DMPS FACILITY ASSESSMENT | MOULTON ELEMENTARY

1.17.2024

ARCHITECTS
ENGINEERS

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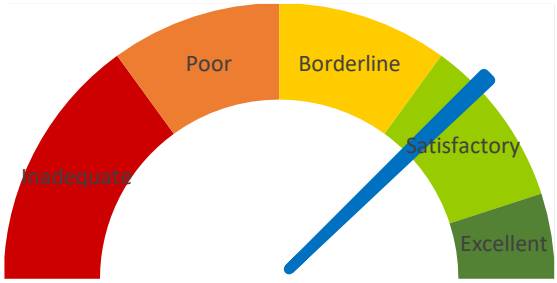

REPORT ORGANIZATION

COVER SHEET

REPORT ORGANIZATION

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COST METHODOLOGY

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EXECUTIVE BUILDING SUMMARY

Moulton Elementary's on-site facility conditions assessment was conducted on January 17, 2024 and included visual conditions assessment from professionals covering interior architecture, exterior building envelope, the property's grounds (site), structural condition, mechanical (HVAC/Plumbing) systems, electrical systems (power, exterior lighting, interior lighting, fire alarm, and general IT), and the elevator conditions.

A few of the short term maintenance identified for Moulton Elementary are: countertop sealant, wood base finish, Reglazing, exterior door repair, roofing repairs, exterior wall cleaning, ventilation and boiler venting confirmations, MDF data grounding, MDF blank plate installation, panel filler plate installation, CCTV camera repair. Additionally there were several structural studies noted to be completed in the near future. These studies will determine if there are structural concern or extensive corrections that need to be made. These studies should be prioritized.

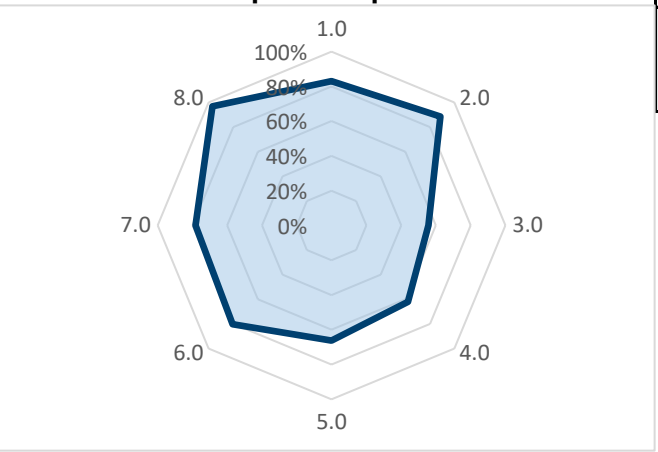
The recommended projects for Moulton Elementary to be completed in the next 1-2 years are as follows:

- Gymnasium Improvements
- Visibility Installation
- Ceiling Replacement
- Fire Escape Replacement
- Roofing Replacement
- Masonry and Lintel Repairs
- Exterior Door/Frame Replacement and Refinish
- Drainage Repair
- Playground Pavement Replacement
- Pavement Replacement
- Thermostatic Mixing Valve Installation
- Hose Bibb installation
- Fall Protection Installation
- Exterior Lighting installation

These projects along with all of the recommended potential projects at the 3-4 year and 5-10 year priority levels are further described within this report.

Discipline Comparison				Building Health				
Assessment Category Summary		Max Pnts	Earned Pnts	Bldg Weight Factor	Max Pnts	Earned Pnts	%	Rating
1.0	Educational Adequacy	165	137	2.00	330	274	83%	Sastifactory
2.0	Environment for Education	375	332	0.60	225	199	89%	Satisfactory
3.0	Exterior Envelope	95	53	3.00	285	159	56%	Borderline
4.0	School Site	95	59	1.50	143	89	62%	Borderline
5.0	Structural Conditions	145	96	1.30	189	125	66%	Borderline
6.0	Mechanical Systems	670	539	0.80	536	431	80%	Satisfactory
7.0	Electrical Systems	455	356	0.75	341	267	78%	Satisfactory
8.0	Elevator Conditions	65	63	1.00	65	63	97%	Excellent
Total					**2,048**	**1,544**	**75%**	**Satisfactory**

Moulton Elementary
Discipline Comparison



Rating Table				
1-29%	30-49%	50-69%	70-89%	90-100%
Inadequate	Poor	Borderline	Satisfactory	Excellent

After totaling the scores from the various discipline assessment reports Moulton Elementary scored a building health rating of 75% or "Satisfactory" per the scale described above. Per the graph shown on the cover page of this report, scores within the "green" range are considered positive scores. Moulton Elementary is within this positive range. Improvements to the exterior envelope, school site, and structural systems as described in this report would make the largest impact in increasing the score to "Excellent."

Building Data Record

Building Name: Moulton Elementary

Date: 1.17.2023

Address: 1541 8th St
Des Moines, IA 50314

High School Feeder System: North High

Building SF: 121,650 SF

Site Acreage: 4.45 Acres

Date(s) of Construction: 1914, 2002, 2017

Date(s) of Roof Replacement: 2000

Current/Scheduled Projects: Interior painting - 2024
Replace pavement - 2024
Acoustics in gym and atrium - 2025

Existing Building Data:

- [x] Egress Plans
- [x] Original Docs
- [x] Major Renovations and Additions
- [ ] Minor Projects
- [ ] Maint. Reports

Site Items:

- [x] Student Garden
- [x] Loading Dock
- [x] Stormwater Detention

Energy Source:

- [x] Electric
- [x] Gas
- [ ] Geothermal
- [ ] Solar

Cooling:

- [ ] DX RTU or DOAS
- [ ] Chiller
- [ ] VRF
- [x] Water Source Heat Pump
- [x] Fluid Cooler

Heating:

- [ ] Gas/Electric RTU or DOAS
- [x] Boiler
- [ ] Water-to-Water Heat Pump
- [ ] VRF
- [x] Water Source Heat Pump

Structure Fireproofing:

- [x] No
- [ ] Yes

Construction:

- [x] Load Bearing Masonry
- [x] Steel Frame
- [x] Concrete
- [x] Wood
- [ ] Other

Exterior Facade:

- [x] Brick
- [ ] Stucco
- [ ] Metal
- [ ] Wood
- [x] Other
  Stone

Floor/Roof Structure:

- [x] Wood Joists
- [x] Steel Joists/Beams
- [x] Slab on Grade
- [x] Struct. Slab
- [ ] Other

A | Architectural, Programming

ASSESSOR: Kaela Shoemaker

1.0 Educational Adequacy

		Weight Factor	Rating	Points	Comments
General					
1.1	**Floor materials** are appropriate for space type.	2	5	10	
Elective/Secondary Classroom					
1.2	**Gymnasium** is adequate for providing physical education programming.	2	2	4	Exterior walls are showing water damage, space is cold. Balcony serves as storage. Ceiling panels appear to have minor acoustic qualities but are showing damage and overall acoustic performance is lacking.
1.3	**Cafeteria** has adequate space, furniture, and acoustics for efficient lunch use.	2	4	8	Wall base is showing wear and minor damage. Overall good condition
1.4	**Music room** is adequate for providing introductory music instruction.	2	5	10	Auditorium appears to be used for instrument storage and small group lessons.
1.5	**Art room** has sufficient accommodations for program.	2	4	8	Appears to be well organized but lacking additional storage closet and space within the art room. Extra corridor spaces tend to be used for some art room or teacher work room material storage. Epoxy flooring appears custom and excellent for this space!
1.6	**Library/Resource/Media Center** provides appropriate and attractive space.	1	4	4	Lacking student soft seating and collaboration spaces.
Core Classroom					
1.7	Classroom space permits arrangements for **small group activity.**	3	5	15	
1.8	**Student storage space** is adequate.	2	3	6	Younger grades did not have tables with storage within classrooms. Wood locker faces in west wing of the building have minor face damage, approx 8 to replace.
1.9	**Teacher storage space** is adequate.	3	3	9	Kindergarten classroom storage is lacking. Overall administration / general staff storage is lacking. Balconies appear to be used as general storage.
1.10	Classroom **acoustical treatment** of ceiling, walls, and floors provide effective sound control.	3	5	15	

A | Architectural, Programming

ASSESSOR: Kaela Shoemaker

		Weight Factor	Rating	Points	Comments
1.11	**Classroom power and data receptacles** are located to support current classroom instruction.	4	4	16	108 lounge and conference room has a minor tripping hazard. 139 and 240 kindergarten rooms have minor tripping hazards and extra cords at teacher spaces. Recommend reorganizing the classrooms to take advantage of current power locations.
1.12	Educational **technology** supports instruction.	4	5	20	
Administration					
1.13	**Conference/Private meeting rooms** are adequate for large and small meetings.	1	4	4	Single nice conference room for about 8- 10 people. Offices have space for private meetings.
1.14	**Main office** has a check-in and waiting area.	2	4	8	Waiting space is outside of the office and protected vestibule. Room 114 has no ceiling.
	TOTAL			137	

A | Architectural, Interior

ASSESSOR: Kaela Shoemaker

2.0 Environment for Education

Design

		Weight Factor	Rating	Points	Comments
2.1	**Traffic flow** is aided by appropriate foyers and corridors.	1	5	5	
2.2	Communication among students is enhanced by **common areas.**	1	4	4	Spaces could be more engaging with student focused furniture. Specific areas of focus on level 1 and 2 lobby areas.
2.3	Areas for students to **interact are suitable to the age group.**	1	4	4	Library and common areas could be improved with additional collaborative furniture and soft seating spaces.
2.4	Large group areas are designed for effective **management of students.**	2	5	10	
2.5	**Furniture Systems** are in good or like new condition.	1	4	4	Kindergarten classrooms on level 1 have worn tables with no student storage. Chairs are in good condition.
2.6	**Color schemes**, building materials, and decor are **engaging and unify** the school character.	2	5	10	Main stairwell in the center and lobby's are engaging and colorful
2.7	Windows and skylights provide access to **adequately controlled daylight** for regularly occupied spaces.	3	5	15	
2.8	Windows provide access to **quality views** (to exterior, courtyards, artwork etc.) for regularly occupied spaces.	3	5	15	
2.9	**Lighting has proper controls** to provide the required light levels for various teaching and learning needs.	2	4	8	Lighting is controlled with 2 zoned switches. Most rooms are adequate, but a couple rooms have covered lights and lamps.
2.10	**Staff dedicated spaces** include conference space, work space, and dedicated restrooms.	1	5	5	

A | Architectural, Interior

ASSESSOR: Kaela Shoemaker

		Weight Factor	Rating	Points	Comments
2.11	**Main office** is visually connected to the entry and is welcoming to students, staff, and guests.	2	5	10	
2.12	**Break room** is adequately sized and furnished for proper use.	1	4	4	Inadequate counter space on levels 1 and 3. The rest of the space appears adequate.
2.13	**Mother's room** is a separate designated space properly furnished.	1	0	0	None observed
Maintainability					
2.14	**Floor surfaces** are durable and in good condition.	1	3	3	West classrooms, older portions of the building, have aged flooring and is showing significant wear. Other areas of the building are in adequate condition.
2.15	**Ceilings** throughout the building – including services areas – are easily cleaned and resistant to stain.	1	2	2	Gym ceiling is showing wear and damage at the corners. Reverberation time is longer than the ideal. Auditorium missing a couple tiles, classroom 302 and 314 have significant water spots and sagging tiles. Additional roof leaks noted after the snow melt, have caused damage in several additional classrooms.
2.16	**Walls** throughout the building – including services areas – are easily cleaned and resistant to stain.	1	3	3	West side minor plaster repairs, other classrooms with gyp wall showing peeling and wear where higher traffic and furniture is present.
2.17	**Built-in casework** is designed and constructed for ease of maintenance.	1	4	4	A few places the sealant is wearing and needs replaced.
2.18	**Doors** are either solid core wood or hollow metal with a hollow metal frame and well maintained.	3	3	9	Minor surface wear at several doors on the western portion of the building.
2.19	**Facility doors** are keyed to standardized master keying system.	3	5	15	
2.20	**Restroom partitions** are securely mounted and of durable finish.	2	5	10	

A | Architectural, Interior

ASSESSOR: Kaela Shoemaker

		Weight Factor	Rating	Points	Comments
2.21	**Adequate electrical outlets** are located to permit routine cleaning in corridors and large spaces.	1	5	5	
Occupant Safety					
2.22	Classroom doors are **recessed and open outward.**	4	5	20	
2.23	Door hardware (into classrooms or any occupied rooms off of corridors) include **intruder classroom locksets.**	3	4	12	Door stops are present and likely used to prop open doors. Room 106 has toddler lock, handle is damaged but still operable.
2.24	**Door panels** into classrooms and other occupied spaces contain **vision lite.**	3	4	12	Room 130 used as counselor office had no vision lite to corridor.
2.25	**Vision lite** in doors is clear and uncovered.	2	4	8	A handful were covered with paper or decorations, but most were clear and uncovered.
2.26	**Glass** is properly located and protected to prevent accidental injury.	2	5	10	
2.27	**Flooring** is maintained in a **non-slip** condition	2	5	10	
2.28	**Traffic areas terminate at exit or** stairway leading to egress	5	5	25	
2.29	Multi-story buildings have at least **two stairways** from all upper levels for student egress.	5	5	25	
2.30	**Stairs (interior and exterior)** are well maintained and in good condition meeting current safety requirements.	5	3	15	Gaurdrails are in good condition but are lower than current code. Stair north of auditorium has significant peeling paint. Southeast stair has little to no heat.

A | Architectural, Interior

ASSESSOR: Kaela Shoemaker

		Weight Factor	Rating	Points	Comments
2.31	At least **two independent exits** from any point in the building	5	5	25	
2.32	**Emergency lighting** is provided throughout the building.	5	5	25	
	TOTAL			332	

A | Architectural , Exterior

ASSESSOR: David Unick

3.0 Exterior Envelope

		Weight Factor	Rating	Points	Comments
Design					
3.1	Overall **design is aesthetically pleasing** and appropriate for the age of students.	2	5	10	No comments
Maintainability					
3.2	**Roofs** appear sound, have positive drainage, and are water tight.	3	1	3	Roofs are all at the end of their service life. Staff reported active roof leaks at multiple locations throughout the building, and cracks in the roofing membrane were observed at several locations. Original stone cap at gym is likely moisture source causing efflorescence on interior of walls.
3.3	**Roof access** is safe for all roofs.	3	3	9	Provide guard at primary access hatch (Roof G). Remove abandoned hatches on Roofs A and K. Modify or replace existing roof ladders to provide top landing and rung(s) on parapet side of ladder.
3.4	Exterior **window sealant** is fully intact without cracks or gaps.	3	2	6	Window sealant generally crazing and in some areas is pulling away from window frames.
3.5	**Glazing** is low-e coated, insulated, and overall in good condition.	1	4	4	Insulating glass units in place throughout, except at original building entries where single pane wire glass remains in place in wood-framed transoms.
3.6	**Operable windows** are functional and safe. Operable portion of window fully seals when closed without gapping or leaking.	2	3	6	Some windows on the north wing have air infiltration.
3.7	**Exterior doors** are of durable material requiring minimum maintenance.	2	2	4	All doors are steel or aluminum, except three locations where original wood doors and frames remain. These should be replaced. (1) frame has significant rust damage and should be replaced. (2) doors/frames have minor rust and should be repaired and repainted.
3.8	**Exterior walls** are of material and finish requiring little maintenance,	1	4	4	Exterior walls are brick with stone or precast concrete accents. Most stone has mildew stains which should be cleaned. Sealant in soft joints of east addition should be replaced. Wall above west side of Library requires repair.
3.9	**Exterior Doors** open outward and are equipped with **panic hardware.**	1	4	4	Door swing path and hardware style acceptable. Existing exterior fire exit stair from Auditorium should be replaced.
3.10	**Exterior Doors are monitored** or controlled by an access control system.	1	3	3	(1) Entry does not consistently latch. (5) entries contain card readers Zero entries contain keyed locksets (8) entries are exit only. Zero entries have exterior identification signage.
	TOTAL			53	

C | Civil

ASSESSOR: Jack Gorman Joel Jackson

4.0 The School Site

		Weight Factor	Rating	Points	Comments
4.1	**Site topography** and grading drains water away from the building and retaining walls.	1	3	3	The retaining walls on the north and south of the site have deteriorated and will eventually need replacement. DMPS maintenance staff said during winter time an ice rink forms in front of main entrance and multiple people will slip on it annually and we see no easy solution.
4.2	**Parking areas** are in good condition.	5	3	15	The west asphalt had potholes and was cracking and sagging badly in areas, the east lot across the street was mostly in good condition.
4.3	**Drive areas** are in good condition.	3	2	6	West asphalt was cracking and sagging, the east side loading dock area pavement was failing and needs replacement soon.
4.4	**Sufficient on-site, solid surface parking** is provided for faculty, staff, and community.	1	4	4	DMPS states day to day parking is adequate for staff with the east lot across the street but there is nowhere to park for events.
4.5	**Sidewalks** around the facility are in good **condition.**	1	3	3	Repairs needed on N and NE sides, much of E and S sides reaching end of design life.
4.6	**Sidewalks are located** in appropriate areas with adequate building access.	1	5	5	All doors have sidewalk access and it was easy to get across site.
4.7	**Hard surface** playground surfaces are in good condition.	3	3	9	Asphalt cracking throughout, especially bad around tree. Basketball area was newer concrete and in new condition. Consider removing pavement around and replacing with mulch.
4.8	**Fencing** around the site is in good condition.	1	5	5	The south side fence does not reach ground in some locations but all other areas okay.
4.9	**Trash enclosure** is in good condition.	1	N/A	0	Dumpsters currently out in east loading dock, no enclosure on site.
4.10	**Utilities** are in newly constructed conditions and placed in suitable locations.	1	5	5	Site uses drains between windows to drain water around building, no issues observed.

ASSESSOR: Jack Gorman Joel Jackson

		Weight Factor	Rating	Points	Comments
4.11	**Site has sufficient room** for both building and parking expansion.	1	1	1	Site has little room to expand without significantly reducing playground areas.
4.12	Site has **onsite bus and parent pickup** up with adequate length, good separation and general good site circulation.	1	3	3	Buses use the west side and parents use the north and west sides. DMPS states conflicts between buses and parents exist.
	TOTAL			59	

S | Structural

ASSESSOR: Trevor Pullen

5.0 Structural Conditions

		Weight Factor	Rating	Points	Comments
Foundations					
5.1	**Foundations** appear to be in good condition with no visible cracks.	1	4	4	
5.2	There does not appear to be any **foundation settlement.**	2	5	10	
5.3	**Basement walls** do not appear to have any cracks.	1	3	3	There are cracks in exterior concrete walls and cracks/spalling in the brick walls. This is to be expected in a building of this age.
5.4	**Stoops** appear to be in good condition.	1	4	4	The stoop at the front entrance has a significant crack.
Slab on Grade					
5.5	**Slabs on grade** do not appear to have any cracks	1	3	3	Basement floor slabs and first floor slab on grade have many shrinkage cracks.
5.6	Slabs on grade do not appear to have any **settlement.**	1	5	5	
Exterior Walls					
5.7	**Brick masonry** appears to be in good condition.	2	4	8	There is some weathering of the exterior brick.
5.8	**Lintels** appear in good condition (no visible deflection or rust).	1	3	3	Some of the steel lintels are corroding. Corrosion varies from minor to significant.
5.9	**CMU** is in good condition.	1	5	5	
5.10	**Precast** is in good condition.	1	N/A	0	

S | Structural

ASSESSOR: Trevor Pullen

		Weight Factor	Rating	Points	Comments
Interior Walls					
5.11	**Interior walls** appear to be in good condition.	1	3	3	There are some minor cracks and deterioration in interior brick. Most notably the gym walls show signs of moisture damage.
Floor Framing (Elevated)					
5.12	**Floor framing** appears to be in good condition.	3	2	6	There is significant cracking, concrete spalling and exposed rebar in the 1st and 2nd floor concrete joist and slab systems.
5.13	Floor framing appears to meet the **code requirements.**	3	5	15	
Roof Framing					
5.14	**Roof framing** appears to be in good condition.	3	5	15	
Miscellaneous					
5.15	**Retaining walls** appear to be in good condition.	1	4	4	There is some cracking in the walls around windows wells but nothing that needs to be repaired.
5.16	**Canopies** appear to be in good condition.	1	N/A	0	
5.17	**Loading dock concrete** appears to be in good condition.	2	2	4	The loading dock slab is significantly cracked. It has significant chunks of concrete that have broken off on the under side exposing corroded rebar. It has already been shored significantly with steel beams, posts and wood beams and posts.
5.18	**Mechanical screening** appears to be in good condition.	2	5	10	
5.19	**Stairs** appear to be in good condition.	1	3	3	The stair going down to the basement near room 008 is significantly corroded and should be replaced.
5.20	**Stair railings** appear to be in good condition.	1	3	3	Most of the stair railings likely do not meet strength requirements as far as the load modern codes require them to be designed for.

S | Structural

ASSESSOR: Trevor Pullen

		Weight Factor	Rating	Points	Comments
5.21	**Tunnels** appear to be in good condition without cracks.	1	N/A	0	
5.22	There is a **designated hardened area** in the building.	1	0	0	None observed.
5.23	The hardened area appears consistent with the **ICC 2018 code.**	1	N/A	0	
	TOTAL			108	

MP | Mechanical & Plumbing

ASSESSOR: Corey Metzger

6.0 Mechanical Systems

HVAC Design

		Weight Factor	Rating	Points	Comments
6.1	**Zone Control.** Thermostats are provided in each space for individual zone control of space temperatures.	3	5	15	Yes
6.2	**Thermostat location.** Thermostats are properly located in the space.	3	5	15	Yes
6.3	Appropriate **amount of ventilation** are provided to each space.	5	3	15	Unclear how balancing works for several building areas (pressurized plenums serving original shafts).
6.4	**Ventilation** is provided during occupied hours.	5	5	25	Appears to be true. One unit needs maintenance in near future.
6.5	**Outdoor air intake locations** are appropriate.	4	5	20	Generally appears to be true.
6.6	Appropriate **levels of exhaust** are provided for areas requiring this such as restrooms, janitor's closets and locker rooms.	5	4	20	Generally appears to be true. Unclear how some of exhaust is balanced.
6.7	**Building pressurization.** The design takes into account the balance between ventilation and exhaust air	2	5	10	Appears to be positively pressured
6.8	**Major HVAC Equipment** appears to be within it's acceptable **service life.**	5	3	15	Majority of equipment, except AHU-1, appears to be from 2016 project. AHU-1 was installed in 2002, but received new heating and cooling coils in 2016.
6.9	**Cooling loads** are within equipment operational capacity.	5	5	25	Appears true
6.10	**Heating loads** are within equipment operations capacity.	5	4	20	Appears true, but some draft/ comfort issues (May be addressed with controls)

MP | Mechanical & Plumbing

ASSESSOR: Corey Metzger

		Weight Factor	Rating	Points	Comments
6.11	**Dehumidification** is provided and addressed humidity loads in incoming outside air.	3	4	12	Appears to be true based on existing equipment. May be some limitations on DX cooling for a few rooftop units.
Plumbing Design					
6.12	**Water Supply Pressure** is adequate to allow for operation of plumbing fixtures.	5	5	25	Yes
6.13	Appropriate **backflow preventer** is provided at connection to city water supply.	5	5	25	Yes - dual backflow preventers in parallel
6.14	**Domestic hot-water systems** are within equipment operational capacity.	5	5	25	Yes - Relatively new water heaters
6.15	Domestic **hot-water recirculating systems** allow for hot-water at fixtures within a reasonable amount of time.	3	5	15	Yes
6.16	**Sanitary sewer systems** are sized and sloped to allow for proper drainage.	5	5	25	Appears to be true
6.17	Appropriately sized **grease interceptors** are provided for facilities with food service.	3	5	15	Yes - 5,000 gallon capacity
6.18	**Roof drainage** systems are sized appropriately and overflow drainage systems are installed.	5	4	20	Overflow provided by scuppers at all levels. Significant ponding observed on roof at multiple locations.
6.19	**Restroom fixtures** are in good condition and comply with current DMPS standards.	3	3	9	Mostly manual in acceptable condition
Maintainability					
6.20	Equipment is provided with **adequate service clearance** to allow for regular maintenance	3	5	15	Generally appears to be true

MP | Mechanical & Plumbing

ASSESSOR: Corey Metzger

		Weight Factor	Rating	Points	Comments
6.21	AHUs and chiller are provided with **coil pull space.**	2	5	10	True for custom rooftop unit.
6.22	**Filter** sizes are standard and filter types are standard.	2	3	6	Variety of filter types and sizes with packaged RTUs, custom RTU, heat pumps, etc.
6.23	**Equipment mounting heights** are reasonable.	3	5	15	Generally appears true
6.24	**Floor surfaces** throughout the mechanical room are non-slip and are dry.	2	5	10	Yes
6.25	**Isolation valves** are located in the plumbing and hydronic systems to allow for isolation of only portions of the system for servicing.	2	5	10	Yes
6.26	Appropriate means are provided for **airflow and water balancing.**	3	5	15	Yes
6.27	**Hose Bibbs** located in proximity to **outdoor condensers and condensing units**. Is cottonwood an issue at this location?	2	1	2	Wall hydrants located on grade level, but majority of building has 3 stories.
6.28	**Fall protection** is provided for equipment within 15 ft of roof edge as per OSHA standard 1910.28(b).	2	0	0	No fall protection observed. Several pieces of equipment are close to edge of roof.
6.29	**Building devices are on DDC controls** and fully visible through Building Automation System. No pneumatic controls remain.	4	5	20	Yes
Occupant Safety					
6.30	**Backflow prevention** is provided at all **cross-connections** to non-potable water.	5	5	25	Yes

MP | Mechanical & Plumbing

ASSESSOR: Corey Metzger

		Weight Factor	Rating	Points	Comments
6.31	Building is fully **sprinklered.**	5	2	10	Only the 2002 addition is sprinklered.
6.32	**Domestic hot-water temperature** at lavatories used by students or staff is provided with a thermostatic mixing valve and adjusted properly.	5	0	0	None observed
6.33	**Emergency eye-washes and tempering valves** are located where required.	5	0	0	Not observed. Recommend evaluation with an occupational safety and health professional to determine necessity of eye wash(es) for facility spaces.
6.34	**Emergency boiler stop switches** are located at exits from boiler rooms.	5	5	25	Yes - inside room at both exits
6.35	**Refrigeration evacuation systems** are provided in rooms with chillers.	5	N/A	0	N/A
6.36	**Carbon Monoxide monitoring** and alarming is provided for areas with gas-fired equipment.	5	5	25	Yes
	TOTAL			539	

E | Electrical

ASSESSOR: David Carlson

7.0 Electrical Systems

Electrical Design

		Weight Factor	Rating	Points	Comments
7.1	**Transformer location** is easily accessible by utility line truck to allow for rapid transformer replacement in the event of an issue.	5	5	25	Service entrance consists of 1000kVA 208/120V transformer.
7.2	**Transformer** has adequate clearance from non-combustible building components, paths of egress, etc. 10' clear working area in front of doors.	5	5	25	
7.3	**The MDP environment** is safe, has adequate clearances and exiting.	3	3	9	Working clearances meet code, but means of egress are grandfathered. For gear larger than 1200A, two exits are required except if the means of egress is unobstructed (is not met, stairs in egress path) or if the working clearance is double that of NEC Table 110.26 (A) (1) (not met). (-2 points)
7.4	The **MDP** appears serviceable.	4	2	8	Square D QED Switchboard. MDP installed in 2001. High humidity noted in main electrical/fan room. MDP beginning to rust. Water spots and dust/dirt are present. (-1 point for age greater than 10 years, -2 points for corrosion and wear.) No project recommendations at this time, continue monitoring.
7.5	The MDP is **maintainable.**	3	5	15	
7.6	The MDP will support **future expansion.**	4	3	12	MDP has 171" of total mounting space for breakers, and 31.5" is spare. (-2 points for less than 25% spare capacity.)
7.7	The Distribution Panel **environment is safe**, has adequate clearances and exiting.	4	3	12	Working clearances are grandfathered by code and adequately marked due to air handler metal enclosure across from distribution panels SDP-A and SDP-B. (-2 points)
7.8	The Distribution Panel appears **serviceable.**	4	3	12	Average score of 3 for SDP-A and SDP-B. SDP-A was installed in 2001 and is in good condition. (-1 point, score of 4) SDP-B is the renamed former MDP and was installed in 1994. Panel is showing signs of corrosion. (-2 points for age greater than 25 years, -1 additional for corrosion present, score 2)
7.9	The Distribution Panel is **maintainable.**	4	5	20	
7.10	The Distribution Panel will support **future expansion.**	4	5	20	SDP-A has 64" total mounting space, and 10.5" is remaining as space. However, All but one breaker is spare, so in reality 90% of panel is spare. SDP-B has 108" total mounting space, with 35" remaining. Between the two, more than 50% capacity is available.

E | Electrical

ASSESSOR: David Carlson

		Weight Factor	Rating	Points	Comments
7.11	**Electrical panels and disconnect switches** observed during assessment are safe, serviceable, and maintainable.	2	5	10	90% of panels have required clear area. Panel backstage in auditorium is difficult to access. Panel in office on Library mezzanine has corkboard hung in front of it. All panels in good condition, and installed 2001 or newer.
7.12	Building has adequate and appropriately located, **safe exterior power** to allow for regular maintenance activities.	1	0	0	No exterior receptacles noted. No projects noted unless receptacles are requested by Moulton personnel.
7.13	Building has adequate **exterior lighting** to promote safety and security of the property.	5	3	15	Dark stair on east side. SW corner and staff lot dark. Add pole mounted lighting for lots and exterior, building mounted lighting at SE corner.
Electronic System Design					
7.14	MDF is **neatly organized** and has appropriate clearances and working spaces. Cables are neatly laced or trained. Entry to the room is restricted.	4	5	20	
7.15	MDF Equipment Racks have adequate space for **future growth.**	4	5	20	More than 50% spare capacity in 45 unit rack.
7.16	MDF is equipped with UPS to back up main switch(es), providing **backup power** to necessary equipment in the event of a power outage.	5	5	25	
7.17	MDF Power is supplied by **20A circuits and receptacles.**	1	5	5	Receptacle serving rack is 20A quad outlet, but other receptacles in the room are 15A receptacles.
7.18	MDF Power is supplied from a branch panel located in the room with **adequate spare circuit capacity.**	1	0	0	No panel present in MDF. Recommend adding panel from MDP in adjacent room to serve utilities within instead of Panel BA.
7.19	MDF employs up-to-date **network cabling.**	2	4	8	Majority of cabling present is CAT5e (-1 point for less than 6/6A).
7.20	MDF is connected to Intermediate Distribution Frame (IDF) closets with **fiber optic cabling.**	1	3	3	IDFs fed by 50µm MM FO cable. Non-armored, single strand.

E | Electrical

ASSESSOR: David Carlson

		Weight Factor	Rating	Points	Comments
7.21	MDF has adequate **grounding busbar capacity.**	2	3	6	Grounding bar has good capacity remaining but does not have connection to data rack. (-2 points for missing connections)
7.22	Building is equipped with an **addressable fire alarm system.**	5	5	25	Custodian noted that FACP has been in trouble/supervisory alarm for 2-3 months. Ticket submitted to Simplex, and work is in progress to reprogram/troubleshoot.
7.23	Building is equipped with an **access control system.**	5	2	10	Of 13 exterior entrances, 6 are equipped with card readers for access control. 6/13=46%
7.24	Building is equipped with a **CCTV system.**	5	3	15	Cameras on West side of building (entry and corner facing north) are inoperable.
7.25	Building is equipped with an **intercom system.**	4	5	20	
7.26	Building is equipped with a **master clock system.**	4	4	16	Simplex master clock. (-1 point for not DMPS Standard Primex)
	TOTAL			356	

EV | Elevator

ASSESSOR: Mike Brown - ATIS

8.0 Elevator Conditions

		Weight Factor	Rating	Points	Comments
Design					
8.1	**Size** meets minimum as directed by ADA.	2	5	10	
8.2	**Control protections and signals** meet ADA standards.	2	5	10	
8.3	**Signage** meets code requirements.	1	5	5	
Operation and Safety					
8.4	Elevators have **proper level accuracy and door times.**	1	5	5	
8.5	**Safety devices** are in place and operable.	1	5	5	
Condition and Maintainability					
8.6	**Equipment is easily accessible** for periodic maintenance.	1	5	5	
8.7	**Equipment** is at an acceptable point in the life cycle, and does not contain obsolete parts.	2	5	10	
8.8	**Finishes** are adequate and maintainable.	1	5	5	
8.9	**Maintenance** is adequate.	1	5	5	
8.10	**Testing** is up to date, and all **record and logbooks** are present and filled out.	1	3	3	Logbooks are incomplete.
	TOTAL			63	

RECOMMENDED PROJECTS AND COST ESTIMATING METHODOLOGIES

One of the major impetuses for our facility condition assessment work is the need to support strategic fiscal and maintenance planning for their facilities. As such, DMPS requires that recommended projects be assigned a total project cost in order to support the strategic planning needs of the District. A total project cost is a cost that includes the estimated construction cost as well as the various other 'hard' and 'soft' costs of a construction project such as professional design fees, contractor overhead, required contingencies, inflation, direct costs (e.g. permitting costs), etc. The full list of these hard and soft costs are defined later in this section.

Project Descriptions

Every building assessment report includes a section titled Recommended Projects and Priorities. This section is divided into the following subcategories: "Short Term Maintenance", "1-2 Year Project Priorities", "3-4 Year Project Priorities", "5 - 10 Year Project Priorities", and "Projects Requiring a Study". Each of these subcategories includes a list of project recommendations. The projects listed in each subcategory are grouped by discipline and listed in the following order: interior architecture, exterior architecture, civil (site), structural, mechanical, electrical, and elevator projects. The discipline order as described mirrors the order of the discipline Scoring Reports section found earlier in the building assessment report. The projects listed within Short Term Maintenance section do not include a cost. It is assumed that DMPS will perform this work. Additionally, projects which recommend furniture repair or replacement do not include a cost since furniture systems are selected and procured via a separate process. All other projects associated with the remaining subcategories, other than "Projects Requiring a Study" are provided an estimated total project cost.

Projects Requiring a Study

The projects listed within Projects Requiring a Study are provided estimated professional design fees to produce the recommended design study. In the future, once commissioned and completed, these recommended studies will not produce a completed design. Rather, the completed study will provide recommended project descriptions and estimated total project costs similar to the projects listed in this assessment report. For studies that most likely will result in a substantial project with a substantial cost associated, an "anticipated capital investment" cost number has been provided to help assist the District's strategic planning. This anticipated capital investment cost is based on a 5-10 Year Priority completion date and very high level general 'rules of thumb' estimations since it is unknown exactly what conclusions or recommendations will be determined by the study before the study is commissioned and completed.

Cost Estimating

To achieve the total project cost reflected in this building report, the recommended projects incorporate construction costs with added percentages to account for professional design services, design phase contingency, construction contingency, general contractor overhead and profit, other direct costs incurred by the project, and year-over-year inflation dependent on how many years out the recommended project is recommended to be completed. Not included in the total project cost are costs associated with hazardous materials abatement, testing, surveys, or site exploration (geotechnical testing, etc.). Additionally, for projects that are expected to produce a minimal amount of waste that is normally acceptable to City of Des Moines collection, costs for dumpsters have been excluded. To arrive at the final estimated total project cost as described above, the following methodology was used by the assessment team for each recommended project:

Step 1: Determine estimated direct cost of construction in 2024 dollars.

The recommended projects are conceptual in nature; therefore, all cost multipliers are overall systems level and/or unit costs. (These costs are not based on itemized breakdowns.) The cost information used is based on current available information which is in 2024 dollars and is a mixture of recent bids, firm experience, manufacturer provided information, and RS Means costing data.

Step 2: For recommended projects that are smaller in scale, scope, and estimated cost, a "small project fee" additive cost is applied to the estimated direct cost of construction determined in Step 1. This additive cost works to cover outsized mobilization, staffing, and equipment costs that are incurred on a small scale project the same as for a large project with a large economy of scale. These costs are as follows:

For projects with a Step 1 cost of $4,999.99 or less, an additive cost of $5,000.00 has been added.

For projects with a Step 1 cost of $5,000.00 to $14,999.99, a graduated additive cost from $5,000.00 to $0 has been added.

For all other projects (Step 1 cost of $15,000.00 and above) this step is skipped.

Step 3: Add 10% of the estimated direct construction cost for construction contingency.

RECOMMENDED PROJECTS AND COST ESTIMATING METHODOLOGIES

Step 4: Add a percentage of estimated direct construction cost plus construction contingency for inflation.
The projects are grouped based on how many years out it is recommended that the project is started. Projects closer to 2024 are more urgent projects. As project start times move further and further away from 2024, inflation must be added to best estimate how 2024 dollars will translate into the future. 5% year-over-year inflation was chosen as a reasonable assumption for this work.

- For projects assigned the 1-2 Year Priority add 10% of the estimated construction cost.
- For projects assigned the 3-4 Year Priority add 20% of the estimated construction cost.
- For projects assigned the 5-10 Year Priority add 50% of the estimated construction cost.

Step 5: Add 5% of the estimated direct construction cost, construction contingency, plus inflation for general conditions.
This cost covers the incidental costs incurred by the contractor to perform the work that are not directly tied to the specific materials and labor; examples include mobilizing to the site and final cleaning.

Step 6: Add 10% of the estimated direct construction cost, construction contingency, inflation, plus inflation for general contractor overhead and profit; combined, this is the total construction cost.

Step 7: Add 10% of the total construction cost for professional design services.
These services include, when appropriate: architectural design and project management, civil engineering, structural engineering, mechanical engineering, and electrical engineering. These services are for conceptual design through construction phase work.

Step 8: Add 5% of the total construction cost and professional design services for other direct costs.
These costs cover various other costs directly associated with the project such as printing, equipment, required permits, etc.

At the conclusion of Step 8, the total project cost for the recommended project is finalized.

PROJECT RECOMMENDATIONS

Below are recommended maintenance, projects, and studies based on the previous assessment scoring information. Short Term Maintenance items are items requiring DMPS attention in less than a year's time and is less than $5,000. Costs for these items are not estimated. 1-2 year priority projects are projects that require attention within the next 2 years. 3-4 year priority projects are projects that require attention within the next 4 years. 5-10 year priority projects are projects that require attention within the next 10 years. Project quantities are all estimated based on observations. These are not measured or verified quantities. Project costs are listed. Project requiring Study are items where project scope is not able to be defined at this time and further investigation is required. Costs for these items are design service fees, not project costs. See the Cost Methodology description for additional information.

Short Term Maintenance

Countertop Sealant	Replace sealant at classroom countertops to prevent moisture damage. Classrooms that appear to need sealant repairs include 123, 217, 219, and 226.
Wood Base Finish	Finish and protect the corridor wood base to match adjacent conditions at the door infill in office 102. A finish on the wood base will help resistant to scuffs or damage during routine cleaning and daily traffic.
Reglazing	Replace insulated glazing unit at singular cracked window in room 022.
Exterior Door Repair	Wood door leaf at south side of building (gymnasium egress stair) does not consistently latch.
Roofing Repair	Patch active roof leaks in multiple areas of the building.
Exterior Wall Cleaning	Clean biologicals from surface of stone/concrete wall surfaces.
Confirm Ventilation	Measure ventilation airflows at areas with pressurized plenums if possible. If determined to be inadequate, plan to address deficiency.
Confirm Boiler Venting	Boilers vented in CPVC with supply water temperature of 180 degrees F observed - confirm material is acceptable for this operating temperature.

MDF Data Rack Grounding	Add #6AWG jumper from TMGB to data rack.	
MDP Blank Plate Installation	Install one blank plate to cover open position in MDP to restrict access to live busbars.	
Panel Filler Plate Installation	Install two filler plates to kitchen sub-panel (fed from Panel 1B) to remove access to live lug connections within panel.	
Repair CCTV Cameras	Repair cameras at entrance and corner (near Room 124)	

1 - 2 Year Priority

		Project Costs
Gymnasium Improvements	Replace ceiling tiles with new acoustic baffles to provide sufficient acoustic absorption. Gym is approximately 4,000 SF and a minimum of 1,500 new acoustic material is recommended. Exterior brick walls should be cleaned and tuckpointed. Approximately 500 SF.	$70,000
Visibility Installation	Install vision panel into door 130. (1) single wood door. Office 130 from Library has no visual connection to the corridor.	$8,000
Replace Fire Escape Stairs	Remove existing fire escape stair from Auditorium and replace with Code-compliant stairs. Steel grate assembly 4' w x 20' L plus 5' landing. Railing 2 sides.	$30,000
Roofing Replacement	Remove and replace membrane roofing on entire building (38,500 SF on 13 roof levels) with code compliant insulation and TPO. Re-flash all exterior duct penetrations into curb caps. Recommend removal and infill of abandoned mechanical curbs throughout (Approximately 10 ranging in size from 2'x2' to 5'x12'. Replace metal parapet caps at all locations, except at Gymnasium. Approximately 1,250LF. Remove sealant between stone cap segments, reseal, and coat top and rear surfaces with elastomeric waterproofing (200 LF) at three sides of Gymnasium.	$940,000

Masonry and Lintel Repairs	Replace (4) steel lintels (above Library) and repair damaged/displaced brick (30 SF) and repoint brick at parapet and near ladder (20 SF). Replace deteriorated reglet flashing on south side of penthouse and west side gym wing (140 LF). Remove surface rust from lintels and paint exposed surfaces throughout building. (51+/-) openings on three floor levels. (350 LF)	$50,000
Door/Frame Replacement	Replace deteriorated steel frame at NW entry (near 103), single wood door/frames at east side original building (egress from stage, adjacent to loading dock)and at 2nd floor (exit from auditorium) plus double wood door/frame at SE side (egress from gym).	$50,000
Door/Frame Refinish	Remove surface rust as required. Repaint steel doors and frames--(2) double doors and (1) single.	$8,000
Drainage Repair	Remove existing sidewalk and, adjust grades to drain water into parking lot intake and prevent water from draining around building corner. For location, refer to civil site plan exhibit found in the appendix of this report.	$20,000
Curb Repair	Return damaged curbs to new condition. Approximately 5 LF of 6" curbs. For locations, refer to civil site plan exhibit found in the appendix of this report.	$6,000
Playground Pavement Replacement	Take out deteriorated playground asphalt around tree and replace with mulch. Approximately 166 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	$12,000
Pavement Replacement	Remove and replace 41 SY of asphalt and 7 SY of PCC. For locations, refer to civil site plan exhibit found in the appendix of this report.	$11,000
Thermostatic Mixing Valve Installation	Confirm whether mixing valves are installed in inaccessible locations. If not, add mixing valves to prevent scalding.	$13,000
Hose Bibb(s) Installation	Add hose bibb(s) at roof to allow for servicing of roof-mounted equipment.	$12,000

Fall Protection Installation	Add fall protection for equipment near roof edges (multiple devices).	$15,000
Exterior Lighting Installation	Add pole-mounted lighting for staff lot (two parts of lot). Add building mounted exterior lighting at East side by dock and exit stair. Add at SW corner of building.	$50,000
	Total 1-2 Year Project Costs:	**$1,295,000.00**

3 - 4 Year Priority

		Project Costs
Ceiling Replacement	Following roofing and other exterior repairs, replace water damaged ceiling tiles throughout the building. Approximately 1,300 SF of panel replacement. Grid may remain.	$25,000
Wall Base Replacement	Replace shrunk or damaged base in classrooms throughout the west wing or as needed. Approximately 100 LF.	$6,000
Interior Refinish	10 classrooms and cafeteria to receive new flooring. Classroom flooring should be replaced with carpet tiles approximately 1/3 of the room and LVT flooring for the remaining room. This matches the existing conditions. Approximately 28 classrooms. Approximately 4,500SF of LVT and 8,500SF of carpet tiles. Music Room flooring should be replaced with carpet. Approximately 500SF. Cafeteria flooring should be replaced with LVT, or similar, for the entire space, approximately 3,100SF, with 250 LF of resilient wall base. Wall refinish and repairs to classrooms. Approximately 150 SF of minor gypsum board wall repairs. Approximately 40,000 SF of repainting for all classrooms and cafeteria.	$330,000
Storage improvements	Replace wood locker doors, approximately 8 faces at 18"x4'.	$14,000

Sealant Replacement	Remove and replace sealant at perimeter of windows/doors throughout building. Approximately 175 openings on three floors. (3,500 LF) Remove and replace sealant in masonry soft joints at west addition. Approximately (31) locations @ 35' (1,100 LF)	$60,000
Exterior Stair Refinish	Repaint steel stair structure and railings (guardrail on both sides). Stairs and landings are 18 and 12 feet long respectively.	$11,000
Pavement Replacement	Remove and replace 336 SY of asphalt and 42 SY of PCC. For locations, refer to civil site plan exhibit found in the appendix of this report.	$55,000
Sidewalk Repairs	Repair damaged sidewalks across the site. Approximately 18 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	$9,000
Brick Lintel Repair	Many brick lintels need to be sand blasted and repainted to eliminate corrosion. Approximately 175 linear feet of lintels.	$8,000
Basement Stair Replacement	The stair going down the basement ear room 008 is heavily corroded and should be replaced. It is a steel stair with concrete pans. 4ft wide 12 feet tall.	$25,000
Stair Railing replacement	Stair railings on most of the interior stairs do not appear to meet modern strength requirements for guardrails and stair rails. They would need to be replaced. There are 5 stairs of this nature. Approximately 200 total feet of railing.	$130,000
Brick Lintel Replacement	Brick Lintels outside of rooms 323, 322 and 321 are corroded beyond repair. They will need to be replaced. (4) lintels, 4ft long. L6x4x3/8 lintel size.	$12,000
Expand Sprinkler Coverage	Extend automatic fire sprinkler coverage to remainder of building.	$1,500,000

Total 3-4 Year Project Costs: $2,185,000.00

5 - 10 Year Priority

		Project Costs
Restroom Improvements	Update multi-user restroom finishes and toilet partitions. 10 restrooms with 5 fixtures each. Approximately 1,500SF of epoxy flooring, 4,000 SF of wall tile and 3,000SF of wall paint. Fixtures to be replaced to utilize automatic fixtures. Lavatories are expected to remain. Project recommended to be completed within 9-10 years. This is based on not meeting current DMPS standards and expected wear.	$1,900,000
Roof Access/Safety Improvements	Provide guard at primary access on Roof G. Secure abandoned hatches on Roofs A and K (consider removing at next reroofing). Remove or revise (4) ladders: Roofs K to I 14+4 VLF, K to J 10+4 VLF, K to M 8+4 VLF, and M to L10+4 VLF -- the 4 VLF includes top landing and rung(s) on parapet side of wall. Provide new ladders for Roofs G to K at 5 VLF, and K to A at 4 VLF. At roof C, provide ladder dock. See appendix for roof identification image.	$45,000
Pavement Replacement	Remove and replace 919 SY of asphalt and 60 SY of PCC. For locations, refer to civil site plan exhibit found in the appendix of this report.	$180,000
Sidewalk Repairs	Repair 277 SY of damaged sidewalks across the site and install a rock base under the 55 SY experiencing subsurface moisture issues. For locations, refer to civil site plan exhibit found in the appendix of this report.	$70,000
Playground Pavement Replacement	Take out deteriorated playground asphalt. Approximately 997 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	$180,000
Grading Repair/ Remove wall	Remove deteriorated retaining wall and re-grade area. For location, refer to civil site plan exhibit found in the appendix of this report.	$30,000
Wall Replacement	Remove existing wooden wall and replace with a modular block wall. For location, refer to civil site plan exhibit found in the appendix of this report.	$35,000
Stoop Replacement	The stoop at the main entrance has a significant crack down the center. It looks like the side of the stoop furthest from the building has settled which caused the crack. Stoop slab is 4ft x 10ft, 5" thick with #4 bars @ 9" O.C. each way. Stoop walls would be 8" thick, 42" deep, reinforced with #4 @ 12" O.C. each way.	$11,000

MDP Replacement	Continue to observe rust on MDP. In the event rust becomes extensive, replace with new. Mitigation of humidity in space would increase longevity of equipment.	$720,000

Total 5-10 Year Project Costs: $3,171,000.00

Projects Requiring Study

		Design Services Fee
Mother's Room Study	Study to define a private dedicated space for a Mother's Room that includes a sink, side table, chair, and privacy door hardware.	$5,000
Space Utilization	Additional storage is needed for staff. A study should be completed to determine how best to add enclosed storage into classrooms as well as for general storage of teaching materials and building support items (extra furniture, etc.).	$5,000
Drainage Study	If drainage repair does not alleviate issue on west side of building, suggest studying the issue in more depth. Solution may be extensive.	$5,000
Structural Slab Study	There are many areas in the basement with cracked load bearing brick, cracking concrete columns, beams and floor slab, exposed rebar that is corroding and walls showing signs of water damage. A more extensive study should be performed to determine the severity and scope of the structural issues. There are numerous locations on the underside of the 2nd and 3rd floor slabs where significant cracking, spalling and exposed rebar can be seen. A more extensive study should be performed to determine the severity and scope of the structural issues. **This study should be prioritized.**	$14,000
Auditorium Stage	The auditorium stage feels bouncy. Further study should be performed to determine if it meets current structural requirements for the capacity of stage spaces.	$2,000
Designated Hardened Area	No designated hardened area was observed. Study to determine the feasibility of adding a designated hardened area, including location, within the existing building, schematic design concept if deemed feasible, and preliminary project costs.	$2,500

Loading Dock Slab Replacement	The slab of the loading dock needs to be replaced. This is a fairly significant structure as there is basement below it. The slab has significant cracking, spalling and exposed rebar on the underside. It also has a significant amount of added shoring to hold it up. Further design will be required to determine the best approach for the replacement. Replace with a new steel post, beam and concrete slab system. The area that needs to be replaced is approximately 30ft x 40ft.	$2,000
	Total Study Design Service Fees:	$35,500

APPENDIX

5+ YEAR REPLACEMENT

3-4 YEAR REPLACEMENT

1-2 YEAR REPLACEMENT

NORTH

GRAPHIC SCALE

60 0 30 60 120

bbs ARCHITECTS ENGINEERS

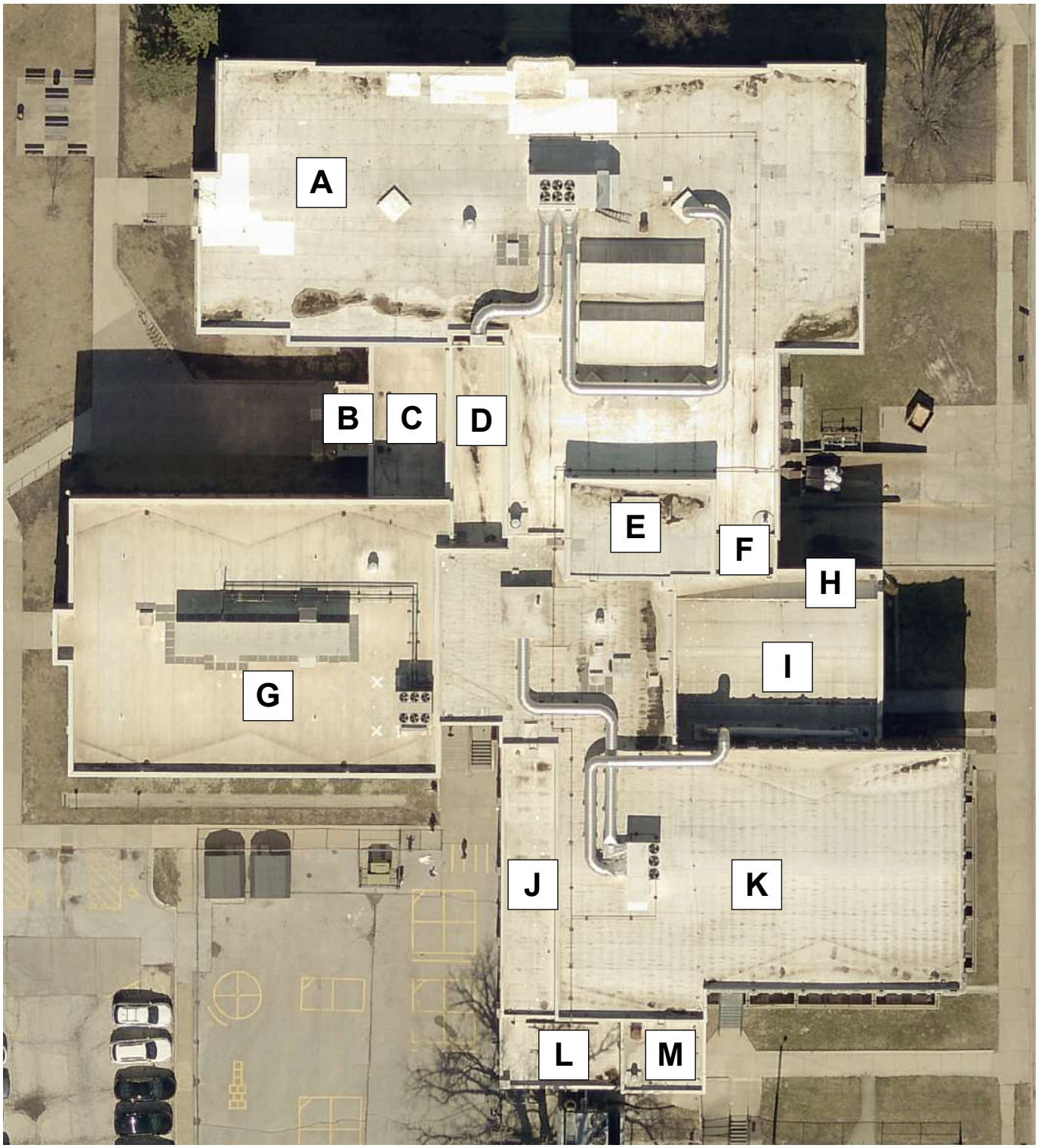
BISHOP ENGINEERING +

MOULTON ELEMENTARY

EXHIBIT

PROJECT # 230286-24

DATE 1/8/2024



bbs ARCHITECTS ENGINEERS

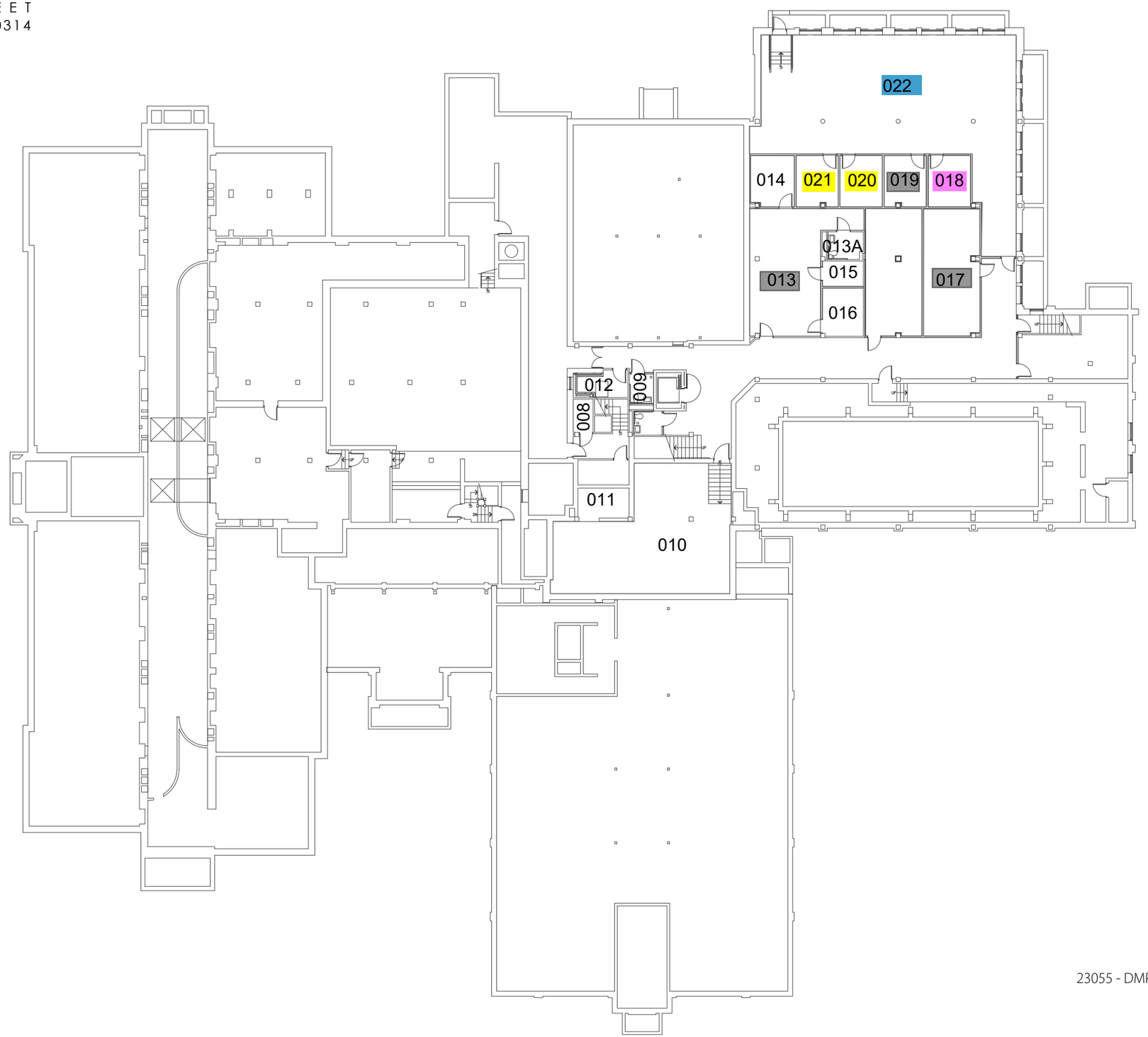
23055 - DMPS Facility Conditions Assessment
Roof Identification Image
Moulton Elementary
1.17.2024

MOULTON ELEMENTARY SCHOOL

1541 8TH STREET
DES MOINES, IOWA 50314

FOUNDATION

NORTH



- Core Classroom
- Student Support
- Administration
- Large Shared Space
- Other

bbs ARCHITECTS ENGINEERS

23055 - DMPS Facility Conditions Assessment

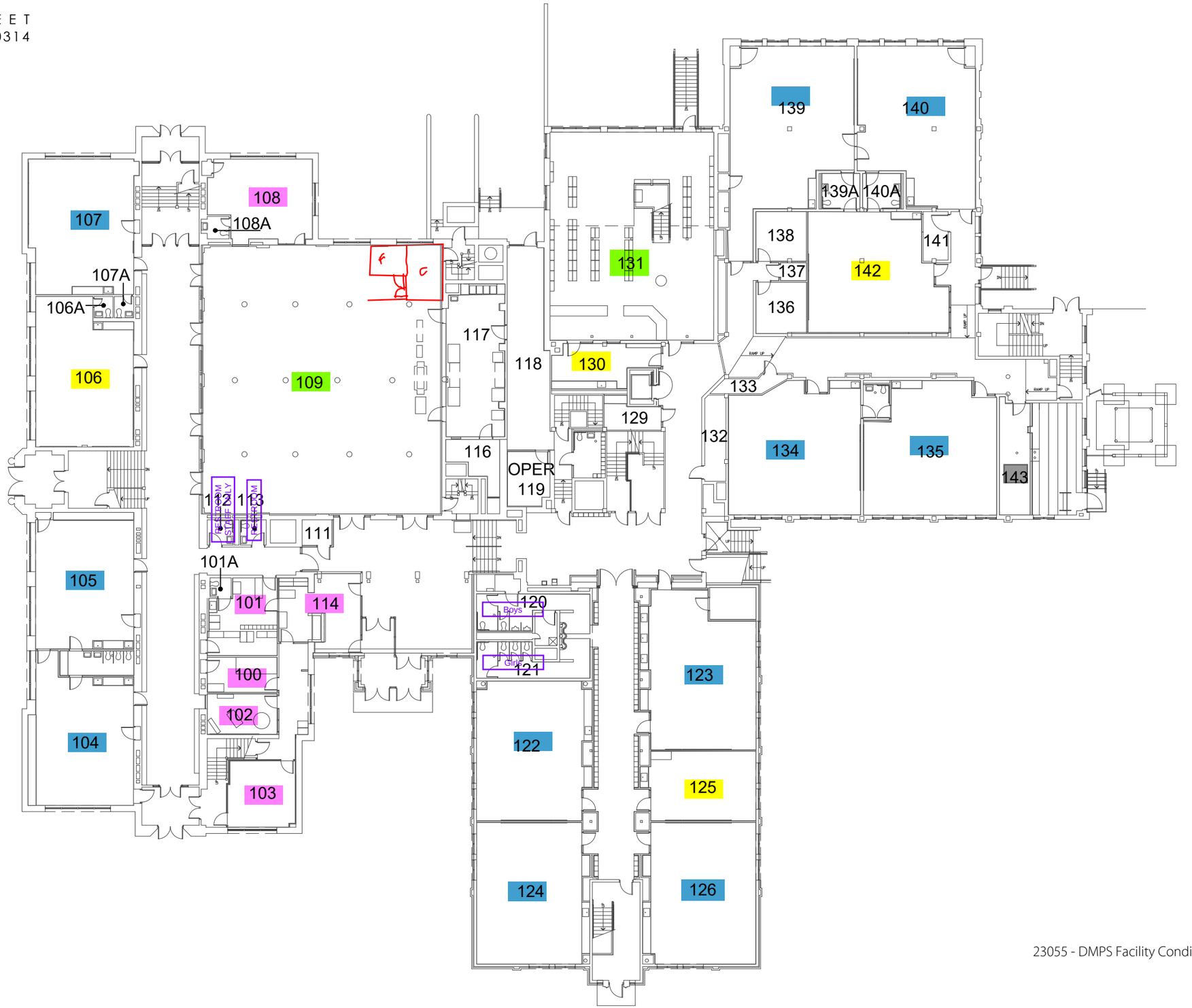
1.17.2024

MOULTON ELEMENTARY SCHOOL

1541 8TH STREET
DES MOINES, IOWA 50314

FIRST FLOOR

NORTH



- Core Classroom
- Student Support
- Administration
- Large Shared Space
- Other

bbs ARCHITECTS ENGINEERS

MOULTON ELEMENTARY SCHOOL

1541 8TH STREET
DES MOINES, IOWA 50314

SECOND FLOOR

NORTH

- Core Classroom
- Student Support
- Administration
- Large Shared Space
- Other

bbs ARCHITECTS ENGINEERS

MOULTON ELEMENTARY SCHOOL

1541 8TH STREET
DES MOINES, IOWA 50314

THIRD FLOOR

NORTH

- Core Classroom
- Student Support
- Administration
- Large Shared Space
- Other

bbs ARCHITECTS ENGINEERS

23055 - DMPS Facility Conditions Assessment

1.17.2024