DMPS FACILITY ASSESSMENT | FINDLEY ELEMENTARY

1.10.2024

bbs
ARCHITECTS
ENGINEERS

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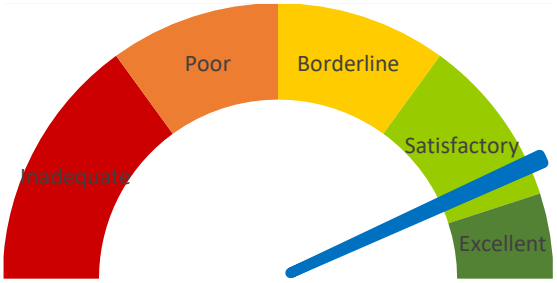

REPORT ORGANIZATION

COVER SHEET

REPORT ORGANIZATION

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COST METHODOLOGY

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EXECUTIVE BUILDING SUMMARY

Findley Elementary's on-site facility conditions assessment was conducted on January 8, 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.

There are many short term maintenance items identified for Findley Elementary. A general summary of the items are: toddler lock removal, pest management, exterior door repair and maintenance, roof repairs, roof access security, site maintenance, electrical grounding, MDP maintenance, and exterior lighting. While the current condition of Findley Elementary appears highly satisfactory these maintenance items are important to keep the building and site well maintained while avoiding costly replacements.

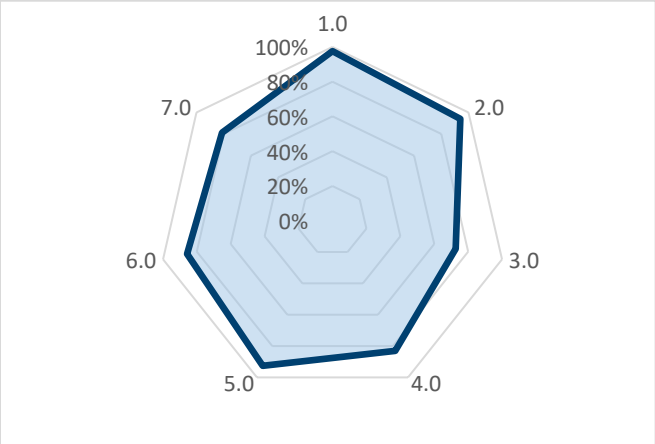
A summary of the recommended projects for Findley Elementary to be completed in the next 1-2 years are as follows:

- Door Hardware Replacement
- Exterior Door Improvements
- Site Repairs
- Lintel Refinish
- Hose Bib Installation
- MDP Panelboard Installation
- Exterior Lighting Improvements

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	161	2.00	330	322	98%	Excellent
2.0	Environment for Education	350	329	0.60	210	197	94%	Excellent
3.0	Exterior Envelope	95	69	3.00	285	207	73%	Satisfactory
4.0	School Site	100	83	1.50	150	125	83%	Satisfactory
5.0	Structural Conditions	135	125	1.30	176	163	93%	Excellent
6.0	Mechanical Systems	635	545	0.80	508	436	86%	Satisfactory
7.0	Electrical Systems	455	370	0.75	341	278	81%	Satisfactory
Total					**2,000**	**1,727**	**86%**	**Satisfactory**

Findley 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 Findley Elementary scored a building health rating of 86% 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. Findley Elementary is high within this positive range. Addressing maintenance items, especially at the exterior envelope, as described in this report will have the greatest impact in increasing this score to "Excellent".

Building Data Record

Building Name: **Findley Elementary**

Date: **1.10.2024**

Address: **3025 Oxford Street**
Des Moines, IA 50313

High School Feeder System: **North High**

Building SF: **43,628 SF**

Site Acreage: **4.12 Acres**

Date(s) of Construction: **1966, 1971, 2017**

Date(s) of Roof Replacement: **1995, 2013, 2016**

Current/Scheduled Projects: **Replace Pavement - 2024**
Acoustics in gym - 2025

Existing Building Data:

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

Site Items:

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

Energy Source:

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

Cooling:

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

Heating:

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

Structure Fireproofing:

- [x] No
- [ ] Yes

Construction:

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

Exterior Facade:

- [x] Brick
- [ ] Stucco
- [x] Metal
- [ ] Wood
- [x] Other **Precast**

Floor/Roof Structure:

- [ ] 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	There are metal panels patched on the floors in some areas from previous mechanical systems. Gaps in sealant lead to mice issues.
Elective/Secondary Classroom					
1.2	**Gymnasium** is adequate for providing physical education programming.	2	4	8	No projector observed.
1.3	**Cafeteria** has adequate space, furniture, and acoustics for efficient lunch use.	2	5	10	
1.4	**Music room** is adequate for providing introductory music instruction.	2	5	10	Band lessons appeared to be held in band director office.
1.5	**Art room** has sufficient accommodations for program.	2	5	10	
1.6	**Library/Resource/Media Center** provides appropriate and attractive space.	1	5	5	
Core Classroom					
1.7	Classroom space permits arrangements for **small group activity.**	3	5	15	
1.8	**Student storage space** is adequate.	2	4	8	Kindergarten student storage within tables and desks was not present. Cubbies are within classrooms for outerwear.
1.9	**Teacher storage space** is adequate.	3	5	15	Most younger grades have additional storage closet.
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	5	20	
1.12	Educational **technology** supports instruction.	4	5	20	
Administration					
1.13	**Conference/Private meeting rooms** are adequate for large and small meetings.	1	5	5	
1.14	**Main office** has a check-in and waiting area.	2	5	10	
	TOTAL			161	

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	5	5	
2.3	Areas for students to **interact are suitable to the age group.**	1	5	5	
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	Some of the staff furniture in the break room and other shared spaces are showing wear and surface damage.
2.6	**Color schemes**, building materials, and decor are **engaging and unify** the school character.	2	5	10	The light grey color shows more streaks and scuffs in high traffic areas like restrooms and at sanitation stations in the classrooms.
2.7	Windows and skylights provide access to **adequately controlled daylight** for regularly occupied spaces.	3	5	15	Interior rooms have solar tubes or skylights.
2.8	Windows provide access to **quality views** (to exterior, courtyards, artwork etc.) for regularly occupied spaces.	3	4	12	Most classroom windows are smaller which provides limited views.
2.9	**Lighting has proper controls** to provide the required light levels for various teaching and learning needs.	2	5	10	Most all rooms have dimming capabilities.
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	5	5	
2.13	**Mother's room** is a separate designated space properly furnished.	1	1	1	Office Staff noted there were offices that could be dedicated as mother's room(s) as staff are needing them. No specific wellness or mother's room was observed.
Maintainability					
2.14	**Floor surfaces** are durable and in good condition.	1	4	4	Restroom tiles varies but is all approximately 8" square tile. Grout is difficult to keep clean and is showing wear. Other flooring is in good condition.
2.15	**Ceilings** throughout the building – including services areas – are easily cleaned and resistant to stain.	1	5	5	
2.16	**Walls** throughout the building – including services areas – are easily cleaned and resistant to stain.	1	4	4	Multi-user Restrooms are painted light gray walls which show scuffs and water spotting throughout. Gypsum board walls showing minor wear and denting, especially at sanitation stations by classroom doors.
2.17	**Built-in casework** is designed and constructed for ease of maintenance.	1	5	5	
2.18	**Doors** are either solid core wood or hollow metal with a hollow metal frame and well maintained.	3	5	15	
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	Several classroom doors do not have space on either sides of the door for entry accessibility.
2.23	Door hardware (into classrooms or any occupied rooms off of corridors) include **intruder classroom locksets.**	3	3	9	Door hardware is adequate. There is a toddler lock on doors 1203, 1205, 1210.
2.24	**Door panels** into classrooms and other occupied spaces contain **vision lite.**	3	5	15	
2.25	**Vision lite** in doors is clear and uncovered.	2	5	10	Only 2 rooms have partially covered vision panels.
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	N/A	0	
2.30	**Stairs (interior and exterior)** are well maintained and in good condition meeting current safety requirements.	5	4	20	Mezzanine stairs are in good condition but are steeper than standard 7x 11.

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			329	

A | Architectural , Exterior

ASSESSOR: David Unick

3.0 Exterior Envelope

Design

		Weight Factor	Rating	Points	Comments
3.1	Overall **design is aesthetically pleasing** and appropriate for the age of students.	2	4	8	See decorative scupper discussion in Section 3.2.

Maintainability

3.2	**Roofs** appear sound, have positive drainage, and are water tight.	3	3	9	Decorative open scupper at main entry canopy creating ice buildup on/near primary building entrance. Active leak (warranty issue) at Area O. Roof at Areas C-K nearing end of service life.
3.3	**Roof access** is safe for all roofs.	3	3	9	Modify roof access ladder and hatch guard at Cafeteria access. Provide new ladders between roof areas on main roof.
3.4	Exterior **window sealant** is fully intact without cracks or gaps.	3	4	12	Window sealant generally in good condition. Will likely require maintenance replacement in 5-10 years. Replace sealant around gymnasium clerestory windows 1-2years.
3.5	**Glazing** is low-e coated, insulated, and overall in good condition.	1	4	4	Glazing is insulated. Tinting does not appear to be in place.
3.6	**Operable windows** are functional and safe. Operable portion of window fully seals when closed without gapping or leaking.	2	4	8	No observed issues.
3.7	**Exterior doors** are of durable material requiring minimum maintenance.	2	3	6	All doors are steel or aluminum storefront. (6) doors/frames show degree of rusting and should be repaired/repainted plus (1) door appears to be warped and should be replaced.
3.8	**Exterior walls** are of material and finish requiring little maintenance,	1	4	4	Multiple wall materials-brick, precast concrete, metal panel. One area of metal panel is damaged and should be replaced. Sealant joints in brick and precast walls should be replaced.
3.9	**Exterior Doors** open outward and are equipped with **panic hardware.**	1	5	5	
3.10	**Exterior Doors are monitored** or controlled by an access control system.	1	4	4	(2) Doors do not consistently latch: Entry nos. 6 and 7. (8) Entries have card readers. (5) Entries have keyed locksets. All doors (except two exterior storage rooms) have exterior identification signage.
	TOTAL			69	

C | Civil

ASSESSOR: Jack Gorman Joel Jackson

4.0 School Site

		Weight Factor	Rating	Points	Comments
4.1	**Site topography** and grading drains water away from the building and retaining walls.	1	4	4	Good drainage away from building, one issue of water not draining in between concrete walks on east side and one deteriorated retaining wall should be removed.
4.2	**Parking areas** are in good condition.	5	5	25	SE lot appeared new, both lots in good condition.
4.3	**Drive areas** are in good condition.	3	4	12	Some of the drive accesses need repairs but mostly good overall.
4.4	**Sufficient on-site, solid surface parking** is provided for faculty, staff, and community.	1	2	2	DMPS states parking is short for day to day and that there is no where to park for events.
4.5	**Sidewalks** around the facility are in good **condition.**	1	3	3	A couple of sections need repair and the roots of the tree on the north side are shifting the sidewalk, but most sidewalk areas are in good condition. The west side stairs are cracking throughout and should be replaced.
4.6	**Sidewalks are located** in appropriate areas with adequate building access.	1	5	5	All doors have sidewalk access and the site was easy to navigate.
4.7	**Hard surface** playground surfaces are in good condition.	3	4	12	The basketball asphalt area was in good condition, some sections of the walk track were cracking.
4.8	**Fencing** around the site is in good condition.	1	5	5	1 small hole in the fence was observed, one connection needs reattached on NW side, all sections appeared new.
4.9	**Trash enclosure** is in good condition.	1	5	5	Pavement, gate, and brick all in good condition. The roof downspout was dented but still appeared to be functioning.
4.10	**Utilities** are in newly constructed conditions and placed in suitable locations.	1	4	4	The detention basin FES needs some maintenance cleaning, other utilities in good condition.

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	The detention basin in the NW limits expansion in that direction and the parking lots don't have much room to expand into.
4.12	Site has **onsite bus and parent pickup** up with adequate length, good separation and general good site circulation.	1	5	5	DMPS states buses use the east side and parents use the south and west sides, no conflicts between the two.
	TOTAL			83	

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	5	5	
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	N/A	0	
5.4	**Stoops** appear to be in good condition.	1	2	2	The exterior door near room 1022 does not have a stoop. It is an out-swinging door. The stoop near room 1329 is not wide enough.
Slab on Grade					
5.5	**Slabs on grade** do not appear to have any cracks	1	4	4	There are some shrinkage cracks in the polished concrete corridor floors. These are not of structural concern.
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	5	10	
5.8	**Lintels** appear in good condition (no visible deflection or rust).	1	5	5	
5.9	**CMU** is in good condition.	1	4	4	There is a stair-stepping crack in the Northeast corner of the gym that needs further study, or monitoring for changes.
5.10	**Precast** is in good condition.	1	5	5	

S | Structural

ASSESSOR: Trevor Pullen

		Weight Factor	Rating	Points	Comments
Interior Walls					
5.11	**Interior walls** appear to be in good condition.	1	5	5	
Floor Framing (Elevated)					
5.12	**Floor framing** appears to be in good condition.	3	5	15	
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	N/A	0	
5.16	**Canopies** appear to be in good condition.	1	5	5	
5.17	**Loading dock concrete** appears to be in good condition.	2	N/A	0	
5.18	**Mechanical screening** appears to be in good condition.	2	5	10	
5.19	**Stairs** appear to be in good condition.	1	5	5	
5.20	**Stair railings** appear to be in good condition.	1	5	5	

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	
5.23	The hardened area appears consistent with the **ICC 2018 code.**	1	N/A	0	
	TOTAL			125	

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	
6.2	**Thermostat location.** Thermostats are properly located in the space.	3	5	15	
6.3	Appropriate **amount of ventilation** are provided to each space.	5	5	25	
6.4	**Ventilation** is provided during occupied hours.	5	5	25	
6.5	**Outdoor air intake locations** are appropriate.	4	5	20	
6.6	Appropriate **levels of exhaust** are provided for areas requiring this such as restrooms, janitor's closets and locker rooms.	5	5	25	
6.7	**Building pressurization.** The design takes into account the balance between ventilation and exhaust air	2	5	10	
6.8	**Major HVAC Equipment** appears to be within it's acceptable **service life.**	5	4	20	Appears true- VRF likely has around 3-5 years remaining
6.9	**Cooling loads** are within equipment operational capacity.	5	5	25	
6.10	**Heating loads** are within equipment operations capacity.	5	5	25	

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	5	15	
Plumbing Design					
6.12	**Water Supply Pressure** is adequate to allow for operation of plumbing fixtures.	5	5	25	
6.13	Appropriate **backflow preventer** is provided at connection to city water supply.	5	5	25	
6.14	**Domestic hot-water systems** are within equipment operational capacity.	5	5	25	
6.15	Domestic **hot-water recirculating systems** allow for hot-water at fixtures within a reasonable amount of time.	3	5	15	
6.16	**Sanitary sewer systems** are sized and sloped to allow for proper drainage.	5	5	25	
6.17	Appropriately sized **grease interceptors** are provided for facilities with food service.	3	5	15	
6.18	**Roof drainage** systems are sized appropriately and overflow drainage systems are installed.	5	2	10	Does not appear overflow installed for most of building
6.19	**Restroom fixtures** are in good condition and comply with current DMPS standards.	3	3	9	Auto flush valves Metered Faucets
Maintainability					
6.20	Equipment is provided with **adequate service clearance** to allow for regular maintenance	3	5	15	

MP | Mechanical & Plumbing

ASSESSOR: Corey Metzger

		Weight Factor	Rating	Points	Comments
6.21	AHUs and chiller are provided with **coil pull space.**	2	N/A	0	
6.22	**Filter** sizes are standard and filter types are standard.	2	2	4	Variety of sizes/types (Cassettes, Horizontal, FCUs, Vertical FCUs, RTUs)
6.23	**Equipment mounting heights** are reasonable.	3	5	15	
6.24	**Floor surfaces** throughout the mechanical room are non-slip and are dry.	2	5	10	
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	
6.26	Appropriate means are provided for **airflow and water balancing.**	3	5	15	
6.27	**Hose Bibbs** located in proximity to **outdoor condensers and condensing units**. Is cottonwood an issue at this location?	2	3	6	No roof hydrants but wall hydrants are located on the outside wall. THe builidng is only 1-story.
6.28	**Fall protection** is provided for equipment within 15 ft of roof edge as per OSHA standard 1910.28(b).	2	3	6	1 RTU in concern
6.29	**Building devices are on DDC controls** and fully visible through Building Automation System. No pneumatic controls remain.	4	5	20	
Occupant Safety					
6.30	**Backflow prevention** is provided at all **cross-connections** to non-potable water.	5	5	25	

MP | Mechanical & Plumbing

ASSESSOR: Corey Metzger

		Weight Factor	Rating	Points	Comments
6.31	Building is fully **sprinklered.**	5	5	25	
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	N/A	0	
6.35	**Refrigeration evacuation systems** are provided in rooms with chillers.	5	N/A	0	
6.36	**Carbon Monoxide monitoring** and alarming is provided for areas with gas-fired equipment.	5	5	25	
	TOTAL			545	

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 is 300kVA 208/120V transformer on east side of building.
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	4	12	Access obstructed by light mechanical maintenance materials (-1 point).
7.4	The **MDP** appears serviceable.	4	2	8	MDP is a Square D I-Line distribution panelboard rated for 800A. Installed in 1973, with modern breakers added over time. Signs of age are evident, but is generally in good condition (-2 points). Open space between breakers exposes live busbars (-1 point).
7.5	The MDP is **maintainable.**	3	5	15	Despite its age, Square D I-Line panelboards have not changed their method of breaker attachment and remain in service despite being 50+ years old.
7.6	The MDP will support **future expansion.**	4	2	8	Panel accepts 72" of mounting space for breakers. 9" is free for breaker expansion, but only one 3-pole space is available for larger expansion. (-3 points for less than 15% spare capacity.) Existing distribution and branch panels are adequate to support the space, and lack of room for growth may only come into question if an addition is considered.
7.7	The Distribution Panel **environment is safe**, has adequate clearances and exiting.	4	5	20	
7.8	The Distribution Panel appears **serviceable.**	4	4	16	Panel IDP is of the same era as the MDP, installed in 1973 (-2 points for age greater than 25 years). Panel K1 (400A Siemens Type P4 Panel) was installed in 2016 (Score of 5). Average score 4.
7.9	The Distribution Panel is **maintainable.**	4	5	20	IDP and K1 are supported by their manufacturers and parts are readily available.
7.10	The Distribution Panel will support **future expansion.**	4	4	16	IDP has 27" of 45" mounting space remaining (60% Spare, 5). K1 has 15 of 78 breaker positions remaining (19% Spare, 3) Average score of 4.

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	3	6	Average score of 3 for all panels observed. 6 of 8 panels shown on record drawings are manufactured 1973 and are marked down due to age, but are still supported by Square D. Panels in public hallways are not locked. recommend custodial staff re-lock panels.
7.12	Building has adequate and appropriately located, **safe exterior power** to allow for regular maintenance activities.	1	5	5	
7.13	Building has adequate **exterior lighting** to promote safety and security of the property.	5	3	15	Light at Door 8 is inoperative. There are dark spots on the building's east side and the SE corner near staff parking.
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	Second rack in space is not used, excess of 50% spare capacity.
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	
7.18	MDF Power is supplied from a branch panel located in the room with **adequate spare circuit capacity.**	1	0	0	No branch panel in MDF, circuits fed from Panel LA2.
7.19	MDF employs up-to-date **network cabling.**	2	4	8	Majority of cabling is CAT5e (-1 point for less than 6 or 6A).
7.20	MDF is connected to Intermediate Distribution Frame (IDF) closets with **fiber optic cabling.**	1	3	3	6-strand 50um OM3 MM cable from MDF to IDF.

E | Electrical

ASSESSOR: David Carlson

		Weight Factor	Rating	Points	Comments
7.21	MDF has adequate **grounding busbar capacity.**	2	3	6	Ground bar has ample capacity (>50% available spaces for lugs). There is a main connection to building steel but no connection to MDP ground bus.
7.22	Building is equipped with an **addressable fire alarm system.**	5	4	20	Fire Alarm Control Panel is Simplex 4010ES panel with NAC extenders (-1 point for not DMPS Standard 4100 series).
7.23	Building is equipped with an **access control system.**	5	3	15	8/13=62%
7.24	Building is equipped with a **CCTV system.**	5	5	25	
7.25	Building is equipped with an **intercom system.**	4	5	20	
7.26	Building is equipped with a **master clock system.**	4	3	12	Primex master clock Caution and Error lights flashing. Recommend facility staff investigate error codes.
	TOTAL			370	

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

Toddler Lock Removal	Toddler locks on classroom door hardware is not compliant with current egress codes within the City of Des Moines. It is suggested these be removed from classrooms 1203, 1205, and 1210.
Pest Management	Mice were noted by staff to be an issue. Pest management should be provided regularly until the issue is resolved.
Exterior Door Latch Repair	Doors 6 (playground access at cafeteria link) and 7 (kitchen) did not consistently latch. Adjust closers as necessary.
Roof Repair	Repair active leak in Roof O (See appendix for Roof Identification Plan.) At time of roof assessment a work ticket had reportedly already been submitted for this by the school staff. This portion of the roof is likely still within the warranty period.
Roof Cleaning	Remove vegetative debris--leaves, branches, acorns, etc.--from multiple areas of the roof near perimeter and at drains.
Soffit Repair	Repair or install cover plate over former recessed light location in wood soffit above windows of Classrooms 1316/1318.
Roof Access Security	Provide interior ladder lock assembly for exposed roof access ladder at Stage 1402.
Clean Out FES	Remove the trash and other debris in the FES of the detention pond. For location, refer to the civil site plan exhibit found in the appendix of this report.

Remove Old Fence Post	Remove the old fence posts no longer in use. For location, refer to the civil site plan exhibit found in the appendix of this report.	
Reattach Fence Connection Bar	Reattach the disconnected fence bar. For location, refer to the civil site plan exhibit found in the appendix of this report.	
Junction Box Cover Replacement	Junction box utilized as cable pull box for Panel K1 feeder in mezzanine adjacent to gymnasium does not have a cover and cables are exposed. Replace cover.	
MDP Blank Filler Plate Replacement	A 3" section of breaker space does not have a filler plate between breakers, leaving live busbar accessible. Provide new filler plate to bridge the gap.	
Add Grounding Conductor to TMGB	Add a #2/0AWG connection from the MDP main grounding bus in the adjacent main electrical room to TMGB.	
Add Grounding Conductor to Cable Tray	Add a #6AWG connection from the TMGB to building cable tray.	
Master Clock System Error Codes	Address flashing Caution and Error lights.	
Exterior light at Door 8.	Repair inoperative light fixture.	

1 - 2 Year Priority

		Project Costs
Door Hardware Replacement	Classrooms 1203, 1205, 1210 are currently used as special education classrooms. If this use is continuous it is recommended to install a delayed egress door hardware system in lieu of safety toddler locks at these 3 locations.	$100,000

Exterior Door Replacement	Door 9 (Gym) does not sit squarely in frame. It latches, but does not fully seat against weather-stripping. Base of jamb has rust damage. Replace single door and frame.	$20,000
Metal Wall Panel Replacement	Ribbed architectural metal wall panels at east end of north wall of cafeteria wing (outside of Room 1414) contain multiple dents and holes plus graffiti damage. Replace damaged panels (150 SF) as well as the rest of the wall area for consistency. Approximately 350 additional area.	$5,000
Exterior Door Refinish	Surface rust is developing on (7) doors/frames, (4) single doors, (2) double doors with center lite, (1) double door: Nos. 3, 5, 7, 10, 11, east Storage Room 102, and roof access door. Clean and refinish doors and frames.	$11,000
Sidewalk Repairs	Repair damaged sidewalks across the site. Approximately 9 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	$7,000
Curb Repair	Return damaged curbs to new condition. Approximately 10 LF of 6" curbs. For locations, refer to civil site plan exhibit found in the appendix of this report.	$6,000
Lintel Refinish	Remove rust and repaint exposed portions of steel lintels. (Classrooms 1326,1329, and gym clerestory windows; 14 locations, approximately 55 LF total.)	$6,000
Thermostatic Mixing Valves	Confirm whether thermostatic mixing valves exist for multi-station wash fountains with piping enclosures and add where needed for student/staff plumbing fixtures.	$13,000
MDF Panelboard Installation	Add 100A branch panelboard to MDF and refeed all circuits within MDF to new panel. Relocate communications equipment in MDF as required to provide wall space for panel.	$15,000
Exterior lighting	Increase exterior lighting at east side of building, especially at Staff Lot near SE corner. Costs include three new exterior wall packs and two new pole lights.	$25,000
	Total 1-2 Year Project Costs:	$208,000.00

3 - 4 Year Priority

		Project Costs
Roofing Replacement	Replace modified bitumen roofing on Roof Areas C-K. (See appendix for Roof Identification Plan.) (9) roof areas, approximately 38,500 SF. Remove/replace deck at abandoned roof curbs on Areas C, E, F, G, I, and K (20 locations).	$1,100,000
Roof Access Installation	Provide gate at hatch guard on Roof A. Provide skylight fall protection rails or screens at (10) dome skylights (80 LF total). Remove and replace existing ladder (embedded rungs) from Roof G to E (10 VLF). Provide ladders from Roof G to C (6 VLF), Roof L to O (4 VLF), and replace existing ladder from N to Q with one that serves N to Q and M (4 VLF). Provide ladder dock to provide access to Roof B.	$60,000
Stair Replacement	Remove and replace west side stairs and align them perpendicular to sidewalk. For location, refer to the civil site plan exhibit found in the appendix of this report.	$45,000
Sidewalk Repairs	Repair damaged sidewalks across the site. Approximately 11 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	$7,000
Stoop replacement and addition.	There are two exterior doors that need new stoops. The doors near room 1022 do not have a stoop and need one added. Doors near room 1329 have a stoop, but it is too narrow. It should be torn out and replaced with a correctly sized stoop. The existing stoop is about 8ft x 2ft. Both new stoops would be 8ft X 4ft X 3'-6" deep. 8" stoop walls reinforced with #4 bars @ 12" O.C. each way. 5" stoop slab reinforced with #4 bars @ 9" O.C. each way.	$12,000
Overflow Roof Drains	Add overflow roof drains at all locations where secondary drainage is not already provided. Recommended to be completed with Roof Replacement noted above.	$35,000
VRF Head End and Branch Controller Replacement	VRF system is nearing end of serviceable life. Recommend replacement of head end controllers and branch controllers as 3-4 year Priority. See 5-10 year Priority for replacement of condensing units and evaporator units.	$260,000
	Total 3-4 Year Project Costs:	**$1,519,000.00**

5-10 Year Priority

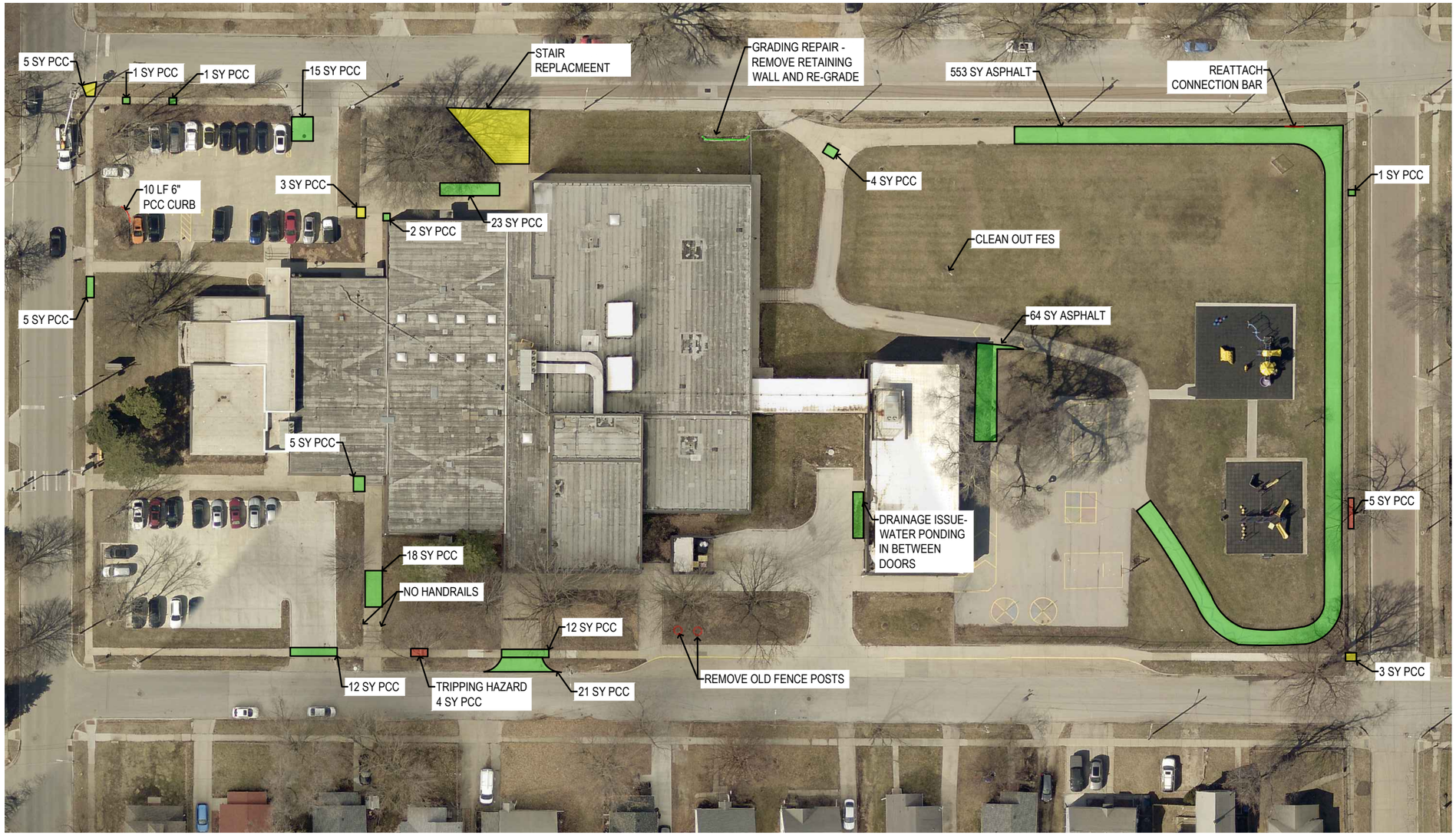
		Project Costs
Sealant Replacement	Replace window sealant at Gymnasium clerestory windows. (Approximately 11 units, 135 LF)	$8,000
Playground Pavement Replacement	Take out and restore deteriorated playground asphalt. Approximately 617 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	$110,000
Sidewalk Repairs	Repair damaged sidewalks across the site. Approximately 84 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	$20,000
Pavement Replacement	Remove and replace 21 SY of PCC. For locations, refer to civil site plan exhibit found in the appendix of this report.	$9,000
Grading Repair	Remove retaining wall and re-grade slope. For location, refer to civil site plan exhibit found in the appendix of this report.	$10,000
VRF Fan Coil and Condensing Unit Replacement	VRF system is nearing end of serviceable life. Recommend replacement of head-end and branch controllers as Year 3-4 Priority. Replace fan coils and condensing units in 5-10 Year Priority.	$1,100,000
Add Breaker Capacity to MDP	Add distribution section or equivalently sized branch panelboard to facilitate future electrical needs. Electrical service is currently constrained only by available breaker positions, not amperage of electrical service.	$30,000
	Total 5-10 Year Project Costs:	**$1,287,000.00**

Projects Requiring Study

		Design Services Fee
Mother's Room Space Study	Study to define a private dedicated space for a Mother's Room that includes at least a sink, side table, chair, and privacy door hardware.	$5,000
Entry Canopy Drainage Study	Decorative drain scupper at main entrance creates winter icing issues on/adjacent to sidewalk. Consider alternative solutions to drain the low canopy.	$2,000

Drainage Issue	The area between two building doors does not appear to have a route for water to drain out. A study should be performed to determine the severity of the issue and its most cost effective solution.	$1,000
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
	Total Study Design Service Fees:	**$10,500**

APPENDIX



5+ YEAR REPLACEMENT

3-4 YEAR REPLACEMENT

1-2 YEAR REPLACEMENT

NORTH

GRAPHIC SCALE

60 0 30 60 120

ARCHITECTS ENGINEERS

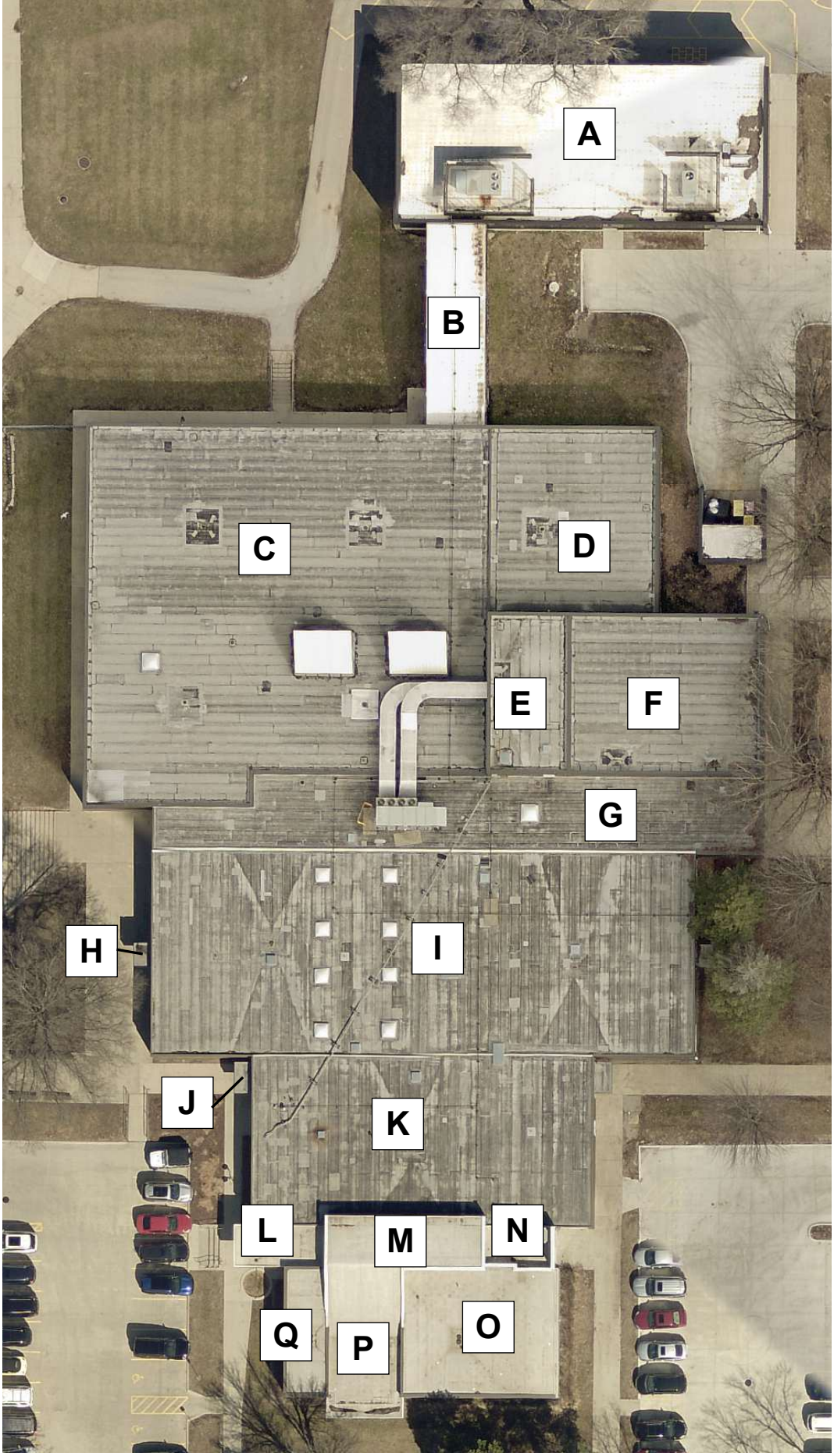
BISHOP ENGINEERING +

FINDLEY ELEMENTARY

EXHIBIT

PROJECT # 230286-08

DATE 1/8/2024



N

bbs ARCHITECTS ENGINEERS

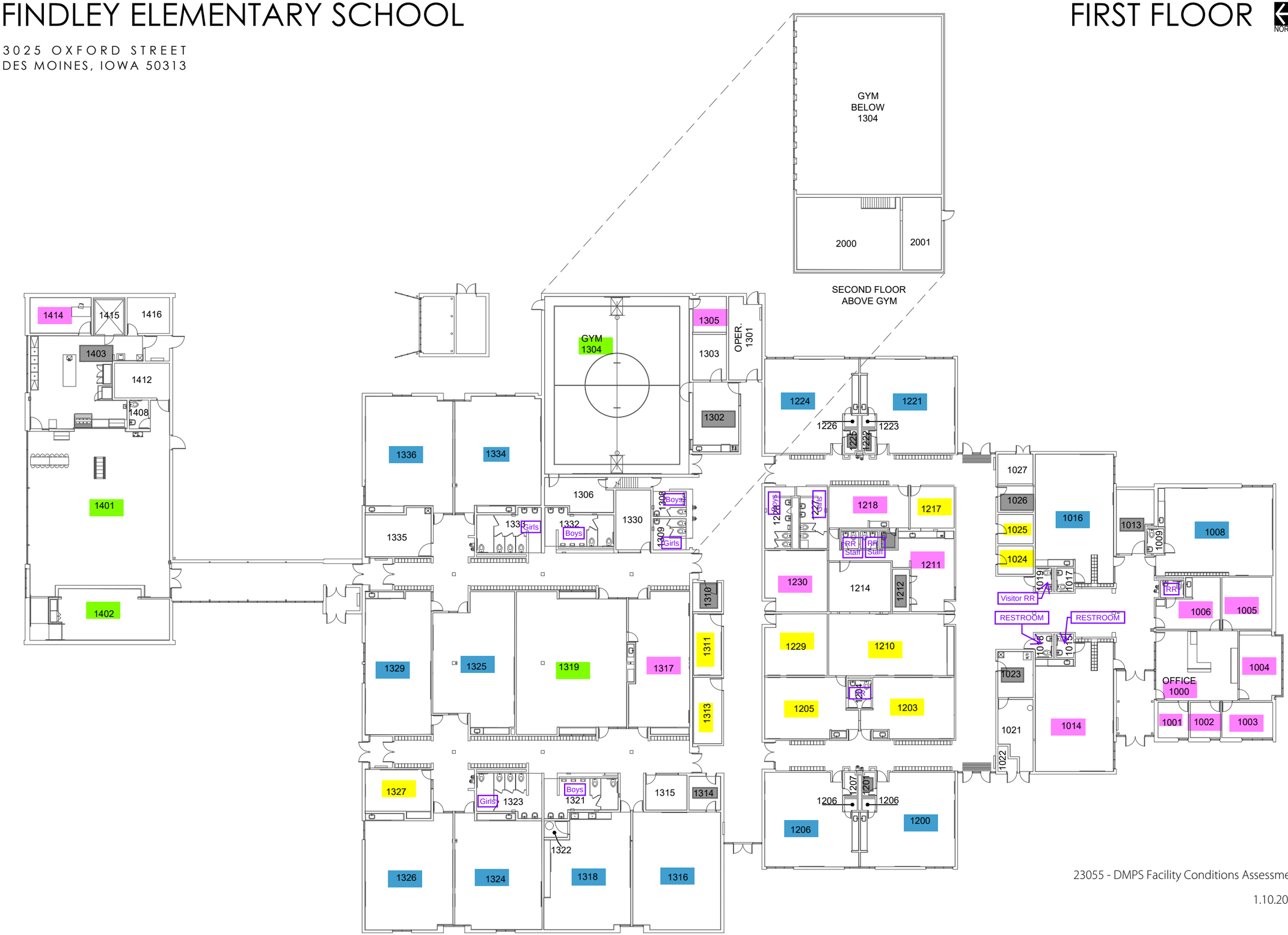
23055 - DMPS Facility Conditions Assessment
Roof Identification Image
Findley Elementary
1.8.2024

FINDLEY ELEMENTARY SCHOOL

3025 OXFORD STREET
DES MOINES, IOWA 50313

FIRST FLOOR

NORTH



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

bbs ARCHITECTS ENGINEERS