTON ELEMENTARY: ADA ACCESSIBILITY ASSESSMENT

The following is an analysis of Clayton Elementary in regards to meeting building code requirements under the Americans with Disability Act (ADA) and regulated by the American National Standard (ANSI) Accessible and Usable Buildings and Facilities. This is not intended to be a comprehensive list, but an analysis as identified by Bray Architects and engineers gathered through extensive tours and assessment of the existing building facility.

1. Building Entrance:

There is at least (1) accessible route of travel. Entry at grade level or ramps with slope no greater than 1:12, and has 5'-0" long landings every 30'-0".

1a. The building has multiple accessible entrances at this level that meet the above criteria.

2. ADA Parking:

Designated/marked ADA stalls are located near the entrance of the building and have 5'-0" access aisles between stalls (502.4.1; 502.4.2).

2a. The site contains marked ADA stalls located near the nearest accessible entrance.

3. Ramps & Lifts:

There is at least (1) accessible route to each floor level. Changes in level greater than 1/2" in height shall be ramped (303); ramps have a slope no greater than 1:12 and have 5'-0" long landings every 30'-0" (405.2).

3a. There are areas of limited accessibility where the building does not meet the criteria for accessibility standards.

4. Railings:

Handrails shall be provided on both sides of stairs and ramps, except for aisle stairs and ramps, which may be provided with a handrail either at the side or within the aisle width (505.2). Ramp runs with a rise greater than 6 inches shall have handrails (405.8).

Ramp handrails shall extend horizontally above the landing 12 inches minimum beyond the top and bottom of ramp runs. Extensions shall return to a wall, guard, or floor, or shall be continuous to the handrail of an adjacent ramp run.

Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs or ramps shall be continuous between flights or runs, except for handrails in aisles serving seating (505.3).

At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches minimum beginning directly above the nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight (505.10.2).

At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance equal to one tread depth beyond the bottom tread nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight (505.10.3).

4a. There are handrails that do not meet the above criteria for accessibility standards.

5. Maneuvering, Thresholds, & Push/Pull:

On the pull side, a minimum clearance of 18" is required parallel to the doorway. On the push side, a minimum of 12" is required parallel to the doorway (404.2.3.1). Distance between two hinged or pivoted doors in series shall be 48" minimum plus the width of any door swinging into the space (404.2.5). Doors have a minimum 32" wide clearance. Maneuvering clearances on either side of the door are a minimum of 60" from the pull side and 48" from the push side.

Thresholds at doorways shall be maximum 1/2" high otherwise a ramp is required (303.2; 303.3).

5a. There are areas where the requirements for push/pull do not meet accessibility standards.

5b. There are areas where the requirements for maneuvering do not meet accessibility standards.

5c. There are areas where the requirements for thresholds do not meet accessibility standards.

6. Door Hardware & Panic Hardware:

Doors have open, lever-styled hardware (no round/knob hardware) (404.2.6). Egress doors have panic hardware.

6a. There are doors that do not meet the criteria for accessibility standards.

7. Restrooms:

Public restrooms have at least 5'-0" clearance space for a wheelchair to turn around, at least (1) ADA accessible stall (sized 60" min. depth x 56" min. width, for wall-mounted stalls, and 59" min. depth for floor-mounted stalls) with 5'-0" clearance (604.3.1), and at least (1) sink at a 34" maximum height (606.3). The compartment door clearance between the door side of the compartment and any obstruction shall be 42" minimum. Compartment doors shall not swing into the required minimum area of the compartment (604.9.3)

There is at least (1) unisex restroom per floor level, and unisex restrooms have at least 5'-0" clearance space for a wheelchair to turn around, as well as a sink/counter-top height at a maximum of 34".

Mirrors located above the sink or counter shall have the bottom edge at a maximum height of 40" above the floor. Mirrors not located above a sink or counter shall have a bottom edge at a maximum height of 35" above the floor (603.3).

Fixed stall grab bars shall be 42" minimum in length located 12" maximum from the rear wall. Vertical fixed grab bars shall be 18" minimum in length, the bottom edge of the bar shall be 39" to 41" above the floor, and 39" to 41" from the rear wall (604.5.1). Rear fixed grab bars shall be 36" minimum in length and extend 12" from the centerline of the toilet. Rear grab bars shall be 24" minimum in length centered from where wall space doesn't permit 36" grab bar (604.5.2).

Bottom edge of urinals shall be 17" maximum above the floor (604.10.4).

ADA showers shall be 36" by 36" minimum with an entry of 36" by 48" minimum. A 36" minimum depth shall be provided adjacent to the open face of the compartment (608.2.1). A roll in shower shall be 60" x 30" minimum with a 60" minimum opening adjacent to the stall (608.2.2). A seat shall be 24" minimum to 36" maximum in length shall be provided at the entry side of the compartment (608.2.3).

Horizontal shower grab bars shall be provided across the control wall and on the back wall to a point 18" from the control wall (608.3.1.1). Vertical shower grab bars shall be 18" minimum in length on the control wall and 3" minimum to 6" maximum above the horizontal grab bar and 4" maximum inward from the front edge of the shower (608.3.1.2).

7a. Restrooms do not meet one or more of the above criteria for accessibility standards.

8. Drinking Fountains & Protruding Objects:

At least (1) fountain has a clear foot space of at least 30" x 48" in front and has a spout height at a maximum of 36" off the ground. Children's fountain spout shall be 30" maximum above the floor. Wheelchair fountain spout shall be 36" maximum and standing 38" to 43" above the floor (602.4).

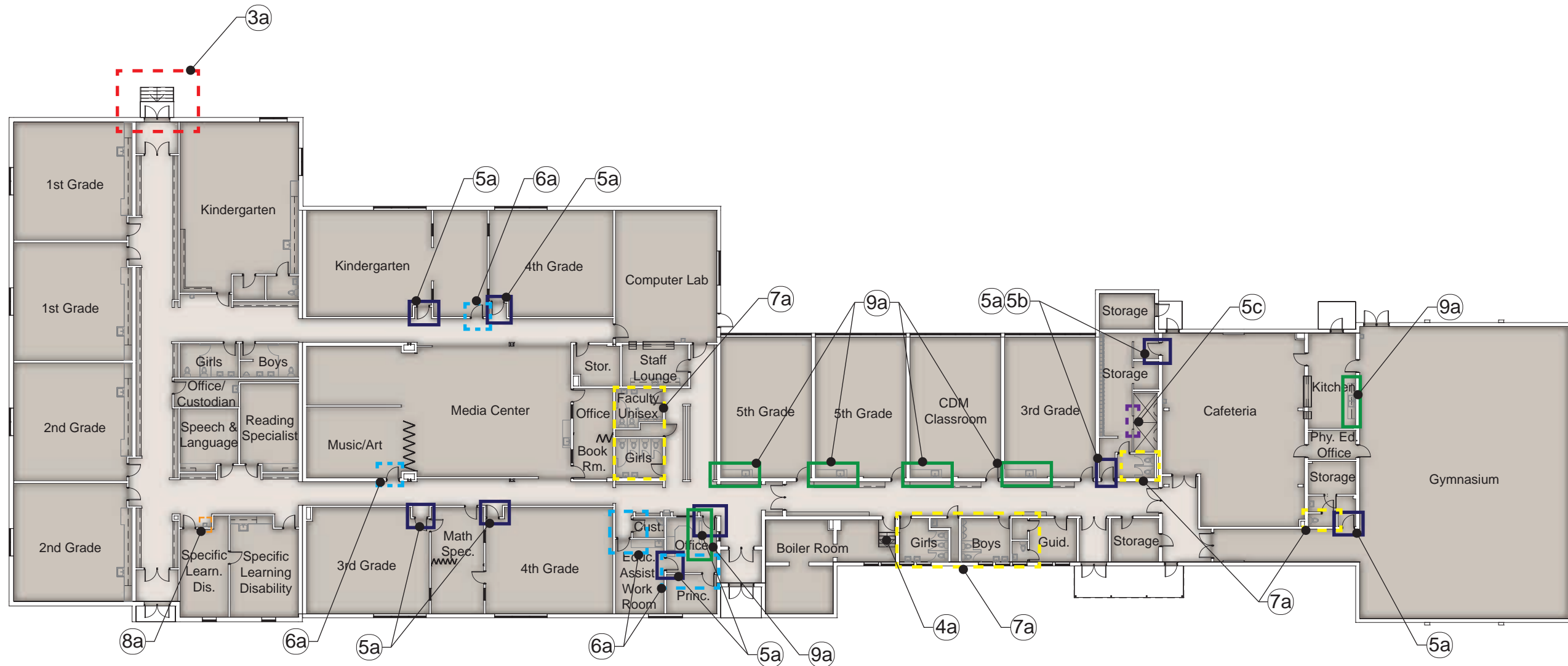
Objects more than 27" and not more than 80" above the floor shall protrude 4" maximum into the circulation path (307.2). Objects shall not reduce clear width required for accessible routes (307.5). Guardrails or other barriers shall be provided where object protrusion is beyond the limits allowed, and where the vertical clearance is less than 80 inches above the floor. The leading edge of such guardrail or barrier shall be 27 inches maximum above the floor (307.4).

8a. There are drinking fountains that do not meet one or more of the above criteria for accessibility standards.

9. Casework, Transaction Counters, & Counters with Sinks:

Counter-tops have a maximum 34" height, and transaction counters have an accessible portion that is at a maximum 34" height for wheelchair accessibility (606.3). Counters and work surfaces for children's use shall be 26" minimum and 30" maximum above the floor (902.4.2).

9a. There are countertops that do not meet the above criteria for accessibility standards.



FIRST FLOOR PLAN
not to scale

CLAYTON ELEMENTARY: ROOF PLAN

Roof Timeline

- = (1) Installer Unknown, Asphalt Shingles, Installation Unknown, Age Unknown, Warranty Unknown
- = (2) Installer Unknown, Modified BUR, Installation 1990, 27 years old, Warranty Unknown
- = (3) Installer Unknown, Modified BUR, Installation 1990, 27 years old, Warranty Unknown
- = (4) Installer Unknown, Thermoplastic Polyolefin, Installation 2007, 10 years old, Warranty Unknown
- = (5) Installer Manville, Modified BUR, Installation 1998, 19 years old, Warranty Expires 2018
- = (6) Installer Unknown, Thermoplastic Polyolefin, Installation 2007, 10 years old, Warranty Unknown
- = (7) Installer GAF, Asphalt Shingles, Installation 1992, 25 years old, Warranty Expires 2017
- = (8) Installer Unknown, Modified BUR, Installation 1992, 25 years old, Warranty Unknown
- = (9) Installer Unknown, Thermoplastic Polyolefin, Installation 2007, 10 years old, Warranty Unknown



ROOF PLAN
not to scale

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CLAYTON ELEMENTARY: EXTERIOR DOOR ANALYSIS

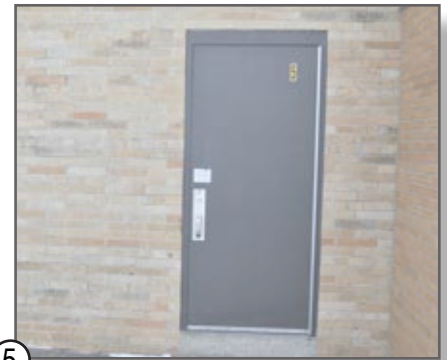
No.	Door Type	Frame Type
1	Hollow Metal	Hollow Metal
2	Hollow Metal	Hollow Metal
3	Hollow Metal	Hollow Metal
4	Hollow Metal	Hollow Metal
5A	Hollow Metal	Hollow Metal
5	Hollow Metal	Hollow Metal
6	Hollow Metal	Hollow Metal
7	Hollow Metal	Hollow Metal
8	Hollow Metal	Hollow Metal
9	Aluminum	Aluminum



① HOLLOW METAL DOORS & HOLLOW METAL FRAME



② HOLLOW METAL DOORS & HOLLOW METAL FRAME



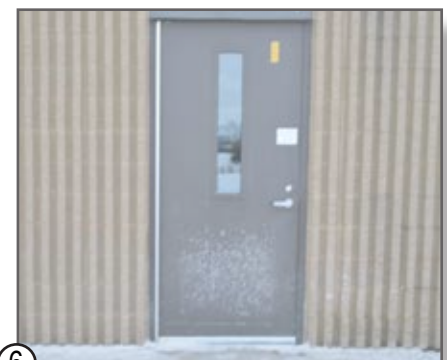
⑤ HOLLOW METAL DOOR & HOLLOW METAL FRAME



⑨ ALUMINUM DOORS & ALUMINUM FRAME

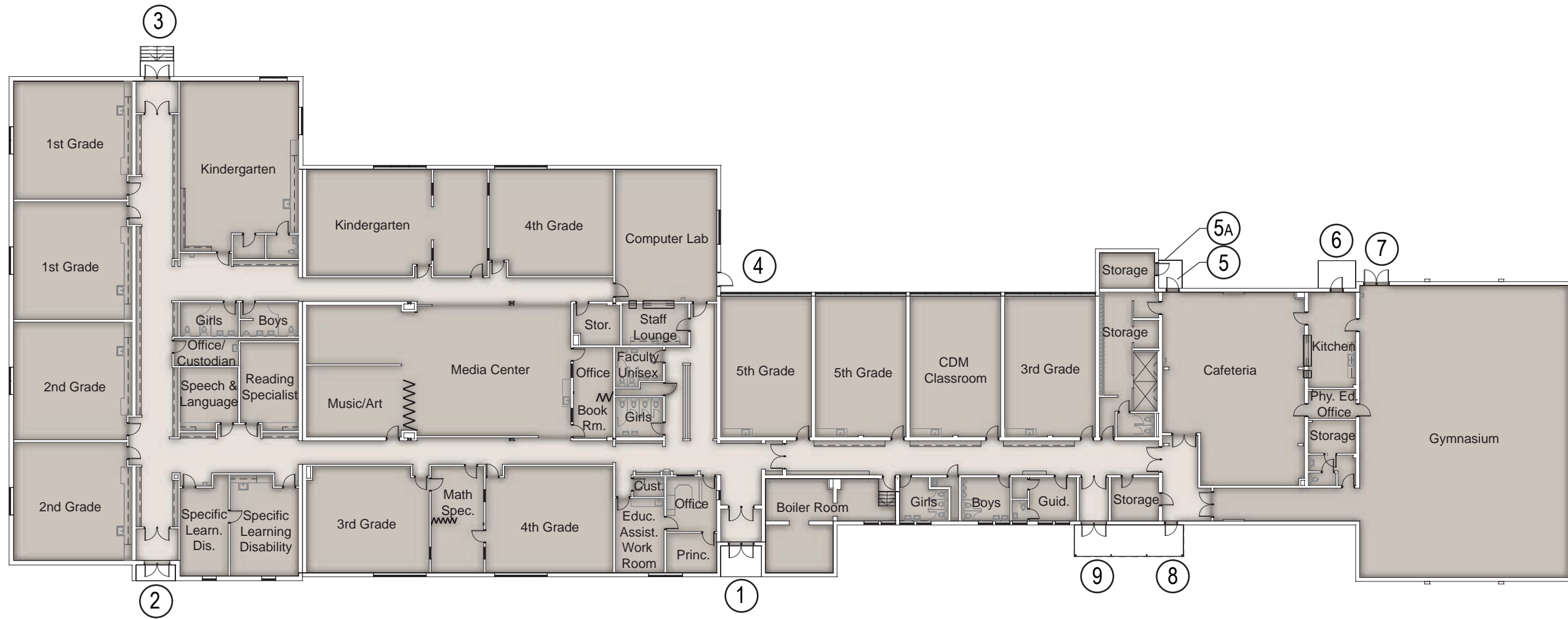


⑦ HOLLOW METAL DOORS & HOLLOW METAL FRAME



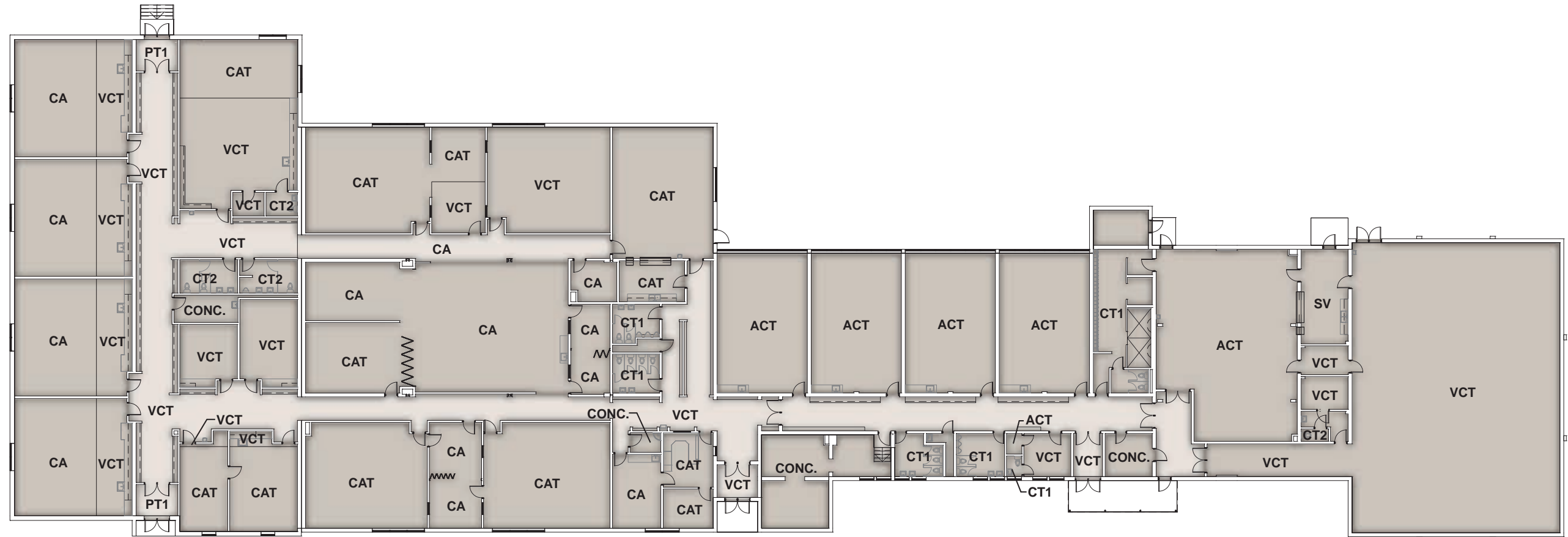
⑥ HOLLOW METAL DOOR & HOLLOW METAL FRAME

CLAYTON ELEMENTARY: EXTERIOR DOOR ANALYSIS



CLAYTON ELEMENTARY: FLOORING ANALYSIS

- ACT** - 9x9 (Asbestos)
- ACT1** - 12x12 (Asbestos)
- ACT2** - 6x6 (Asbestos)
- CA** - Carpet Broadloom
- CAT** - Carpet Tile
- CT1** - 1x1 Ceramic Tile
- CT2** - 2x2 Ceramic Tile
- CT12** - 1x2 Ceramic Tile
- CTH** - Hex Ceramic Tile
- CONC.** - Concrete
- PT** - 8x8 Paver Tile
- PT1** - 6x6 Paver Tile
- PT2** - 3x3 Paver Tile
- PT3** - 3x6 Paver Tile
- RT** - Rubber Tile
- RTT** - Rubber Tile Tread
- SS** - Seamless Synthetic
- SV** - Sheet Vinyl
- TER** - Terrazzo Tile
- TER1** - 12x12 Terrazzo Tile
- VCT** - 12x12
- WD** - Wood
- WDP** - 4x4 Wood Parquet
- WM** - Walk-off Mat



* Flooring Types Identified by Gries Architectural Group

FIRST FLOOR PLAN
not to scale



CLAYTON ELEMENTARY: ENGINEER REPORT - PLUMBING

Plumbing System Review:

The following report is the result of a site visit by Leslie Fry of Muermann Engineering, LLC that occurred in January 19, 2017. Site observations and interviews with staff were used in the preparation of this report.

The original building was built in 1957 with additions completed in 1970 and 1992.

Domestic Water

Observations

- A. Water is well supplied to the building by what appears to be 2" water service with well tank. The water service is at its limit and could not support any future additions.
- B. The majority of the water distribution piping in the building appears to be galvanized pipe and copper. The water distribution piping appears to be in fair condition.
- C. The building has no fire suppression system.

Recommendations

- A. The water distribution piping in the original building is at the end of its life expectancy. We would recommend replacing the existing pipe and fittings with new type "L" copper tube and fittings.
- B. If there are any new additions or major remodeling planned, a new larger water service will need to be provided.
- C. If a complete fire sprinkler system is preferred for the building, a new 6" water service will need to be provided.



Sanitary and Storm Piping

Observations

- A. The sanitary waste from the building flows by gravity out the building to a field system.
- B. The sanitary waste piping in the original is underground and could not be identified.
- C. The building has a prep kitchen with a two single compartment sinks, a dishwasher, and no disposal.
- D. The classroom sinks do not have solids traps installed on the waste piping.
- E. The existing roof water is collected by gutter and downspout flow by gravity out the building to drainage field.
- F. There is a clearwater sump pump located in the Boiler Room for removing groundwater. The sump systems appear to be in fair to good condition.



Recommendations

- G. The sanitary sewer system in the original building is nearing the end of their life expectancy. We would recommend the existing



CLAYTON ELEMENTARY: ENGINEER REPORT - PLUMBING

sewer located below the floor be inspected with a camera and may need to be replaced, pending outcome of scope.

- H. The storm sewer system in the original building is nearing the end of their life expectancy. We would recommend the existing sewer located below the floor be inspected with a camera and may need to be replaced, pending outcome of scope.
- I. The existing clearwater sump pump should be monitored and repaired or replaced as necessary.

Plumbing Equipment

Observations

- A. The building has one domestic water heater that was installed in 1990. It appears to be in fair condition with no reported challenges.
- B. The domestic water is softened for hot water only.

Recommendations

- A. The existing water heater is not energy efficient. We would recommend replacing the unit with a high efficiency unit.

Plumbing Fixtures

Observations

- A. The existing plumbing fixtures in the building are a combination of various styles and ages. Most of the fixtures are original to the building age they were installed. Some of the fixtures have been replaced with newer water efficient and ADA compliant fixtures.
- B. The water closets are floor set, tank type fixtures. They do not appear to be water conserving or ADA compliant. The fixtures are old and in fair condition.
- C. The urinals in the building are floor set varying types of flushing. The fixtures are not water conserving. The fixtures are old and are in fair condition.
- D. The lavatories in the building are wall hung with multiple styles of faucets. They do not appear to be water conserving or ADA compliant and are in fair condition.
- E. The drinking fountains in the building are vitreous china drinking fountains or wall hung electric water coolers. They are not ADA compliant and are in fair condition. The fixtures are in good condition.
- F. The classroom sinks are single bowl, vitreous china drop-in sinks with gooseneck faucet and separate drinking fountain. The fixtures are not ADA compliant and are in fair condition.



Recommendations

- A. The water closets should be replaced with new water conserving and ADA compliant fixtures.



CLAYTON ELEMENTARY: ENGINEER REPORT - PLUMBING

- B. The urinals should be replaced with new water conserving and ADA compliant fixtures.
- C. The lavatories should be replaced with new water conserving and ADA compliant fixtures.
- D. The older drinking fountains should be replaced with new ADA compliant fixtures with a bottle filler.
- E. The faucets on the classroom sinks should be replaced with new ADA compliant faucets.



HVAC SYSTEM

The following report is the result of a site visit by Jason Testin of Fredericksen Engineering that occurred on January 19, 2017. Site observations, construction plan review, and interviews with staff were all used in the preparation of this report.

The original building was constructed in 1957, with additions being constructed in 1970 and 1992.

1.1 Heating System

A. Existing Data

1. A steam boiler plant serves the building. Installed in 1957, it consists of two Kewanee steam boilers, each fired with natural gas. One boiler has a capacity of 1,750,000 btu. The second boiler has a capacity of 1,550,000 btu.
2. Steam piping is run in the tunnels and above ceilings throughout the building.

B. Observations

1. According to information obtained by the Owner, the boiler plant has some reserve capacity at this point. Both boilers are needed during the coldest weather but only one boiler can heat the building during most of the heating season.
2. The Kewanee boilers are in fair condition. According to the Owner, the smaller boiler has had maintenance problems. Both boilers have exceeded the estimated life expectancy of 30 years..
3. Steam piping is original and appears to be in fair condition according to the Owner. There are pipes in the gymnasium that leak.
4. There are leaks in the tunnels but the water is coming through the tunnel walls.
5. The existing Kewanee boilers are original to the building and have exceeded the estimated life expectancy.

C. Recommendations

1. Continue preventative maintenance on the system.
2. Plans should be made to replace the aging Kewanee boilers. At the time of replacement, it is strongly recommended that the steam system be converted to hot water. All steam and condensate piping will be replaced with hot water piping.
3. Any future additions or construction will most likely require the addition of boiler capacity to serve the additional spaces.

1.2 Ventilation and Air Conditioning Systems

A. Existing Data

1. There are two systems that provide ventilation for the facility. The two systems are classroom unit ventilators and constant volume air handling systems.
2. The classrooms, gymnasium and multi-purpose room are ventilated using classroom unit ventilators. Unit ventilators house a fan, heating coil, fresh air damper, return air damper and controls in a single cabinet mounted in the space. Steam and condensate water piping is run to each unit ventilator. The unit ventilators are mounted on the perimeter wall for the majority of spaces.
3. The IMC area is served by individual constant volume air handling units. Constant volume systems consist of a central supply fan, which contains a heating coil, fresh

air and return air dampers. A room thermostat is used to control the temperature of the air supplied to the space.

4. The offices are served by convectors and room air conditioning units. Outside air is provided by operable windows.
5. Only the office, computer room and workroom are air conditioned. Air conditioning is provided by room air conditioning units.

B. Observations

1. The unit ventilators are original to the building (1958, 1970 and 1992) and have exceeded the estimated life expectancy of 25 years.
2. The constant volume air handling unit serving the IMC area is original from 1970. The unit has exceeded the estimated life expectancy of 30 years.
3. The office receives the code required outside air from operable windows. Current Wisconsin code does not allow natural ventilation for school offices.
4. Door transfer grilles are currently utilized to transfer relief air from the classrooms to the corridor.
5. If the previously mentioned change from a steam system to hot water system occurs, all convectors, cabinet heaters, unit ventilators and air handling units will need to be replaced with hot water units and piping.

C. Recommendations

1. Plans should be made for the replacement of the aging unit ventilators. At the time of replacement, it is recommended that hot water unit ventilators are installed (as mentioned previously in the Heating System).
2. Plans should be made for the replacement of the aging constant volume air handling unit. At the time of replacement, it is recommended that a hot water air handling unit is installed (as mentioned previously in the Heating System).
3. With any remodel or renovation, plans should be made to replace the door transfer grille relief system with a code approved system. The current building code does not allow transfer air into a path of emergency egress.
4. With a change to a hot water system, all supplementary heat (convectors, cabinet heaters, etc.) will need to be replaced with hot water units.

1.3 Control Systems

A. Existing Data

1. A pneumatic temperature control system serves the school.

B. Observations

1. The limitations of the pneumatic system do result in comfort complaints. Pneumatic systems require frequent calibration to maintain accuracy. The newer digital controls are more accurate and more flexible. In addition, the industry has made such a complete changeover to digital controls that it is becoming difficult to find good pneumatic service technicians.

C. Recommendations

1. Continue to maintain and operate the pneumatic control system as long as the current mechanical equipment remains. When any renovations to the existing equipment are made, a changeover to digital controls is strongly recommended.



Electrical System Review:

The following report is the result of a site visit by Daniel Cedeno of Muermann Engineering, LLC that occurred on January 19, 2017. Site observations, existing plan review and interviews with staff were all used in the preparation of this report. The facility was built in 1957, with additions occurring in 1970 and 1992.

Electric Service

Observations

- A. The facility has an 800-amp, 120/240V 1-phase 3 wire main electric service that has been recently replaced and is in good working condition. The main switchboard has capacity for 1 additional breaker for potential future loads. There is no surge suppression provision on the main electric service.
- B. The electric panelboards throughout the facility vary in age between old circuit breaker panelboards that are nearing the end of their useful lifespan, and some panelboards that were replaced or added during the most recent service upgrade that are in good working condition.
- C. Utility service to the building consists of pole mounted transformers across the street with an overhead electric service terminating at an exterior wall mounted CT cabinet and electric meter.
- D. There is no emergency backup power available in the building.

Recommendations

- A. The main electric service is in good working condition, recommendations include exercising of circuit breakers and possibly performing thermal imaging analysis for predictive maintenance purposes.
- B. Provide surge suppression to prevent equipment damage in the building during power surges.
- C. Vintage circuit breaker panelboards should be scheduled for replacement within the next 10 years.
- D. A possible recommendation is to provide a new emergency generator system to provide backup power and emergency lighting to the building during electric outages.
- E. Ensure proper working clearances are maintained in front of all panelboards at all times. Working clearance area may not be used for storage. Recommendations include using industrial vinyl safety tape to physically indicate clearance on floor/wall around panelboards.

Light Fixtures & Controls

Observations

- A. Much of the interior lighting throughout the facility consists of a variety of T8 fluorescent or incandescent light fixtures, including recessed, surface, and pendant mounted varieties. The fixtures range in age but all are in good working condition.



Main Electric Service



Old Branch Panelboard



C/T Cabinet & Meter



Classroom Lighting



CLAYTON ELEMENTARY: ENGINEER REPORT - ELECTRICAL

- B. The cafeteria and gymnasium use high bay metal halide fixtures to provide general lighting in the space. There is (1) fluorescent fixture with emergency battery backup in the gymnasium that provides minimal emergency lighting in the space.
- C. General lighting controls in rooms consist of toggle switches with no occupancy sensors or dual level lighting. Most classrooms utilize split area zones to split lighting controls in room, some have dual level lighting controls.
- D. Corridor lighting controls consist of local toggle switches with no occupancy sensors. Staff indicated they prefer to turn off the corridor lighting circuit breakers to minimize efforts.
- E. There are no provisions for emergency lighting, except for a handful of wall mounted battery packs throughout the facility that provide minimal, non-code compliant light levels.
- F. Exterior lighting consists of high pressure sodium wall packs.
- G. Exterior lighting is controlled via a combination of photocell and time clock controls.



Gymnasium Lighting



Exterior Wall Pack

Recommendations

- A. Recommendations to interior lighting include replacing fixtures with LED equivalents, providing dimming controls and occupancy sensors to maximize on energy savings.
- B. Schedule existing exterior light fixtures with LED equivalents and control via existing timeclock/photocell controls.
- C. Corridors should be provided with occupancy sensors and light switches removed to automatically control the lighting and maximize on energy savings.
- D. If new LED lighting is provided, it is recommended that emergency lighting be provisioned through back up batteries integral to the normal light fixtures through egress paths and rooms with an occupant load greater than 50 persons. Alternatively, providing a new emergency generator system would be an alternative option to battery backup.



Typical Light Controls

Wiring Devices

Observations

- A. Most receptacles throughout the facility are 15A rated.
- B. There was a general lack of receptacles throughout the facility. Facility staff indicated they have problems finding available receptacles often. Some classrooms only have 3 receptacles in the whole room.

Recommendations

- A. Recommendations include replacing existing 15A rated receptacles with 20A rated type.
- B. Provide additional receptacles throughout working spaces as necessary to meet needs of space.



Typical Receptacle



Phone System

Observations

- A. The facility has a Shoretel IP based phone system that is in good working condition.

Recommendations

- A. No recommendations at this time.

Data System

Observations

- A. Data service is provided via fiber optic utility service. The system seems to be in good working condition.
- B. Fiber optic wiring interconnects all of the schools to the main district network.
- C. General data cabling consists of a variety of Cat5e and Cat6 cabling, both in plenum and riser rated varieties.
- D. The school has (1) data rack, which has spare rack capacity for future needs. Data cabling management at the rack is run in a disorganized fashion with no labeling. There are also no provisions for backup power.



Data Rack

Recommendations

- A. It was unknown at the time of the site visit if the facility has ceiling plenums, but if there are plenums in the ceiling spaces, the riser rated data cabling should be replaced with plenum rated cabling.
- B. Data cabling at the data rack should be reinstalled in a clean workmanlike manner. Proper labeling of data cabling should also be considered to facilitate cable management and traceability.
- C. A possible recommendation is to provide a UPS battery backup system to provide backup power to the data rack in the event of power loss.

Keyless Entry System

Observations

- A. The building has a keyless entry system that is in good working condition.
- B. Access controlled doors are controlled via electric strikes and card readers.
- C. None of the exterior doors have door position contacts to monitor if doors are shut or left open.

Recommendations

- A. It is recommended to provide door monitor contacts on all exterior doors to help monitor and control access to the facility at all times.



Card Reader & Electric Strike



Intercom System

Observations

- A. The building has a vintage Dukane intercom system that is nearing the end of its useful lifespan.
- B. The intercom system does not have the capacity to fully cover the entire school, various classrooms don't have speakers.
- C.
- D. Intercom speakers throughout are nearing the end of their useful lifespan.
- E. Issues reported by secretary with faulty call-in switches getting stuck on "call" position in some rooms.
- F. The bell schedule system is controlled via a timeclock. Staff reported no issues with system.

Recommendations

- A. The existing intercom system should be scheduled for full replacement with a new IP-based intercom system. Existing speakers should be scheduled for replacement in addition to providing additional speakers in areas lacking coverage.



Existing Intercom Head-End



Bell Schedule Timeclock

CCTV System

Observations

- A. The building has a CCTV system consisting of 2 cameras throughout the facility. The system seems to be in good working condition. The district plans to add about 18 more cameras to the system in the future.

Recommendations

- A. Provide new CCTV cameras where additional coverage is necessary.



CCTV Camera

Fire Alarm System

Observations

- A. The building has a Faraday fire alarm system that is about 15 years old and is in good working condition.
- B. The system is monitored and dials out to the fire department during a fire alarm event.
- C. Notification coverage is lacking by today's standards.
- D. Corridors with open cubby storage should be protected with smoke detectors per today's standards.



Fire Alarm Control Panel

Recommendations

- A. A possible recommendation would be to provide additional fire alarm notification devices in areas where coverage is lacking.

Other Low Voltage Systems

Observations

- A. The building does not have a security system.
- B. The building has a monitoring system to ensure the boilers in the facility are operational. The system is programmed to dial facility management in the event of a boiler failure.
- C. The building does not have a synchronized clock system.

Recommendations

- A. Other possible recommendations include adding a security system to control and monitor access to the facility.
- B. Replacing the existing clocks with a synchronized clock system such as a GPS wireless clock system may be a recommended upgrade to minimize labor efforts required when updating clocks during daylight savings time changes.



Boiler Monitoring System