# FACILITY CONDITION ASSESSMENT

*Prepared for*

Ann Arbor Public Schools
2555 South State Street
Ann Arbor, Michigan 48104
Jim Vibbart


FACILITY CONDITION ASSESSMENT

OF

LAWTON ELEMENTARY
2250 SOUTH SEVENTH STREET
ANN ARBOR, MICHIGAN 48103

PREPARED BY:
*EMG*
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EMG PROJECT #:
*129010.18R000-016.354*

DATE OF REPORT:
*June 29, 2018*

ONSITE DATE:
*March 9, 2018*

**Immediate Repairs Report**
**Lawton Elementary School**
## 6/29/2018

| EMG Renamed Item Number | Location Description | ID | Cost Description | Quantity | Unit | Unit Cost * | Subtotal | Deficiency Repair Estimate * |
|---|---|---|---|---|---|---|---|---|
| 1.2 | Throughout | 880768 | Engineer, Environmental, Asbestos (ACM) & Lead Base Paint (LBP), Evaluate/Report | 1 | EA | $5,750.00 | $5,750 | **$5,750** |
| D30 | Interiors | 885588 | Air Conditioning, Central, Install | 50000 | SF | $11.50 | $575,000 | **$575,000** |
| C10 | Mechanical room | 881201 | Interior Wall Finish, Gypsum Board/Plaster, Repair | 1500 | SF | $3.66 | $5,488 | **$5,488** |
| D20 | 315 | 880838 | Drinking Fountain, Refrigerated, Replace | 1 | EA | $1,446.13 | $1,446 | **$1,446** |
| D30 | Main roof | 881319 | Exhaust Fan, Centrifugal, 251 to 800 CFM, Replace | 1 | EA | $2,325.15 | $2,325 | **$2,325** |
| D50 | 314 | 880841 | Fluorescent Lighting Fixture, 80 W, Replace | 1 | EA | $241.87 | $242 | **$242** |
| D50 | 310 | 880818 | Emergency/Exit Combo LED, Install | 1 | EA | $687.51 | $688 | **$688** |
| | Site | 958707 | Davis Bacon Prevailing Wages, Surcharge for Prevailing Wages, 10% surcharge for prevailing wages | 50381.02 | LS | $1.15 | $57,938 | **$57,938** |
| G20 | Parking lot | 881529 | ADA, Parking, Signage, Pole-Mounted, Install | 1 | EA | $500.00 | $500 | **$500** |
| D20 | Restroom | 881532 | ADA, Restroom, Lavatory Pipe Wraps, Install | 4 | EA | $80.00 | $320 | **$320** |
| **Immediate Repairs Total** | | | | | | | | **$649,696** |

* Location Factor (1) included in totals.

**Replacement Reserves Report**

**Lawton Elementary School**

## 6/29/2018

| Location | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | Total Escalated Estimate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lawton Elementary School | $649,696 | $410,929 | $450,998 | $1,041,181 | $642,570 | $657,355 | $391,559 | $446,511 | $73,394 | $1,466,510 | $1,696,502 | $432,720 | $241,483 | $114,124 | $794,305 | $528,844 | $747,419 | $149,900 | $361,407 | $807,557 | **$12,104,965** |
| **GrandTotal** | **$649,696** | **$410,929** | **$450,998** | **$1,041,181** | **$642,570** | **$657,355** | **$391,559** | **$446,511** | **$73,394** | **$1,466,510** | **$1,696,502** | **$432,720** | **$241,483** | **$114,124** | **$794,305** | **$528,844** | **$747,419** | **$149,900** | **$361,407** | **$807,557** | **$12,104,965** |

| EMG Renamed Item Number | Location Description | ID | Cost Description | Lifespan (EUL) | EAge | RUL | Quantity | Unit | Unit Cost | w/ Markup * | Subtotal | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | RRR_RowGrandTotalLabel |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.2 | Throughout | 880768 | Engineer, Environmental, Asbestos (ACM) & Lead Base Paint (LBP), Evaluate/Report | 0 | 0 | 0 | 1 | EA | $5,000.00 | $5,750.00 | $5,750 | $5,750 | | | | | | | | | | | | | | | | | | | | **$5,750** |
| D30 | Interiors | 885588 | Air Conditioning, Central, Install | 50 | 50 | 0 | 50000 | SF | $10.00 | $11.50 | $575,000 | $575,000 | | | | | | | | | | | | | | | | | | | | **$575,000** |
| B20 | roof hatches | 881324 | Structural Flooring/Decking, Metal, Refinish | 10 | 9 | 1 | 72 | SF | $1.44 | $1.44 | $104 | | $104 | | | | | | | | | | $104 | | | | | | | | | **$207** |
| B20 | multi-purpose room | 880735 | Exterior Stair/Ramp Rails, Metal, Refinish | 10 | 7 | 3 | 100 | LF | $1.44 | $1.44 | $144 | | | | $144 | | | | | | | | | $144 | | | | | | | | **$288** |
| B20 | multipurpose room stairs | 882808 | Exterior Stair/Ramp Rails, Metal, Refinish | 10 | 6 | 4 | 100 | LF | $1.44 | $1.44 | $144 | | | | | $144 | | | | | | | | | $144 | | | | | | | **$288** |
| B20 | Exterior wall | 880616 | Exterior Wall, Brick Veneer, 1-2 Stories, Replace | 40 | 38 | 2 | 110 | SF | $48.58 | $55.87 | $6,146 | | | $6,146 | | | | | | | | | | | | | | | | | | **$6,146** |
| B20 | Exterior wall | 880614 | Exterior Wall, Brick or Brick Veneer, 1-2 Stories, Repoint | 25 | 23 | 2 | 1000 | SF | $41.28 | $47.47 | $47,475 | | | $47,475 | | | | | | | | | | | | | | | | | | **$47,475** |
| B20 | Exterior wall | 881520 | Exterior Wall, Fascia, door area Paint, Prep & Paint | 10 | 8 | 2 | 5000 | SF | $2.87 | $3.30 | $16,507 | | | $16,507 | | | | | | | | | | | $16,507 | | | | | | | **$33,013** |
| B20 | Exterior wall | 880611 | Exterior Wall, Joint Caulking 0" to 1/2", 1-2 Stories, Replace | 10 | 7 | 3 | 3500 | LF | $2.82 | $3.24 | $11,351 | | | | $11,351 | | | | | | | | | | $11,351 | | | | | | | **$22,701** |
| B20 | 314/315 | 881245 | Soffit, Wood, Replace | 20 | 19 | 1 | 64 | SF | $17.37 | $19.97 | $1,278 | | $1,278 | | | | | | | | | | | | | | | | | | | **$1,278** |
| B20 | Throughout | 880753 | Window Screen, Aluminum 12 SF, Replace | 10 | 5 | 5 | 43 | EA | $518.50 | $596.28 | $25,640 | | | | | | $25,640 | | | | | | | | | | $25,640 | | | | | **$51,280** |
| B20 | Throughout | 880754 | Window, Aluminum Double-Glazed 12 SF, 1-2 Stories, Replace | 30 | 15 | 15 | 139 | EA | $584.21 | $671.84 | $93,385 | | | | | | | | | | | | | | | | $93,385 | | | | | **$93,385** |
| B20 | Throughout | 880755 | Window, Aluminum Double-Glazed 24 SF, 1-2 Stories, Replace | 30 | 15 | 15 | 96 | EA | $870.45 | $1,001.02 | $96,098 | | | | | | | | | | | | | | | | $96,098 | | | | | **$96,098** |
| B20 | Throughout | 880752 | Exterior Door, Steel w/ Safety Glass, Replace | 25 | 13 | 12 | 27 | EA | $1,352.72 | $1,555.63 | $42,002 | | | | | | | | | | | | | | $42,002 | | | | | | | **$42,002** |
| B20 | multipurpose room | 880751 | Exterior Door, Steel Insulated, Replace | 25 | 13 | 12 | 1 | EA | $1,577.53 | $1,814.16 | $1,814 | | | | | | | | | | | | | | $1,814 | | | | | | | **$1,814** |
| B20 | Main roof | 881331 | Roof, Single-Ply TPO/PVC Membrane, Replace | 20 | 10 | 10 | 57200 | SF | $15.93 | $18.32 | $1,047,935 | | | | | | | | | | | $1,047,935 | | | | | | | | | | **$1,047,935** |
| B20 | Main roof | 881341 | Roof Skylight, Plexiglass Dome Fixed 9-20 SF, Replace | 30 | 16 | 14 | 2 | EA | $1,207.20 | $1,388.27 | $2,777 | | | | | | | | | | | | | | | $2,777 | | | | | | **$2,777** |
| C10 | 106/107 | 881103 | Wall Partitions, Movable/Hinged/Folding, Acoustical Dampening, Replace | 25 | 21 | 4 | 10 | LF | $25.00 | $25.00 | $250 | | | | | $250 | | | | | | | | | | | | | | | | **$250** |
| C10 | 109/108 | 881243 | Wall Partitions, Movable/Hinged/Folding, Acoustical Dampening, Replace | 25 | 21 | 4 | 10 | LF | $25.00 | $25.00 | $250 | | | | | $250 | | | | | | | | | | | | | | | | **$250** |
| C10 | 302 | 880789 | Wall Partitions, Movable/Hinged/Folding, Acoustical Dampening, Replace | 25 | 13 | 12 | 20 | LF | $245.58 | $282.42 | $5,648 | | | | | | | | | | | | | | $5,648 | | | | | | | **$5,648** |
| C10 | 202/203 | 880770 | Wall Partitions, Movable/Hinged/Folding, Acoustical Dampening, Replace | 25 | 13 | 12 | 20 | LF | $245.58 | $282.42 | $5,648 | | | | | | | | | | | | | | $5,648 | | | | | | | **$5,648** |
| C10 | 210/211 | 880782 | Wall Partitions, Movable/Hinged/Folding, Acoustical Dampening, Replace | 25 | 13 | 12 | 20 | LF | $245.58 | $282.42 | $5,648 | | | | | | | | | | | | | | $5,648 | | | | | | | **$5,648** |
| C10 | hallways | 880947 | Interior Door, Fire 90-Minutes and Over, Replace | 20 | 11 | 9 | 10 | EA | $1,649.06 | $1,896.42 | $18,964 | | | | | | | | | | $18,964 | | | | | | | | | | | **$18,964** |
| C10 | Throughout | 880773 | Interior Door, Steel w/ Safety Glass, Replace | 20 | 11 | 9 | 95 | EA | $1,352.72 | $1,555.63 | $147,785 | | | | | | | | | | $147,785 | | | | | | | | | | | **$147,785** |
| C10 | Throughout | 881364 | Interior Door, Wood Solid-Core, Replace | 20 | 6 | 14 | 95 | EA | $1,423.11 | $1,636.58 | $155,475 | | | | | | | | | | | | | | | $155,475 | | | | | | **$155,475** |
| D70 | Throughout | 946251 | Exterior Door Hardware, Electronic Door Locks ANSI F39 Lockset, Replace | 30 | 29 | 1 | 27 | EA | $1,345.00 | $1,546.75 | $41,762 | | $41,762 | | | | | | | | | | | | | | | | | | | **$41,762** |
| C10 | Restroom | 881336 | Toilet Partitions, Metal Overhead-Braced, Replace | 20 | 16 | 4 | 4 | EA | $850.00 | $977.50 | $3,910 | | | | | $3,910 | | | | | | | | | | | | | | | | **$3,910** |
| C10 | Mechanical room | 881201 | Interior Wall Finish, Gypsum Board/Plaster, Repair | 0 | 0 | 0 | 1500 | SF | $3.18 | $3.66 | $5,488 | $5,488 | | | | | | | | | | | | | | | | | | | | **$5,488** |
| C10 | Throughout | 881363 | Interior Wall Finish, Concrete/Masonry, Prep & Paint | 8 | 6 | 2 | 92500 | SF | $1.45 | $1.67 | $154,350 | | | $154,350 | | | | | | | | $154,350 | | | | | | | $154,350 | | | **$463,050** |
| C10 | Gymnasium | 880926 | Interior Wall Finish, Acoustical Tile (ACT), Replace | 10 | 6 | 4 | 2000 | SF | $7.57 | $8.71 | $17,411 | | | | | $17,411 | | | | | | | | | | $17,411 | | | | | | **$34,821** |
| C10 | multipurpose rm | 881362 | Interior Floor Finish, Maple Sports Floor, Refinish | 10 | 4 | 6 | 2000 | SF | $4.53 | $5.21 | $10,428 | | | | | | | $10,428 | | | | | | | | | | $10,428 | | | | **$20,856** |
| C10 | Throughout | 880767 | Interior Floor Finish, Vinyl Tile (VCT), Replace | 15 | 9 | 6 | 34040 | SF | $4.80 | $5.52 | $187,924 | | | | | | | $187,924 | | | | | | | | | | | | | | **$187,924** |
| C10 | media & offices | 881108 | Interior Floor Finish, Carpet Tile Commercial-Grade, Replace | 10 | 5 | 5 | 8000 | SF | $6.96 | $8.01 | $64,059 | | | | | | $64,059 | | | | | | | | | | $64,059 | | | | | **$128,117** |
| C10 | 301 | 880799 | Interior Ceiling Finish, Gypsum Board/Plaster, Prep & Paint | 10 | 6 | 4 | 2000 | SF | $1.94 | $2.23 | $4,454 | | | | | $4,454 | | | | | | | | | | $4,454 | | | | | | **$8,908** |
| C10 | Classroom | 880964 | Interior Ceiling Finish, Acoustical Tile (ACT) Dropped Fiberglass, Replace | 20 | 18 | 2 | 10000 | SF | $5.05 | $10.85 | $108,528 | | | $108,528 | | | | | | | | | | | | | | | | | | **$108,528** |
| C10 | hallways | 880956 | Interior Ceiling Finish, Suspended Acoustical Tile (ACT), Replace | 20 | 11 | 9 | 15000 | SF | $3.11 | $3.58 | $53,665 | | | | | | | | | | $53,665 | | | | | | | | | | | **$53,665** |
| C10 | Throughout | 881365 | Interior Ceiling Finish, Acoustical Tile (ACT) Dropped Fiberglass, Replace | 20 | 1 | 19 | 10000 | SF | $5.05 | $5.80 | $58,050 | | | | | | | | | | | | | | | | | | | | $58,050 | **$58,050** |
| D20 | Restroom | 880763 | Toilet, Tankless (Water Closet), Replace | 20 | 11 | 9 | 14 | EA | $842.97 | $969.41 | $13,572 | | | | | | | | | | $13,572 | | | | | | | | | | | **$13,572** |
| D20 | Restroom | 881337 | Urinal, Vitreous China, Replace | 20 | 11 | 9 | 2 | EA | $1,193.44 | $1,372.46 | $2,745 | | | | | | | | | | $2,745 | | | | | | | | | | | **$2,745** |
| D20 | Kitchen | 881218 | Sink, Trough Style, Solid Surface, Replace | 20 | 11 | 9 | 1 | EA | $2,332.00 | $2,681.80 | $2,682 | | | | | | | | | | $2,682 | | | | | | | | | | | **$2,682** |
| D20 | Throughout | 881338 | Sink, Stainless Steel, Replace | 20 | 11 | 9 | 28 | EA | $1,054.05 | $1,212.16 | $33,940 | | | | | | | | | | $33,940 | | | | | | | | | | | **$33,940** |
| D20 | Restroom | 880764 | Sink, Vitreous China, Replace | 20 | 11 | 9 | 14 | EA | $861.51 | $990.74 | $13,870 | | | | | | | | | | $13,870 | | | | | | | | | | | **$13,870** |
| D20 | 315 | 880838 | Drinking Fountain, Refrigerated, Replace | 10 | 10 | 0 | 1 | EA | $1,257.51 | $1,446.13 | $1,446 | $1,446 | | | | | | | | | | $1,446 | | | | | | | | | | **$2,892** |
| D20 | hallway | 881220 | Drinking Fountain, Refrigerated, Replace | 10 | 6 | 4 | 2 | EA | $1,257.51 | $1,446.13 | $2,892 | | | | | $2,892 | | | | | | | | | | $2,892 | | | | | | **$5,785** |
| D20 | Gymnasium & Hallway | 880939 | Drinking Fountain, Vitreous China, Replace | 15 | 9 | 6 | 2 | EA | $1,938.99 | $2,229.84 | $4,460 | | | | | | | $4,460 | | | | | | | | | | | | | | **$4,460** |
| D20 | Mechanical room AHU6 | 881205 | Water Heater, Gas, Commercial, 60 to 120 GAL, Replace | 15 | 10 | 5 | 1 | EA | $10,698.82 | $12,303.64 | $12,304 | | | | | | $12,304 | | | | | | | | | | | | | | | **$12,304** |
| D20 | Mechanical room | 881032 | Water Heater, Gas, Commercial, 60 to 120 GAL, Replace | 15 | 8 | 7 | 1 | EA | $10,698.82 | $12,303.64 | $12,304 | | | | | | | | $12,304 | | | | | | | | | | | | | **$12,304** |
| | Roof | 960806 | Solar Instillation Project, Roof Mounted Solar Instillation, Install | 20 | 15 | 5 | 354000 | SF | $1.00 | $1.15 | $407,100 | | | | | | $407,100 | | | | | | | | | | | | | | | **$407,100** |
| D30 | Main roof | 881323 | Condensing Unit/Heat Pump, Split System, 8 to 10 Ton, Replace | 15 | 11 | 4 | 1 | EA | $15,825.28 | $18,199.07 | $18,199 | | | | | $18,199 | | | | | | | | | | | | | | | $18,199 | **$36,398** |
| D30 | Main roof | 881327 | Ductless Split System, Single Zone, 2.5 to 3 Ton, Replace | 15 | 8 | 7 | 1 | EA | $6,577.13 | $7,563.70 | $7,564 | | | | | | | | $7,564 | | | | | | | | | | | | | **$7,564** |

| EMG Renamed Item Number | Location Description | ID | Cost Description | Lifespan (EUL) | EAge | RUL | Quantity | Unit | Unit Cost | w/ Markup * | Subtotal | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | RRR_RowGrandTotalLabel |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D30 | Main roof | 881287 | Split System HVAC, Interior & Exterior Component Pairing, 3.5 Ton, Replace | 15 | 2 | 13 | 1 | EA | $7,200.00 | $8,280.00 | $8,280 | | | | | | | | | | | | | | $8,280 | | | | | | | **$8,280** |
| D30 | Main roof | 881315 | Air Handler, Exterior, 3,001 to 4,000 CFM, Replace | 15 | 11 | 4 | 1 | EA | $19,738.18 | $22,698.91 | $22,699 | | | | | $22,699 | | | | | | | | | | | | | | | $22,699 | **$45,398** |
| D30 | computer lab | 880843 | Fan Coil Unit, 3 Ton, Replace | 15 | 8 | 7 | 1 | EA | $3,416.79 | $3,929.31 | $3,929 | | | | | | | | $3,929 | | | | | | | | | | | | | **$3,929** |
| D30 | 204 | 880775 | Fan Coil Unit, 1 to 1.5 Ton, Replace | 15 | 8 | 7 | 1 | EA | $1,878.84 | $2,160.67 | $2,161 | | | | | | | | $2,161 | | | | | | | | | | | | | **$2,161** |
| D30 | kitchen store rm | 881239 | Variable Air Volume (VAV) Unit, 401 to 800 CFM, Replace | 15 | 6 | 9 | 1 | EA | $4,983.58 | $5,731.11 | $5,731 | | | | | | | | | | $5,731 | | | | | | | | | | | **$5,731** |
| D30 | Mechanical Room AHU2 | 881330 | Air Handler, Interior, 8,001 to 10,000 CFM, Replace | 30 | 11 | 19 | 1 | EA | $31,181.53 | $35,858.76 | $35,859 | | | | | | | | | | | | | | | | | | | | $35,859 | **$35,859** |
| D30 | Mechanical Room AHU4 | 881317 | Air Handler, Interior, 6,501 to 8,000 CFM, Replace | 30 | 11 | 19 | 1 | EA | $26,016.62 | $29,919.11 | $29,919 | | | | | | | | | | | | | | | | | | | | $29,919 | **$29,919** |
| D30 | Mechanical Room AHU5 | 881210 | Air Handler, Interior, 8,001 to 10,000 CFM, Replace | 30 | 11 | 19 | 1 | EA | $31,181.53 | $35,858.76 | $35,859 | | | | | | | | | | | | | | | | | | | | $35,859 | **$35,859** |
| D30 | Mechanical Room | 881192 | Air Handler, Interior, 8,001 to 10,000 CFM, Replace | 30 | 11 | 19 | 1 | EA | $31,181.53 | $35,858.76 | $35,859 | | | | | | | | | | | | | | | | | | | | $35,859 | **$35,859** |
| D30 | Mechanical Room AHU5 | 881326 | Air Handler, Interior, 8,001 to 10,000 CFM, Replace | 30 | 11 | 19 | 1 | EA | $31,181.53 | $35,858.76 | $35,859 | | | | | | | | | | | | | | | | | | | | $35,859 | **$35,859** |
| D30 | Mechanical Room AHU3 | 881329 | Air Handler, Interior, 8,001 to 10,000 CFM, Replace | 30 | 11 | 19 | 1 | EA | $31,181.53 | $35,858.76 | $35,859 | | | | | | | | | | | | | | | | | | | | $35,859 | **$35,859** |
| D30 | Main roof | 881319 | Exhaust Fan, Centrifugal, 251 to 800 CFM, Replace | 15 | 15 | 0 | 1 | EA | $2,021.87 | $2,325.15 | $2,325 | $2,325 | | | | | | | | | | | | | | | $2,325 | | | | | **$4,650** |
| D30 | Main roof | 881285 | Exhaust Fan, Centrifugal, 251 to 800 CFM, Replace | 15 | 11 | 4 | 1 | EA | $2,021.87 | $2,325.15 | $2,325 | | | | | $2,325 | | | | | | | | | | | | | | | $2,325 | **$4,650** |
| D30 | Main roof | 881280 | Exhaust Fan, Centrifugal, 251 to 800 CFM, Replace | 15 | 9 | 6 | 1 | EA | $2,021.87 | $2,325.15 | $2,325 | | | | | | | $2,325 | | | | | | | | | | | | | | **$2,325** |
| D30 | Main roof | 881288 | Exhaust Fan, Centrifugal, 251 to 800 CFM, Replace | 15 | 9 | 6 | 1 | EA | $2,021.87 | $2,325.15 | $2,325 | | | | | | | $2,325 | | | | | | | | | | | | | | **$2,325** |
| D30 | Mechanical room AHU6 | 881203 | Exhaust Fan, Centrifugal, 100 to 250 CFM, Replace | 15 | 6 | 9 | 1 | EA | $889.90 | $889.90 | $890 | | | | | | | | | | $890 | | | | | | | | | | | **$890** |
| D30 | Mechanical room AHU5 | 881209 | Exhaust Fan, Centrifugal, 100 to 250 CFM, Replace | 15 | 6 | 9 | 1 | EA | $889.90 | $889.90 | $890 | | | | | | | | | | $890 | | | | | | | | | | | **$890** |
| D30 | Mechanical room AHU2 | 881325 | Exhaust Fan, Centrifugal, 100 to 250 CFM, Replace | 15 | 6 | 9 | 1 | EA | $889.90 | $889.90 | $890 | | | | | | | | | | $890 | | | | | | | | | | | **$890** |
| D30 | Main roof | 881328 | Packaged Unit (RTU), 8 to 10 Ton, Replace | 15 | 11 | 4 | 1 | EA | $18,554.44 | $21,337.61 | $21,338 | | | | | $21,338 | | | | | | | | | | | | | | | $21,338 | **$42,675** |
| D30 | Main roof | 881321 | Packaged Unit (RTU), 16 to 20 Ton, Replace | 15 | 11 | 4 | 1 | EA | $36,777.37 | $42,293.98 | $42,294 | | | | | $42,294 | | | | | | | | | | | | | | | $42,294 | **$84,588** |
| D30 | Mechanical room | 881114 | Building Automation System (HVAC Controls), Upgrade | 20 | 11 | 9 | 50000 | SF | $5.36 | $6.17 | $308,344 | | | | | | | | | | $308,344 | | | | | | | | | | | **$308,344** |
| D40 | Interior | 937490 | Sprinkler System, Full Retrofit, School (per SF), Renovate | 50 | 46 | 4 | 50000 | SF | $6.25 | $7.19 | $359,576 | | | | | $359,576 | | | | | | | | | | | | | | | | **$359,576** |
| D50 | Mechanical room | 881248 | Building/Main Switchgear, 208 Y, 120 V, 1,200 Amp, Replace | 30 | 23 | 7 | 1 | EA | $212,265.31 | $244,105.10 | $244,105 | | | | | | | | $244,105 | | | | | | | | | | | | | **$244,105** |
| D50 | 210 near | 880784 | Distribution Panel, 208 Y, 120 V, 200 Amp, Replace | 30 | 21 | 9 | 6 | EA | $7,906.20 | $9,092.13 | $54,553 | | | | | | | | | | $54,553 | | | | | | | | | | | **$54,553** |
| D50 | Mechanical room | 881250 | Switchboard, 600 Amp, Replace | 30 | 11 | 19 | 1 | EA | $24,768.06 | $28,483.27 | $28,483 | | | | | | | | | | | | | | | | | | | | $28,483 | **$28,483** |
| D50 | 314 | 880841 | Fluorescent Lighting Fixture, 80 W, Replace | 20 | 20 | 0 | 1 | EA | $241.87 | $241.87 | $242 | $242 | | | | | | | | | | | | | | | | | | | | **$242** |
| D50 | Throughout | 880766 | Lighting System, Interior, School, Upgrade | 25 | 22 | 3 | 50000 | SF | $15.36 | $17.67 | $883,396 | | | | $883,396 | | | | | | | | | | | | | | | | | **$883,396** |
| D60 | Front entrance | 946250 | Intercom Master Station, Replace | 20 | 19 | 1 | 1 | EA | $3,814.50 | $4,386.67 | $4,387 | | $4,387 | | | | | | | | | | | | | | | | | | | **$4,387** |
| D50 | Throughout | 945804 | Clock and Bell System, Wireless or Ethernet Enabled, Up To 100 Total Clocks / Bells, Replace | 15 | 14 | 1 | 50000 | SF | $0.51 | $0.59 | $29,325 | | $29,325 | | | | | | | | | | | | | | | $29,325 | | | | **$58,650** |
| D70 | office | 881247 | Fire Alarm Control Panel, Addressable, Replace | 15 | 9 | 6 | 1 | EA | $20,297.59 | $23,342.23 | $23,342 | | | | | | | $23,342 | | | | | | | | | | | | | | **$23,342** |
| D70 | Throughout | 946252 | Security/Surveillance System, Cameras and CCTV, Install | 10 | 9 | 1 | 50000 | SF | $4.35 | $5.00 | $249,964 | | $249,964 | | | | | | | | | $249,964 | | | | | | | | | | **$499,928** |
| D50 | 310 | 880818 | Emergency/Exit Combo LED, Install | 10 | 10 | 0 | 1 | EA | $687.51 | $687.51 | $688 | $688 | | | | | | | | | | $688 | | | | | | | | | | **$1,375** |
| D50 | Kitchen Store Rm | 881241 | Emergency Lighting Pack, 2 Light w/ Battery, Replace | 10 | 8 | 2 | 1 | EA | $1,227.87 | $1,412.05 | $1,412 | | | $1,412 | | | | | | | | | $1,412 | | | | | | | | | **$2,824** |
| C10 | multi-purpose room | 881235 | Stage Curtain, Medium Weight Velour, Flameproof (per SF), Replace | 15 | 9 | 6 | 2100 | SF | $13.00 | $14.95 | $31,395 | | | | | | | $31,395 | | | | | | | | | | | | | | **$31,395** |
| E10 | Kitchen | 881228 | Commercial Kitchen, Steamer, Tabletop, Replace | 10 | 6 | 4 | 1 | EA | $6,344.00 | $7,295.60 | $7,296 | | | | | $7,296 | | | | | | | | | | $7,296 | | | | | | **$14,591** |
| E10 | Kitchen | 881232 | Commercial Kitchen, Convection Oven, Double, Replace | 10 | 6 | 4 | 1 | EA | $8,643.00 | $9,939.45 | $9,939 | | | | | $9,939 | | | | | | | | | | $9,939 | | | | | | **$19,879** |
| E10 | Kitchen | 881233 | Commercial Kitchen, Refrigerator, 2-Door Reach-In, Replace | 15 | 9 | 6 | 1 | EA | $4,256.00 | $4,894.40 | $4,894 | | | | | | | $4,894 | | | | | | | | | | | | | | **$4,894** |
| E10 | Kitchen | 881230 | Commercial Kitchen, Refrigerator, 1-Door Reach-In, Replace | 15 | 9 | 6 | 1 | EA | $2,515.00 | $2,892.25 | $2,892 | | | | | | | $2,892 | | | | | | | | | | | | | | **$2,892** |
| D20 | 313 | 880824 | Commercial Kitchen, Exhaust Hood, Replace | 15 | 8 | 7 | 1 | EA | $2,000.00 | $2,300.00 | $2,300 | | | | | | | | $2,300 | | | | | | | | | | | | | **$2,300** |
| E10 | Kitchen | 881226 | Commercial Kitchen, milk cooler, Replace | 15 | 6 | 9 | 1 | EA | $2,515.00 | $2,892.25 | $2,892 | | | | | | | | | | $2,892 | | | | | | | | | | | **$2,892** |
| D30 | Gymnasium | 880935 | Residential Fixtures, Ceiling Fan, Replace | 15 | 4 | 11 | 2 | EA | $2,000.00 | $2,300.00 | $4,600 | | | | | | | | | | | $4,600 | | | | | | | | | | **$4,600** |
| C10 | Throughout | 881340 | Kitchen Cabinet, Base and Wall Section, Wood, Replace | 20 | 11 | 9 | 420 | LF | $467.63 | $537.78 | $225,867 | | | | | | | | | | $225,867 | | | | | | | | | | | **$225,867** |
| | Site | 958707 | Davis Bacon Prevailing Wages, Surcharge for Prevailing Wages, 10% surcharge for prevailing wages | 1 | 1 | 0 | 50381.02 | LS | $1.00 | $1.15 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | $57,938 | **$1,158,763** |
| G20 | Parking lot | 880577 | Roadways, Asphalt Pavement, Mill & Overlay | 25 | 9 | 16 | 32000 | SF | $3.28 | $3.77 | $120,538 | | | | | | | | | | | | | | | | | $120,538 | | | | **$120,538** |
| G20 | Parking lot | 880554 | Parking Lots, Asphalt Pavement, Seal & Stripe | 5 | 3 | 2 | 32000 | SF | $0.38 | $0.44 | $13,966 | | | $13,966 | | | | | $13,966 | | | | | $13,966 | | | | | $13,966 | | | **$55,862** |
| G20 | entry | 880552 | Pedestrian Pavement, Sidewalk, Concrete Sections/Small Areas, Replace | 30 | 29 | 1 | 650 | SF | $19.00 | $21.85 | $14,203 | | $14,203 | | | | | | | | | | | | | | | | | | | **$14,203** |
| G20 | Sidewalk | 880580 | Pedestrian Pavement, Sidewalk, Asphalt, Seal | 5 | 3 | 2 | 43050 | SF | $0.38 | $0.44 | $18,788 | | | $18,788 | | | | | $18,788 | | | | | $18,788 | | | | | $18,788 | | | **$75,152** |
| G20 | Playground | 880739 | Pedestrian Pavement, Sidewalk, Concrete Large Areas, Replace | 30 | 16 | 14 | 9000 | SF | $9.00 | $10.35 | $93,150 | | | | | | | | | | | | | | | $93,150 | | | | | | **$93,150** |
| G20 | Sidewalk | 880581 | Pedestrian Pavement, Sidewalk, Asphalt, Replace | 25 | 9 | 16 | 43050 | SF | $5.00 | $5.75 | $247,538 | | | | | | | | | | | | | | | | | $247,538 | | | | **$247,538** |
| G20 | Site | 881352 | Fences & Gates, Chain Link, 4' High, Replace | 30 | 16 | 14 | 300 | LF | $30.51 | $35.09 | $10,527 | | | | | | | | | | | | | | | $10,527 | | | | | | **$10,527** |
| G20 | site | 881354 | Fences & Gates, Wood Board, Replace | 30 | 16 | 14 | 2400 | SF | $6.11 | $7.03 | $16,866 | | | | | | | | | | | | | | | $16,866 | | | | | | **$16,866** |
| G20 | entry | 880545 | Signage, Property, Monument/Pylon, Replace | 20 | 11 | 9 | 1 | EA | $8,602.00 | $9,892.30 | $9,892 | | | | | | | | | | $9,892 | | | | | | | | | | | **$9,892** |
| G20 | Playground | 880748 | Site Furnishings, Picnic Table, Plastic-Coated Metal, Replace | 20 | 6 | 14 | 2 | EA | $1,391.50 | $1,600.23 | $3,200 | | | | | | | | | | | | | | | $3,200 | | | | | | **$3,200** |
| G20 | Playground | 880749 | Site Furnishings, Park Bench, Metal/Wood/Plastic, Replace | 20 | 6 | 14 | 9 | EA | $487.03 | $560.08 | $5,041 | | | | | | | | | | | | | | | $5,041 | | | | | | **$5,041** |
| G20 | Playground | 880599 | Play Structure, Small, Replace | 20 | 11 | 9 | 1 | EA | $18,975.00 | $21,821.25 | $21,821 | | | | | | | | | | $21,821 | | | | | | | | | | | **$21,821** |
| G20 | Playground | 880620 | Play Structure, Medium, Replace | 20 | 6 | 14 | 3 | EA | $40,005.63 | $46,006.47 | $138,019 | | | | | | | | | | | | | | | $138,019 | | | | | | **$138,019** |
| G40 | Parking lot | 880563 | Pole Light, Exterior, 135 to 1000 W HID (Double Fixture, with Metal Pole), Replace | 20 | 11 | 9 | 15 | EA | $8,523.34 | $9,801.84 | $147,028 | | | | | | | | | | $147,028 | | | | | | | | | | | **$147,028** |
| G20 | Parking lot | 881529 | ADA, Parking, Signage, Pole-Mounted, Install | 0 | 0 | 0 | 1 | EA | $500.00 | $500.00 | $500 | $500 | | | | | | | | | | | | | | | | | | | | **$500** |
| D20 | Restroom | 881532 | ADA, Restroom, Lavatory Pipe Wraps, Install | 0 | 0 | 0 | 4 | EA | $80.00 | $80.00 | $320 | $320 | | | | | | | | | | | | | | | | | | | | **$320** |

| EMG Renamed Item Number | Location Description | ID | Cost Description | Lifespan (EUL) | EAge | RUL | Quantity | Unit | Unit Cost | w/ Markup * | Subtotal | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | RRR_RowGrandTotalLabel |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Totals, Unescalated** | | | | | | | | | | | | $649,696 | $398,960 | $425,109 | $952,828 | $570,915 | $567,040 | $327,924 | $363,054 | $57,938 | $1,123,958 | $1,262,357 | $312,606 | $169,372 | $77,713 | $525,129 | $339,445 | $465,767 | $90,692 | $212,288 | $460,539 | $9,353,331 |
| **Totals, Escalated (3.0% inflation, compounded annually)** | | | | | | | | | | | | $649,696 | $410,929 | $450,998 | $1,041,181 | $642,570 | $657,355 | $391,559 | $446,511 | $73,394 | $1,466,510 | $1,696,502 | $432,720 | $241,483 | $114,124 | $794,305 | $528,844 | $747,419 | $149,900 | $361,407 | $807,557 | $12,104,965 |

* Markup/LocationFactor (1) has been included in unit costs. Markup includes a and 15% Ann Arbor Premium factors applied to the location adjusted unit cost.

# TABLE OF CONTENTS

# 1 Executive Summary

## 1.1 Property Information and General Physical Condition

The property information is summarized in the table below. More detailed descriptions may be found in the various sections of the report and in the Appendices.

| Property Information | |
|---|---|
| Address: | 2250 South Seventh Street, Ann Arbor, Washtenaw, MI 48103 |
| Year Constructed/Renovated: | 1961, Phase I / 1996 Phase II (estimated) |
| Current Occupants: | Ann Arbor Pubic Schools |
| Percent Utilization: | 100 percent utilized to support the school. |
| Management Point of Contact: | Ann Arbor Pubic Schools/Physical Properties, Jim Vibbart, 734-320-3613 phone |
| Property Type: | Classrooms, Office, and support space |
| Site Area: | 14.4 acres |
| Building Area: | 50,000 SF |
| Number of Buildings: | 1 |
| Number of Stories: | 1 |
| Parking Type and Number of Spaces: | 61 spaces in open lot |
| Building Construction: | Conventional wood frame structure on concrete slab/ with raised floor.<br>Masonry bearing walls and wood-framed roofs.<br>Steel frame with concrete-topped metal decks.<br>Concrete tilt-up bearing walls and wood panel roof. |
| Roof Construction: | Hexagonal Gazebo and flat roofs with TPO single ply membrane. |
| Exterior Finishes: | Brick Veneer |
| Heating, Ventilation & Air Conditioning: | The building heating is primarily completed with Air handlers with heating sections. There are selective areas with cooling with is done either with a roof-top condenser for ductless systems or with a Package Unit. The rooms are supplied with air via underfloor duck work. |
| Fire and Life/Safety: | Hydrants, smoke detectors, alarms, strobes, extinguishers, pull stations, alarm panel, and exit signs. |
| ADA: | This building does not have any major ADA issues |
| All 50,000 square feet of the building are occupied by a single occupant, Ann Arbor Public Schools. The space is a combination of offices, classrooms, and supporting utility spaces. | |
| | |
| A most representative sample of the interior spaces were observed to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries, exterior of the property and the roof. All areas of the property were available for observation during the site visit. | |
| **Assessment Information** | |
| Dates of Visit: | March 9, 2018 |
| On-Site Point of Contact (POC): | Jim Vibbart |
| Assessment and Report Prepared by: | Randall Patzke |

| Property Information | |
|---|---|
| Reviewed by: | Al Diefert<br>Technical Report Reviewer For<br>Andrew Hupp<br>Program Manager<br>ahupp@emgcorp.com<br>800.733.0660 x6632 |

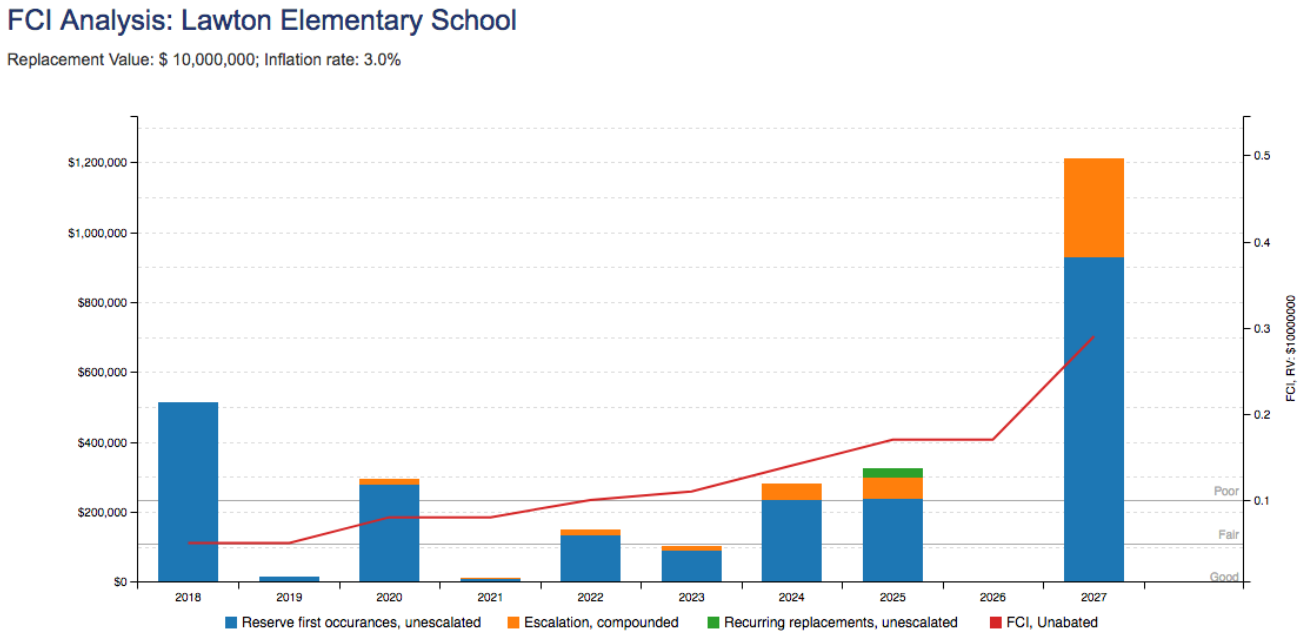
## 1.2 Key Findings

**Site:** The sidewalk between the parking lot and the fence is heaved and retains water that can freeze. The paving parking lot, playground and sidewalk need seal coating with restriping. The facility has a pest control issue related to ants.

**Architectural:** The exterior walls at the corners of the hexagonal walls have multiple issues related to the brick work. This includes brink failure, re-pointing of brick joints and the actual caulking. The mechanical penthouses have not been repaired after the installation of the new air handlers.

**MEPF:** The air handlers in the mechanical rooms do not have a cross over. To access equipment person must crawl across top of air handler. Exterior insulations are not being maintained.

## 1.3 Facility Condition Index (FCI)




One of the major goals of the FCA is to calculate the FCI, which gives an indication of a building's overall condition. Two FCI ratios are calculated and presented, the Current Year and Ten-Year. The Current Year FCI is the ratio of Immediate Repair Costs to the building's Current Replacement Value. Similarly, the Ten-Year FCI is the ratio of anticipated Capital Reserve Needs over the next ten years to the Current Replacement Value.

| Fci Condition Rating | Definition | Percentage Value |
|---|---|---|
| Good | In new or well-maintained condition, with no visual evidence of wear, soiling or other deficiencies. | 0 to .05 |

| Fci Condition Rating | Definition | Percentage Value |
|---|---|---|
| Fair | Subjected to wear and soiling but is still in a serviceable and functioning condition. | > than .05 to .10 |
| Poor | Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life. | > than .10 to .60 |
| Very Poor | Has reached the end of its useful or serviceable life. Renewal is now necessary. | > than .60 |

The graphs above and tables below represent summary-level findings for the FCA. The deficiencies identified in this assessment can be combined with potential new construction requirements to develop an overall strategy that can serve as the basis for a portfolio-wide capital improvement funding strategy. Key findings from the assessment include:

| KEY FINDING | METRIC |
|---|---|
| Current Year Facility Condition Index (FCI) FCI = (IR)/(CRV): | 5.15% |
| Current Year FCI Rating: | 2018 |
| 10-Year Facility Condition Index (FCI) FCI = (RR)/(CRV): | 29.06% |
| 10-Year FCI Rating | 0.29 |
| Current Replacement Value (CRV): | $10,000,000 |
| Year 0 (Current Year) - Immediate Repairs (IR): | $514,801 |
| Years 1-10 - Replacement Reserves (RR): | $2,390,997 |
| Total Capital Needs: | $2,905,798 |

Further detail on the specific costs that make up the Immediate Repair Costs can be found in the cost tables at the beginning of this report.

# 2 Building Structure

## A10 Foundations

| Building Foundation | | |
|---|---|---|
| Item | Description | Condition |
| Foundation | Concrete spread footings | Fair |
| Basement and Crawl Space | None | -- |

***Anticipated Lifecycle Replacements***

- No components of significance

***Actions/Comments:***

- The foundation systems are concealed. There are no significant signs of settlement, deflection, or movement.

## B10 Superstructure

| B1010 Floor Construction & B1020 Roof Construction | | |
|---|---|---|
| Item | Description | Condition |
| Framing / Load-Bearing Walls | Masonry walls | Fair |
| Ground Floor | Concrete slab | Fair |
| Upper Floor Framing | None | -- |
| Upper Floor Decking | None | -- |
| Balcony Framing | None | -- |
| Balcony Decking | None | -- |
| Balcony Deck Toppings | None | -- |
| Balcony Guardrails | None | -- |
| Roof Framing | Heavy lumber beams | Fair |
| Roof Decking | 2 x lumber | Fair |

| Maintenance Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Caulk minor cracking | ☐ | Monitor cracking for growth | ☐ |
| Other | ☐ | Other | ☐ |

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- The superstructure is concealed. Walls and floors appear to be plumb, level, and stable. There are no significant signs of deflection or movement.

| B1080 Stairs | | | | | |
|---|---|---|---|---|---|
| Type | Description | Riser | Handrail | Balusters | Condition |
| Building Exterior Stairs | Concrete stairs | Closed | Metal | None | Fair |
| Building Interior Stairs | Wood-framed | Closed | None | None | Fair |

***Anticipated Lifecycle Replacements:***

- Refinish metal handrails

***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

# 3 Building Envelope

## B20 Exterior Vertical Enclosures

| B2010 Exterior Walls | | |
|---|---|---|
| Type | Location | Condition |
| Primary Finish | Brick veneer | Poor |
| Secondary Finish | NA | -- |
| Accented with | Metal siding | Fair |
| Soffits | Concealed | Fair |
| Building sealants | Between dissimilar materials, at joints, around windows and doors | Fair |

| Maintenance Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Graffiti | ☐ | Efflorescence | ☒ |
| Other | ☐ | Other | ☐ |

***Anticipated Lifecycle Replacements:***

- Exterior paint
- Metal Trim (siding)
- Brick veneer
- Wood trim
- Caulking
- Masonry re-pointing
- Masonry Brick Replacement

***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance, including patching repairs, graffiti removal, and re-caulking, is highly recommended. Future lifecycle replacements of the components listed above will be required.
- Building has an issue with ants inside the facility. This is most noticed in the 5th grade class rooms.
- The wood soffit around 314/315 has come loose and may require replacement and painting. The cost of this work is relatively insignificant and the work can be performed as part of the protperty management's routine maintenance program
- The metal siding below fascia has significant areas that require repainting.
- Isolated portions of the mortar joints along the brick veneer are cracked (at the non-ninety degree corners). The damaged mortar joints must be cleaned and re-pointed.
- The brick masonry has isolated areas of efflorescence (near Multi-Purpose Room entry stairs). The affected areas of brick masonry must be cleaned, and the brick sealed.
- The brick veneer has significant areas of loose units and deteriorated mortar joints (at the non-ninety-degree corners). The damaged veneer must be repaired and/or replaced.

| B2020 Exterior Windows | | | | |
|---|---|---|---|---|
| Window Framing | Glazing | Location | Window Screen | Condition |
| Aluminum framed, fixed | Double glaze | Throughout | ☐ | Fair |
| Aluminum framed, operable | Double glaze | Throughout | ☒ | Fair |

| B2050 Exterior Doors | | |
|---|---|---|
| Main Entrance Doors | Door Type | Condition |
| | Fully glazed, metal framed | Fair |
| Secondary Entrance Doors | Fully glazed, metal framed | Fair |
| Service Doors | Metal, hollow | Fair |
| Overhead Doors | None | -- |

***Anticipated Lifecycle Replacements:***

- Windows
- Exterior doors
- Window sealants

***Actions/Comments:***

- No significant actions are identified now. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.
- The function of the windows should be tested and confirmed functional for Active Shooter. This should include the windows, screens and blinds. Replacing missing/damaged blinds.
- There are a few damaged, rusted doors and door frames. That require repainting and repair.

## B30 Roof

| B3010 Primary Roof | | | |
|---|---|---|---|
| Location | Main Roof | Finish | Single-ply membrane |
| Type / Geometry | Hexagonal Gazebo | Roof Age | 10 Yrs |
| Flashing | Membrane | Warranties | Unknown |
| Parapet Copings | None | Roof Drains | Gutters and downspouts |
| Fascia | Metal Panel | Insulation | Rigid Board |
| Soffits | Concealed Soffits | Skylights | Yes |
| Attics | Concrete-topped steel decks | Ventilation Source-1 | None |
| Roof Condition | Fair | Ventilation Source-2 | -- |

| Maintenance Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Drainage components broken/missing | ☐ | Vegetation/fungal growth | ☐ |
| Blocked Drains | ☐ | Debris | ☐ |
| Other | ☐ | Other | ☐ |

| Degradation Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Evidence of roof leaks | ☐ | Significant ponding | ☐ |
| Excessive patching or repairs | ☐ | Blistering or ridging | ☐ |
| Other | ☐ | Other | ☐ |

***Anticipated Lifecycle Replacements:***

- TPO roof membrane
- Roof flashings (included as part of overall membrane replacement)
- Skylights

***Actions/Comments:***

- The roof finishes appear to be more than 10 years old. Information regarding roof warranties or bonds was not available. A copy of the warranty was requested but was not available. The roofs are maintained by an outside contractor.
- According to the Principal, there are active roof leaks. There is evidence of active roof leaks. The locations were not identified. But, these leaks should be addressed and repaired.
- There is no evidence of roof deck or insulation deterioration. The roof substrate and insulation should be inspected during any future roof repair or replacement work.
- Roof drainage appears to be adequate. Clearing and minor repair of drain system components should be performed regularly as part of routine maintenance and operations program.
- The attics are not accessible, and it could not be determined if there is moisture, water intrusion, or excessive daylight in the attics.

# 4 Interiors

## C10 Interior Construction

| C1030 Interior Doors | | |
|---|---|---|
| Item | Type | Condition |
| Interior Doors | Solid Core Wood | Fair |
| Door Framing | Metal | Fair |
| Fire Doors | Yes | Fair |
| Closet Doors | Solid core wood | Fair |

| Maintenance Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Improperly adjusted door closures | ☒ | Damaged/loose door hardware | ☒ |
| Other | ☐ | Other | ☐ |

The following table generally describes the locations and typical conditions of the interior finishes within the facility:

**Interior Finishes - LAWTON ELEMENTARY**

| Location | Finish | | Quantity (SF) | Condition | Action | RUL | Est. Cost |
|---|---|---|---|---|---|---|---|
| Classroom | Ceiling | Gypsum Board/Plaster | 2000 | Fair | Prep & Paint | 4 | 3,873 |
| Classroom | Ceiling | Acoustical Tile (ACT) Dropped Fiberglass | 10000 | Fair | Replace | 2 | 100,956 |
| Gymnasium | Wall | Acoustical Tile (ACT) | 2000 | Fair | Replace | 4 | 15,140 |
| Hallways | Ceiling | Acoustical Tile (ACT) Dropped Fiberglass | 15000 | Fair | Replace | 9 | 46,665 |
| Mechanical room | Wall | Gypsum Board/Plaster | 1500 | Poor | Repair | 0 | 4,772 |
| Media & offices | Floor | Carpet Tile Commercial-Grade | 8000 | Fair | Replace | 5 | 55,703 |
| Multipurpose rm | Floor | Maple Sports Floor | 2000 | Fair | Refinish | 6 | 9,068 |
| Restroom | Floor | Ceramic Tile | 960 | Fair | Replace | 37 | 15,125 |
| Throughout | Ceiling | Acoustical Tile (ACT) Dropped Fiberglass | 10000 | NA | Replace | 19 | 50,478 |
| Throughout | Wall | Concrete/Masonry | 60500 | Fair | Prep & Paint | 2 | 87,786 |
| Throughout | Floor | Vinyl Tile (VCT) | 34040 | Fair | Replace | 6 | 163,412 |

| Maintenance Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Loose carpeting/flooring | ☐ | Minor areas of stained ceiling tiles | ☒ |
| Minor paint touch-up | ☒ | Areas of damaged/missing baseboard | ☒ |
| Other | ☐ | Other | ☐ |

***Anticipated Lifecycle Replacements:***

- Carpet
- Vinyl tile
- Ceramic tile
- Interior paint
- Suspended acoustic ceiling tile
- Hard tile ceilings
- Interior doors

***Actions/Comments:***

- It appears that the interior finishes have not been renovated within the last 7 years.
- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.
- The carpet to tile transion strip is missing at the entrance door to the office/hallway. These should be replaced with then finishes are updated or by maintenance as part of routine maintenance.
- The interior finishes are worn and dated. The interior of the school should be repainted.
- The ceilings in the classrooms may contain asbestos materials. If that is the case the tiles should be removed and replaced with a new acoustical dampening panel.

# 5 Services (MEPF)

## D10 Conveying Systems

Not applicable. There are no elevators or conveying systems.

## D20 Plumbing

| D2010 Domestic Water Distribution | | |
|---|---|---|
| Type | Description | Condition |
| Water Supply Piping | Copper | Fair |
| Water Meter Location | Mechanical Room | |

| Domestic Water Heaters or Boilers | |
|---|---|
| Components | Water Heaters |
| Fuel | Natural gas |
| Boiler or Water Heater Condition | Fair |
| Supplementary Storage Tanks? | No |
| Adequacy of Hot Water | Adequate |
| Adequacy of Water Pressure | Adequate |

| D2020 Sanitary Drainage | | |
|---|---|---|
| Type | Description | Condition |
| Waste/Sewer Piping | Cast iron | Fair |
| Vent Piping | Cast iron | Fair |

| Maintenance Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Hot water temperature too hot or cold | ☐ | Minor or isolated leaks | ☐ |
| Other | ☐ | Other | ☐ |

**Plumbing Systems - LAWTON ELEMENTARY**

| Location | Component | Component Description | Quantity | Unit | Condition | RUL | Est. Cost |
|---|---|---|---|---|---|---|---|
| 315 | Drinking Fountain | Refrigerated | 1 | EA | NA | 0 | 1,258 |
| Gymnasium & Hallway | Drinking Fountain | Vitreous China | 2 | EA | Fair | 6 | 3,878 |
| Hallway | Drinking Fountain | Refrigerated | 2 | EA | Fair | 4 | 2,515 |
| Kitchen | Sink | Trough Style, Solid Surface | 1 | EA | Fair | 9 | 2,332 |
| Mechanical room | Water Heater | Gas, Commercial, 60 to 120 GAL | 1 | EA | Fair | 7 | 10,699 |
| Mechanical room | Water Heater | Gas, Commercial, 60 to 120 GAL | 1 | EA | Fair | 5 | 10,699 |
| Restroom | Toilet | Tankless (Water Closet) | 14 | EA | Fair | 9 | 11,802 |
| Restroom | Urinal | Vitreous China | 2 | EA | Fair | 9 | 2,387 |
| Restroom | Sink | Vitreous China | 14 | EA | Fair | 9 | 12,061 |
| Throughout | Sink | Stainless Steel | 28 | EA | Fair | 9 | 29,513 |

***Anticipated Lifecycle Replacements:***

- Circulation pumps
- Water heaters
- Toilets
- Urinals
- Sinks

***Actions/Comments:***

- The plumbing systems appear to be well maintained and functioning adequately. The water pressure appears to be sufficient. No significant repair actions or short-term replacement costs are required. Routine and periodic maintenance is recommended. Future lifecycle replacements of the components or systems listed above will be required.

## D30 Building Heating, Ventilating, and Air Conditioning (HVAC)

| Packaged, Split & Individual Units | |
|---|---|
| Primary Components | Package units |
| Cooling (if separate from above) | performed via components above |
| Heating Fuel | Natural gas |
| Location of Equipment | Rooftop |
| Space Served by System | Entire building |

| Supplemental/Secondary Components | |
|---|---|
| Supplemental Component | Ductless mini-split systems |
| Location / Space Served | Computer rooms |
| Condition | Excellent |

| Controls and Ventilation | |
|---|---|
| HVAC Control System | BAS, direct digital controls (DDC) |
| HVAC Control System Condition | Fair |
| Building Ventilation | Central AHU, with fresh air intake |
| Ventilation System Condition | Good |

| Maintenance Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Ductwork/grills need cleaned | ☐ | Minor control adjustments needed | ☐ |
| Leaking condensate lines | ☐ | Poor mechanical area access | ☐ |
| Other | ☐ | Other | ☐ |

| Degradation Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Heating, Cooling or Ventilation is not adequate | ☒ | Major system inefficiencies | ☐ |
| HVAC controls pneumatic or antiquated | ☐ | Obsolete refrigerants: R11, R12, R22, R123, R502 | ☐ |
| Other | ☐ | Other | ☐ |

**Mechanical Systems - LAWTON ELEMENTARY**

| Location | Component | Component Description | Quantity | Unit | Condition | Action | RUL | Est. Cost |
|---|---|---|---|---|---|---|---|---|
| 204 | Fan Coil Unit | 1 to 1.5 Ton | 1 | EA | Fair | Replace | 7 | 1,879 |
| computer lab | Fan Coil Unit | 3 Ton | 1 | EA | Excellent | Replace | 7 | 3,417 |
| kitchen store rm | Variable Air Volume (VAV) Unit | 401 to 800 CFM | 1 | EA | Fair | Replace | 9 | 4,984 |
| Main roof | Split System HVAC | Interior & Exterior Component Pairing, 3.5 Ton | 1 | EA | Excellent | Replace | 13 | 7,200 |
| Main roof | Exhaust Fan | Centrifugal, 251 to 800 CFM | 1 | EA | Fair | Replace | 6 | 2,022 |
| Main roof | Condensing Unit | Air-Cooled, 10 Ton | 1 | EA | Fair | Replace | 4 | 5,616 |
| Main roof | Exhaust Fan | Centrifugal, 251 to 800 CFM | 1 | EA | Poor | Replace | 0 | 2,022 |
| Main roof | Exhaust Fan | Centrifugal, 251 to 800 CFM | 1 | EA | Fair | Replace | 6 | 2,022 |
| Main roof | Ductless Split System | Single Zone, 2.5 to 3 Ton | 1 | EA | Fair | Replace | 7 | 6,577 |
| Main roof | Exhaust Fan | Centrifugal, 251 to 800 CFM | 1 | EA | Fair | Replace | 4 | 2,022 |
| Main roof | Packaged Unit (RTU) | 16 to 20 Ton | 1 | EA | Fair | Replace | 4 | 36,777 |
| Main roof | Air Handler | Exterior, 3,001 to 4,000 CFM | 1 | EA | Fair | Replace | 4 | 19,738 |
| Main roof | Packaged Unit (RTU) | 8 to 10 Ton | 1 | EA | Fair | Replace | 4 | 18,554 |
| Mechanical room | Building Automation System (HVAC Controls) | Full Upgrade (per SF) | 50000 | SF | Fair | Upgrade | 9 | 268,125 |
| Mechanical Room | Air Handler | Interior, 8,001 to 10,000 CFM | 1 | EA | Good | Replace | 19 | 31,182 |
| Mechanical Room | Air Handler | Interior, 8,001 to 10,000 CFM | 1 | EA | Good | Replace | 19 | 31,182 |
| Mechanical Room | Air Handler | Interior, 6,501 to 8,000 CFM | 1 | EA | Good | Replace | 19 | 26,017 |
| Mechanical Room | Exhaust Fan | Centrifugal, 100 to 250 CFM | 1 | EA | Fair | Replace | 9 | 890 |
| Mechanical Room | Exhaust Fan | Centrifugal, 100 to 250 CFM | 1 | EA | Fair | Replace | 9 | 890 |
| Mechanical Room | Exhaust Fan | Centrifugal, 100 to 250 CFM | 1 | EA | Fair | Replace | 9 | 890 |
| Mechanical Room | Air Handler | Interior, 8,001 to 10,000 CFM | 1 | EA | Good | Replace | 19 | 31,182 |
| Mechanical Room | Air Handler | Interior, 8,001 to 10,000 CFM | 1 | EA | Good | Replace | 19 | 31,182 |
| Mechanical Room | Air Handler | Interior, 8,001 to 10,000 CFM | 1 | EA | Good | Replace | 19 | 31,182 |

***Anticipated Lifecycle Replacements:***

- Air handling units
- Package units
- Condensing units
- Split system units
- Rooftop exhaust fans

***Actions/Comments:***

- The HVAC systems are maintained by an outside contractor. Records of the installation, maintenance, upgrades, and replacement of the HVAC equipment at the property have not been maintained since the property was first occupied.
- Approximately 5 percent of the HVAC equipment is original. The HVAC equipment varies in age.
- The HVAC equipment appears to be functioning adequately overall. The principal commented that the temperature control in the classrooms is an on-going issue.

## D40 Fire Protection

| Item | Description | | | | | |
|---|---|---|---|---|---|---|
| Type | None | | | | | |
| Sprinkler System | None | ☒ | Standpipes | ☐ | Backflow Preventer | ☐ |
| | Hose Cabinets | ☐ | Fire Pumps | ☐ | Siamese Connections | ☐ |
| Sprinkler System Condition | -- | | | | | |
| Fire Extinguishers | Last Service Date | | Servicing Current? | | | |
| | August 2017 | | Yes | | | |
| Hydrant Location | Front entrance | | | | | |
| Siamese Location | None | | | | | |
| Special Systems | Kitchen Suppression System | ☐ | Computer Room Suppression System | ☐ | | |

| Maintenance Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Extinguisher tag expired | ☒ | Riser tag expired (5 year) | ☐ |
| Other | ☐ | Other | ☐ |

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- No significant actions are identified now. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

- The building is not protected by fire suppression. Due to its construction date, the facility is most likely "grandfathered" by code and the installation of fire sprinklers not required until major renovations are performed. A budgetary cost is included.
- The Fire Extinguisher contractor missed some of the extinguishers not out in the open areas.

## D50 Electrical

| Distribution & Lighting | | | |
|---|---|---|---|
| Electrical Lines | Underground | Transformer | Pad-mounted |
| Main Service Size | 1200 Amps | Volts | 120/208 Volt, three-phase |
| Meter & Panel Location | Mechanical Room | Branch Wiring | Copper |
| Conduit | Metallic | Step-Down Transformers? | No |
| Security / Surveillance System? | Yes | Building Intercom System? | Yes |
| Lighting Fixtures | T-8, CFL | | |
| Main Distribution Condition | Fair | | |
| Secondary Panel and Transformer Condition | Fair | | |
| Lighting Condition | Fair | | |

| Maintenance Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Improperly stored material | ☒ | Unsecured high voltage area | ☐ |
| Loose cables or improper use of conduit | ☐ | Poor electrical room ventilation | ☐ |
| Other | ☐ | Other | ☐ |

***Anticipated Lifecycle Replacements:***

- Circuit breaker panels
- Main switchgear
- Switchboards
- Interior light fixtures

***Actions/Comments:***

- The onsite electrical systems up to the meter are owned and maintained by the respective utility company.
- The electrical service and capacity appear to be adequate for the property's demands.
- The distribution panels are original 1961 components. The electrical service appears to be adequate for the facility's needs. However, due to the age of the distribution panels and increasing difficulty of obtaining replacement parts over time, lifecycle replacements are recommended.

## D60 Communications

| D6060 Public Address Systems | | | | | | |
|---|---|---|---|---|---|---|
| Item | Description | | | | | |
| Communication Equipment | Public Address System | ☒ | Nurse Call System | ☐ | Clock | ☒ |

## D70 Electronic Safety and Security

| D7010 Access Control and Intrusion Detection / D7050 Detection and Alarm | | | | | | |
|---|---|---|---|---|---|---|
| Item | Description | | | | | |
| Access Control and Intrusion Detection | Exterior Camera | ☒ | Interior Camera | ☒ | Front Door Camera Only | ☐ |
| | Cameras monitored | ☐ | Security Personnel On-Site | ☐ | Intercom/Door Buzzer | ☒ |
| Fire Alarm System | Central Alarm Panel | ☒ | Battery-Operated Smoke Detectors | ☐ | Alarm Horns | ☒ |
| | Annunciator Panels | ☐ | Hard-Wired Smoke Detectors | ☒ | Strobe Light Alarms | ☒ |
| | Pull Stations | ☒ | Emergency Battery-Pack Lighting | ☒ | Illuminated EXIT Signs | ☒ |
| Fire Alarm System Condition | Good | | | | | |
| Central Alarm Panel System | Location of Alarm Panel | | Installation Date of Alarm Panel | | | |
| | Office | | 2016 | | | |

***Anticipated Lifecycle Replacements:***

- Fire alarm panel
- Emergency lighting

***Actions/Comments:***

- No significant actions are identified now. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

# 6 Equipment & Furnishings

## E10 Equipment

The kitchen includes the following major appliances, fixtures, and equipment:

| E1030 Commercial Kitchen Equipment | | |
|---|---|---|
| Appliance | Comment | Condition |
| Refrigerators | Up-right | Fair |
| Freezers | ☐ | -- |
| Ranges | ☐ | -- |
| Ovens | Electric | Fair |
| Griddles / Grills | ☐ | -- |
| Fryers | ☐ | -- |
| Hood | Exhaust ducted to exterior | Fair |
| Dishwasher | ☐ | -- |
| Microwave | ☐ | -- |
| Ice Machines | ☐ | -- |
| Steam Tables | ☒ | Fair |
| Work Tables | ☒ | Fair |
| Shelving | ☐ | -- |

| E1030 Commercial Laundry | | |
|---|---|---|
| Equipment | Comment | Condition |
| Commercial Washing Machines | ☐ | -- |
| Commercial Dryers | ☐ | -- |
| Residential Washers | ☐ | -- |
| Residential Dryers | ☐ | -- |

***Anticipated Lifecycle Replacements:***

- Convection warming oven
- Reach-in refrigerator
- Milk coolers
- Oven Hood
- Steam table

***Actions/Comments:***

- No significant actions are identified now. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

# 7 Sitework

## G20 Site Improvements

| G2020 Parking Lots & G2030 Pedestrian Walkways | | |
|---|---|---|
| Item | Material | Condition |
| Entrance Driveway Apron | Asphalt | Fair |
| Parking Lot | Asphalt | Fair |
| Drive Aisles | Asphalt | Fair |
| Service Aisles | Asphalt | Fair |
| Sidewalks | Concrete | Fair |
| Curbs | Concrete | Fair |
| Pedestrian Ramps | -- | -- |
| Ground Floor Patio or Terrace | -- | -- |

| Parking Count | | | | |
|---|---|---|---|---|
| Open Lot | Carport | Private Garage | Subterranean Garage | Freestanding Parking Structure |
| 58 | - | - | - | - |
| Total Number of ADA Compliant Spaces | | | 2 | |
| Number of ADA Compliant Spaces for Vans | | | 1 | |
| Total Parking Spaces | | | 61 | |

| Site Stairs | | | |
|---|---|---|---|
| Location | Material | Handrails | Condition |
| Multi-Purpose Entry | Concrete stairs | Metal | Fair |

| Maintenance Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Pavement oil stains | ☐ | Vegetation growth in joints | ☐ |
| Stair/ramp rails loose | ☐ | Stair/ramp rail needs scraped and painted | ☐ |
| Other | ☐ | Other | ☐ |

| Degradation Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Potholes/depressions | ☐ | Alligator cracking | ☐ |
| Concrete spalling | ☐ | Trip hazards (settlement/heaving) | ☐ |
| Other | ☐ | Other | ☐ |

***Anticipated Lifecycle Replacements:***

- Asphalt seal coating
- Asphalt pavement
- Sidewalks

***Actions/Comments:***

- No significant actions are identified now. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.
- The concrete sidewalks have isolated areas of vertically-displaced concrete due to mature tree root growth and settlement. These areas occur (between the fence and parking lot). The damaged areas of concrete sidewalks require replacement.

| G2060 Site Development | |
|---|---|
| Property Signage | |
| Property Signage | Monument |
| Street Address Displayed? | Yes |

| Site Fencing | | |
|---|---|---|
| Type | Location | Condition |
| Stained wood board and posts | Entry | Fair |
| Chain link with metal posts | Part of playground | Fair |

| Refuse Disposal | | | | |
|---|---|---|---|---|
| Refuse Disposal | Common area dumpsters | | | |
| Dumpster Locations | Mounting | Enclosure | Contracted? | Condition |
| Front entry | Concrete pad | None | Yes | Fair |

| Other Site Amenities | | | |
|---|---|---|---|
| | Description | Location | Condition |
| Playground Equipment | Plastic and metal | Playground | Fair |
| Tennis Courts | None | -- | -- |

| Other Site Amenities | | | |
|---|---|---|---|
| | Description | Location | Condition |
| Basketball Court | Asphalt | Playground | Fair |
| Swimming Pool | None | -- | -- |

***Anticipated Lifecycle Replacements:***

- Signage
- Site fencing
- Playground equipment
- Playground surfaces
- Asphalt paving (walkways and parking lot)

***Actions/Comments:***

- No significant actions are identified now. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

| G2080 Landscaping | | |
|---|---|---|
| Drainage System and Erosion Control | | |
| System | Exists At Site | Condition |
| Surface Flow | ☒ | Fair |
| Inlets | ☒ | Fair |
| Swales | ☐ | -- |
| Detention pond | ☐ | -- |
| Lagoons | ☐ | -- |
| Ponds | ☐ | -- |
| Underground Piping | ☒ | Fair |
| Pits | ☐ | -- |
| Municipal System | ☒ | Fair |
| Dry Well | ☐ | -- |

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- There is evidence of storm water runoff from adjacent properties. The storm water system appears to provide adequate runoff capacity. There is no evidence of major ponding or erosion. But, the principal did comment that water can be an issue on the site.

| Item | Description |
|---|---|
| Site Topography | The site is relatively flat. There is a slope from the Southeast corner of the site to the building. |

| Item | Description | | | | | | |
|---|---|---|---|---|---|---|---|
| Landscaping | Trees | Grass | Flower Beds | Planters | Drought Tolerant Plants | Decorative Stone | None |
| | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Landscaping Condition | Fair | | | | | | |
| Irrigation | Automatic Underground | Drip | Hand Watering | None | | | |
| | ☐ | ☐ | ☐ | ☒ | | | |
| Irrigation Condition | -- | | | | | | |

| Retaining Walls | | |
|---|---|---|
| Type | Location | Condition |
| None | -- | -- |

***Anticipated Lifecycle Replacements:***

- Landscaping materials

***Actions/Comments:***

- The topography and adjacent uses do not appear to present conditions detrimental to the property. There are no significant areas of erosion.

## G30 Liquid & Gas Site Utilities

| G3060 Site Fuel Distribution | |
|---|---|
| Item | Description |
| Natural Gas | Gas service is supplied from the gas main on the adjacent public street. The gas meter and regulator are located along the exterior walls of the building. The gas distribution piping within the building is malleable steel (black iron). |

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- The pressure and quantity of gas appear to be adequate.
- The gas meter and regulator appear to be functioning adequately and will require routine maintenance.
- Only limited observation of the gas distribution piping can be made due to hidden conditions.

## G40 Electrical Site Improvements

| G4050 Site Lighting | | | | | |
|---|---|---|---|---|---|
| Site Lighting | None | Pole Mounted | Bollard Lights | Ground Mounted | Parking Lot Pole Type |
| | ☐ | ☐ | ☐ | ☐ | ☒ |
| | Fair | | | | |
| Building Lighting | None | | Wall Mounted | | Recessed Soffit |
| | ☐ | | ☒ | | ☐ |
| | Excellent | | | | |

| Maintenance Issues | | | |
|---|---|---|---|
| Observation | Exists At Site | Observation | Exists At Site |
| Isolated bulb/lamp replacement | ☐ | Discolored/dirty lens cover | ☐ |
| Other | ☐ | Other | ☐ |

***Anticipated Lifecycle Replacements:***

- Exterior lighting

***Actions/Comments:***

- No significant actions are identified now. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

# 8 Ancillary Structures

| Other Ancillary Structures | | | |
|---|---|---|---|
| Type | Maintenance/Storage Shed | Location | Site |
| Item | Material | Item | Material |
| Exterior Siding | Pre-Cast Concrete | Roof Finishes | Pre-cast concrete |
| Interior Finishes | Floor: Exposed concrete<br>Ceiling: Exposed concrete<br>Walls: Exposed concrete<br>(based on Transportation bldg.) | MEPF | Electrical (was not able to access) |
| Overall Building Condition | | | Fair |
| Type | Storage Shed | Location | Garden |
| Item | Material | Item | Material |
| Exterior Siding | Wood | Roof Finishes | Asphalt Singles |
| Interior Finishes | Floor: Wood<br>Ceiling: Exposed<br>Walls: Wood | MEPF | None |
| Overall Building Condition | | | Fair |

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- No significant actions are identified now. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

# 9 Opinions of Probable Costs

Cost estimates are attached at the front of this report (following the cover page).

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means* and *Marshall & Swift,* EMG's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, and whether competitive pricing is solicited, etc. ASTM E2018-08 recognizes that certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

## 9.1 Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, EMG opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its effective age. Projections of Remaining Useful Life (RUL) are based on continued use of the Property similar to the reported past use. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be derived from an actual take-off, lump sum costs or allowances are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

## 9.2 Immediate Repairs

Immediate repairs are opinions of probable costs that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) material building or fire code violations, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

## 9.3 Replacement Reserves

Replacement Reserves are for recurring probable expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, EMG's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

EMG's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning system's or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined in the Immediate Repair Cost Estimate

# 10 Purpose and Scope

## 10.1 Purpose

EMG was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record at municipal offices, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives.

**CONDITIONS:**

The physical condition of building systems and related components are typically defined as being in one of five conditions: Excellent, Good, Fair, Poor, Failed or a combination thereof. For the purposes of this report, the following definitions are used:

| | | |
|---|---|---|
| Excellent | = | New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service. |
| Good | = | Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service. |
| Fair | = | Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life. |
| Poor | = | Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life. |
| Failed | = | Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required. |
| Not Applicable | = | Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present. |

Throughout sections 5 through 9 of this report, each report section will typically contain three subsections organized in the following sequence:

- A descriptive table (and/or narrative), which identifies the components assessed, their condition, and other key data points.
- A simple bulleted list of Anticipated Lifecycle Replacements, which lists components and assets typically in Excellent, Good, or Fair condition at the time of the assessment but that will require replacement or some other attention once aged past their estimated useful life. These listed components are typically included in the associated inventory database with costs identified and budgeted beyond the first several years.
- A bulleted cluster of Actions/Comments, which include more detailed narratives describing deficiencies, recommended repairs, and short term replacements. The assets and components associated with these bullets are/were typically problematic and in Poor or Failed condition at the time of the assessment, with corresponding costs included within the first few years.

**PLAN TYPES:**

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the "why" part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the "best" fit, typically the one with the greatest significance. The following Plan Types are listed in general weighted order of importance:

| | | |
|---|---|---|
| Safety | = | An observed or reported unsafe condition that if left unaddressed could result in an injury; a system or component that presents a potential liability risk. |
| Performance/Integrity | = | Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses a risk to overall system stability. |
| Accessibility | = | Does not meet ADA, UFAS, and/or other handicap accessibility requirements. |
| Environmental | = | Improvements to air or water quality, including removal of hazardous materials from the building or site. |
| Modernization/Adaptation | = | Conditions, systems, or spaces that need to be upgraded in appearance or function to meet current standards, facility usage, or client/occupant needs. |
| Lifecycle/Renewal | = | Any component or system in which future repair or replacement is anticipated beyond the next several years and/or is of minimal substantial early-term consequence. |

## 10.2 Scope

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents in order to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a general statement of the subject Property's compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey, but will help identify exposure to issues and the need for further review.
- Perform a limited assessment of accessible areas of the building(s) for the presence of fungal growth, conditions conducive to fungal growth, and/or evidence of moisture. EMG will also interview Project personnel regarding the presence of any known or suspected fungal growth, elevated relative humidity, water intrusion, or mildew-like odors. Potentially affected areas will be photographed. Sampling will not be considered in routine assessments.
- List the current utility service providers.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, in order to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report.
- Prepare a mechanical inventory list.

# 11 Accessibility and Property Research

## 11.1 ADA Accessibility

Generally, Title III of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of "areas of public accommodations" and "commercial facilities" on the basis of disability. Regardless of its age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

Buildings completed and occupied after January 26, 1992 are required to comply fully with the ADAAG. Existing facilities constructed prior to this date are held to the lesser standard of compliance to the extent allowed by structural feasibility and the financial resources available. As an alternative, a reasonable accommodation pertaining to the deficiency must be made.

During the FCA, a limited visual observation for ADA accessibility compliance was conducted. The scope of the visual observation was limited to those areas set forth in *EMG's Abbreviated Accessibility Checklist* provided in Appendix D of this report. It is understood by the Client that the limited observations described herein does not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of EMG's undertaking. Only a representative sample of areas was observed and, other than as shown on the Abbreviated Accessibility Checklist, actual measurements were not taken to verify compliance.

The facility does not appear to be accessible with Title III of the Americans with Disabilities Act. Elements as defined by the ADAAG that are not accessible as stated within the priorities of Title III, are as follows:

| Accessibility Issues | | | |
|---|---|---|---|
| Component | Major Issue | Moderate Issue | Minor Issue |
| Parking | ☐ | ☐ | ☒ |
| Exterior Accessible Route | ☐ | ☐ | ☐ |
| Interior Accessible Route | ☐ | ☐ | ☐ |
| Restrooms | ☐ | ☐ | ☒ |
| Elevators | ☐ | ☐ | ☐ |

One of the parking spaces is missing the ADA Parking sign. The common area restrooms the piping beneath the sinks is not wrapped. The wrap is protecting a person's legs.

A full ADA Compliance Survey may reveal aspects of the property that are not in compliance.

Corrections of these conditions should be addressed from a liability standpoint, but are not necessarily code violations. The Americans with Disabilities Act Accessibility Guidelines concern civil rights issues as they pertain to the disabled and are not a construction code, although many local jurisdictions have adopted the Guidelines as such.

## 11.2 Flood Zone and Seismic Zone

According to the Flood Insurance Rate Map, published by the Federal Emergency Management Agency (FEMA) and dated April 3, 2012, the property is located in Zone X, defined as an area outside the 500-year flood plain with less than 0.2% annual probability of flooding. Annual Probability of Flooding of Less than one percent.

According to the 1997 Uniform Building Code Seismic Zone Map of the United States, the property is located in Seismic Zone 1, defined as an area of low probability of damaging ground motion.

# 12 Certification

Ann Arbor Public Schools retained EMG to perform this Facility Condition Assessment in connection with its continued operation of Lawton Elementary, 2250 South Seventh Street, Ann Arbor, MI, the "Property". It is our understanding that the primary interest of Ann Arbor Public Schools is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling or operating of equipment or in depth studies were performed unless specifically required under Section 2 of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas were observed (See Section 4.2 for areas observed). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared on behalf of and exclusively for the use of the client for the purpose stated within Section 10 of this report. The report, or any excerpt thereof, shall not be used by any party other than the client or for any other purpose than that specifically stated in our agreement or within Section 10.1 of this report without the express written consent of EMG.

Any reuse or distribution of this report without such consent shall be at Ann Arbor Public Schools and the recipient's sole risk, without liability to EMG.

**Prepared by:** Randall Patzke,
Project Manager

**Reviewed by:**

Al Diefert
Technical Report Reviewer For
Andrew Hupp
Program Manager

# 13 Appendices

Appendix A: Photographic Record
Appendix B: Site Plans
Appendix C: Supporting Documentation
Appendix D: EMG Accessibility Checklist
Appendix E: Pre-Survey Questionnaire

# Appendix A:
# Photographic Record


| | |
|---|---|
| #1: | FRONT ELEVATION |

| | |
|---|---|
| #2: | RIGHT ELEVATION |

| | |
|---|---|
| #3: | REAR ELEVATION |

| | |
|---|---|
| #4: | LEFT ELEVATION |

| | |
|---|---|
| #5: | CEILING TILE POSSIBLY CONTAINING ASBESTOS |

| | |
|---|---|
| #6: | PIPE INSULATION WITH POSSIBLE ASBESTOS |

| | |
|---|---|
| #7: | EXTERIOR WALL |

| | |
|---|---|
| #8: | EXTERIOR DOORS, EXTERIOR FASCIA |

| | |
|---|---|
| #9: | EXTERIOR DOOR |

| | |
|---|---|
| #10: | EXTERIOR STAIR/RAMP RAILS |

| | |
|---|---|
| #11: | MECHANICAL ROOM HATCH NEEDS PAINTING |

| | |
|---|---|
| #12: | ROOF MEMBRANE |

| | |
|---|---|
| #13: | WINDOWS |

| | |
|---|---|
| #14: | WOOD SOFFIT |

| | |
|---|---|
| #15: | DAMAGED BRICK VENEER |

| | |
|---|---|
| #16: | ROOF HVAC |

| | |
|---|---|
| #17: | BRICK VENEER |

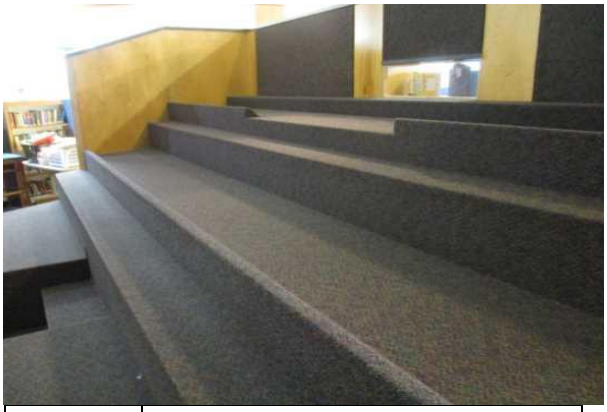
| | |
|---|---|
| #18: | ROOF EXHAUST FAN |

| | |
|---|---|
| #19: | EXTERIOR DOOR |

| | |
|---|---|
| #20: | CASEWORK |

| | |
|---|---|
| #21: | ACOUSTICAL INTERIOR WALL FINISH, WITH CEILING FAN |

| | |
|---|---|
| #22: | VINYL TILE FLOOR |



| | |
|---|---|
| #23: | INTERIOR CARPET |

| | |
|---|---|
| #24: | WALL PARTITION |


| | |
|---|---|
| #25: | ACOUSTICAL INTERIOR CEILING |


| | |
|---|---|
| #26: | CASEWORK |


| | |
|---|---|
| #27: | INTERIOR DOOR |

| | |
|---|---|
| #28: | REPAIR INTERIOR WALL FINISH |

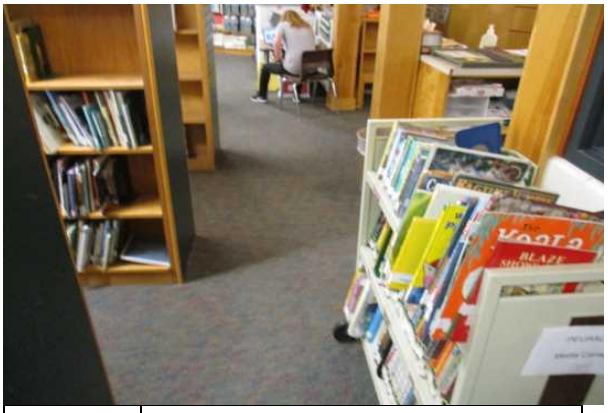
| | |
|---|---|
| #29: | STAGE CURTAIN |

| | |
|---|---|
| #30: | ACOUSTICAL WALL PARTITIONS |

| | |
|---|---|
| #31: | ACOUSTICAL WALL PARTITIONS |

| | |
|---|---|
| #32: | INTERIOR CEILING TILE |

| | |
|---|---|
| #33: | REPAIR INTERIOR WALL FINISH |



| | |
|---|---|
| #34: | CARPET |

| | |
|---|---|
| #35: | DAMAGED CONCRETE BLOCK |

| | |
|---|---|
| #36: | HARD CEILING FINISH |

| | |
|---|---|
| #37: | HARDWOOD FLOORING |

| | |
|---|---|
| #38: | OFFICE |

| | |
|---|---|
| #39: | ACOUSTICAL INTERIOR WALL FINISH |

| | |
|---|---|
| #40: | INTERIOR WALL FINISHES |

| | |
|---|---|
| #41: | TOILET, SINK AND CERAMIC TILE FLOORING |

| | |
|---|---|
| #42: | TOILET PARTITIONS |

| | |
|---|---|
| #43: | WOOD CABINETS |

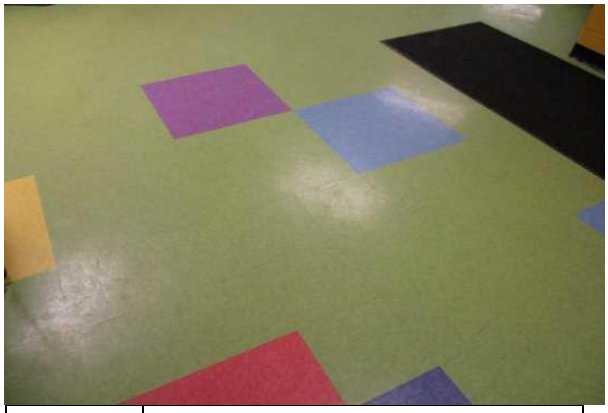
| | |
|---|---|
| #44: | HALLWAY |

| | |
|---|---|
| #45: | CLASROOM |

| | |
|---|---|
| #46: | INTERIOR WALL AND CEILING FINISH TO REPAIR |

| | |
|---|---|
| #47: | GLAZED, STEEL INTERIOR DOOR |

| | |
|---|---|
| #48: | ACT INTERIOR CEILING FINISH |



| | |
|---|---|
| #49: | VINYL TILE FLOOR |

| | |
|---|---|
| #50: | INTERIOR WALL FINISH TO REPAIR |

| | |
|---|---|
| #51: | URINALS |

| | |
|---|---|
| #52: | KITCHEN EXHAUST HOOD |

| | |
|---|---|
| #53: | TROUGH STYLE SINK |

| | |
|---|---|
| #54: | DRINKING FOUNTAINS |

| | |
|---|---|
| #55: | DRINKING FOUNTAIN |

| | |
|---|---|
| #56: | DRINKING FOUNTAIN |

| | |
|---|---|
| #57: | WATER HEATER |

| | |
|---|---|
| #58: | EXHAUST FAN |


| | |
|---|---|
| #59: | AIR COOLED CONDENSER |

| | |
|---|---|
| #60: | EXHAUST FAN |

| | |
|---|---|
| #61: | EXHAUST FAN |

| | |
|---|---|
| #62: | VARIABLE AIR VOLUME (VAV) BOX |


| | |
|---|---|
| #63: | INTERIOR AIR HANDLER |

| | |
|---|---|
| #64: | INTERIOR AIR HANDLER |


| | |
|---|---|
| #65: | BUILDING AUTOMATION SYSTEM (HVAC CONTROLS) |

| | |
|---|---|
| #66: | ROOF TOP PACKAGE UNIT |

| | |
|---|---|
| #67: | SPLIT SYSTEM HVAC |

| | |
|---|---|
| #68: | SPLIT SYSTEM HVAC |

| | |
|---|---|
| #69: | DUCTLESS SPLIT SYSTEM, CONDENSER |

| | |
|---|---|
| #70: | FAN COIL UNIT |


| | |
|---|---|
| #71: | EXTERIOR DOOR |

| | |
|---|---|
| #72: | INTERIOR LIGHTING SYSTEM |

| | |
|---|---|
| #73: | FLUORESCENT LIGHTING FIXTURE |


| | |
|---|---|
| #74: | DISTRIBUTION PANEL |


| | |
|---|---|
| #75: | BUILDING/MAIN SWITCHGEAR |

| | |
|---|---|
| #76: | SWITCHBOARD AND DISTRIBUTION PANEL |


| | |
|---|---|
| #77: | FIRE ALARM CONTROL PANEL |

| | |
|---|---|
| #78: | COMMERCIAL 2 DOOR REFRIGERATOR |

| | |
|---|---|
| #79: | WOOD FENCE AND DUMPSTERS |

| | |
|---|---|
| #80: | CONCRETE SIDEWALK |

| | |
|---|---|
| #81: | ASPHALT SIDEWALK |

| | |
|---|---|
| #82: | ASPHALT PAVEMENT |

| | |
|---|---|
| #83: | PLAY STRUCTURE |

| | |
|---|---|
| #84: | PLAY STRUCTURE |


| | |
|---|---|
| #85: | PROPERTY SIGN |

| | |
|---|---|
| #86: | SIDEWALK AND METAL RAILING |

| | |
|---|---|
| #87: | PARKING LOT |

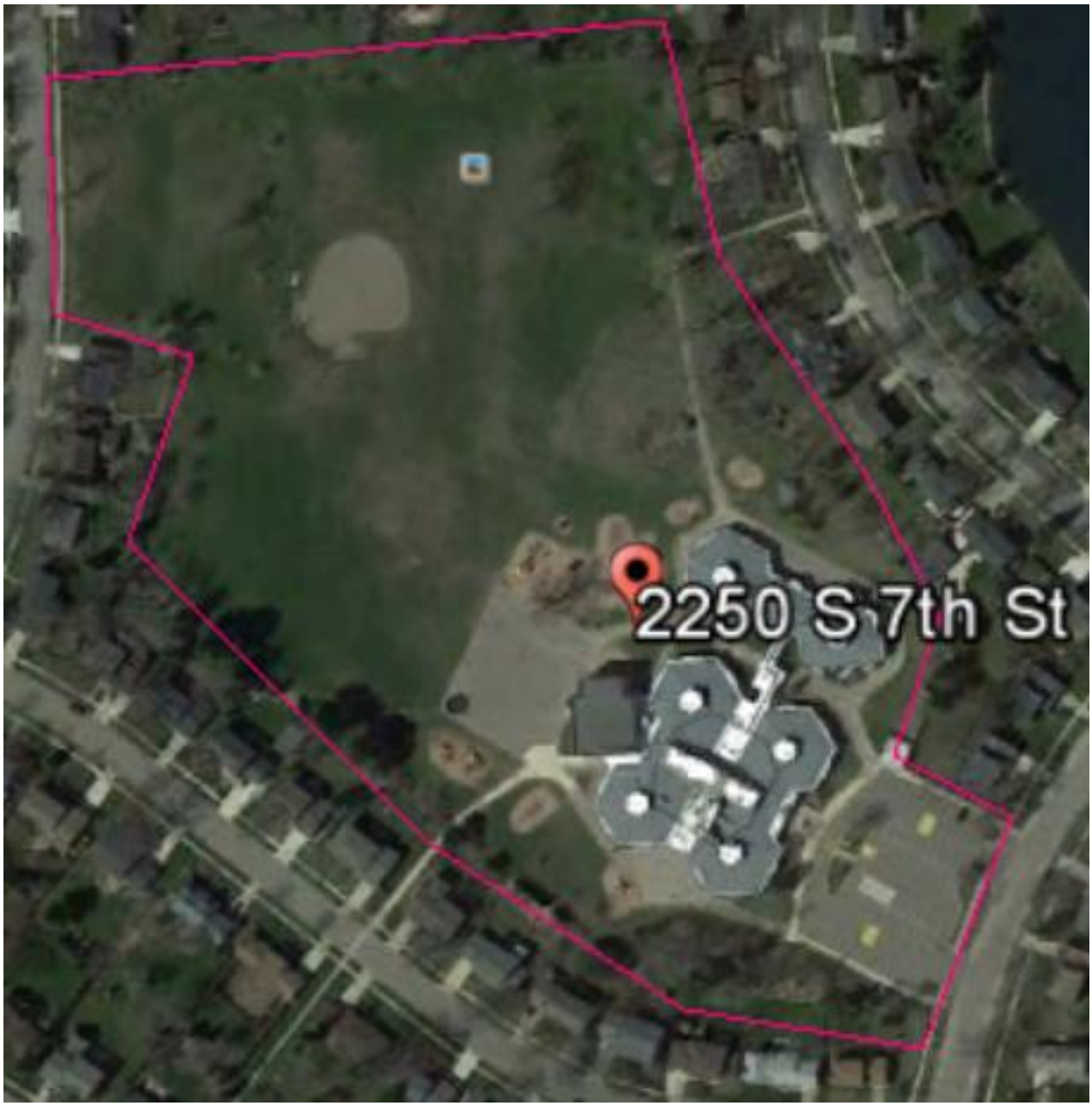
| | |
|---|---|
| #88: | SIDEWALK |

| | |
|---|---|
| #89: | POLE LIGHTS |

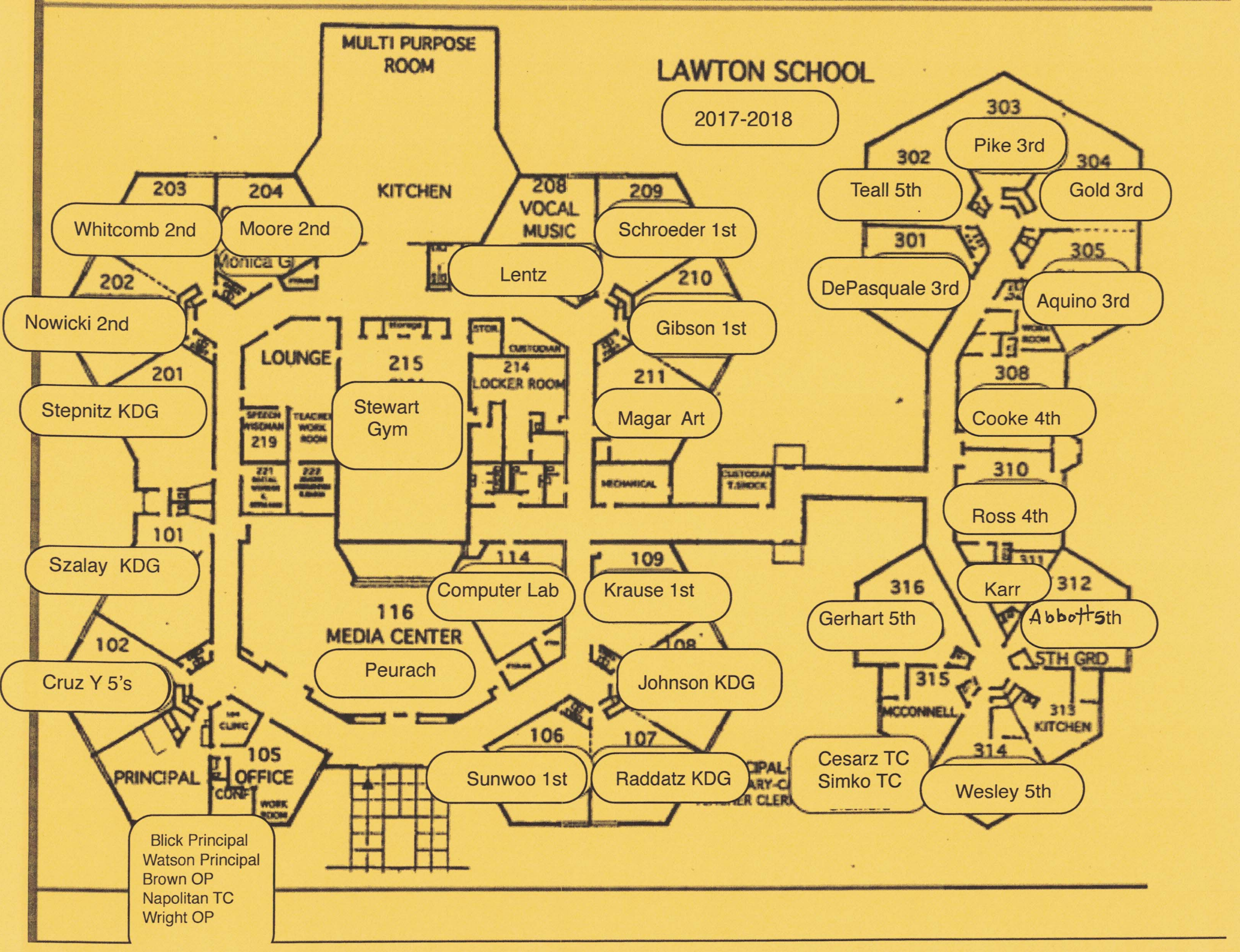
| | |
|---|---|
| #90: | ADA, PARKING |

# Appendix B:
# Site Plans

## Site Plan




| | | |
|---|---|---|
| emg | **Project Name:**<br>Lawton Elementary | **Project Number:**<br>129010.18R000-016.354 |
| | **Source:**<br>Google Earth Pro | **On-Site Date:**<br>March 9, 2018 |


LAWTON SCHOOL
2017-2018
MULTI PURPOSE ROOM
KITCHEN
LOUNGE
LOCKER ROOM
MEDIA CENTER
PRINCIPAL
OFFICE
MECHANICAL
MCCONNELL
5TH GRD
303
Pike 3rd
302
Teall 5th
304
Gold 3rd
301
DePasquale 3rd
305
Aquino 3rd
203
204
Whitcomb 2nd
Moore 2nd
208
VOCAL MUSIC
209
Schroeder 1st
Lentz
202
210
Nowicki 2nd
Gibson 1st
201
Stepnitz KDG
Stewart Gym
211
Magar Art
308
Cooke 4th
310
Ross 4th
101
Szalay KDG
114
109
Computer Lab
Krause 1st
316
Gerhart 5th
Karr
312
Abbott 5th
102
Cruz Y 5's
Peurach
Johnson KDG
315
313
KITCHEN
106
107
Sunwoo 1st
Raddatz KDG
Cesarz TC
Simko TC
314
Wesley 5th
Blick Principal
Watson Principal
Brown OP
Napolitan TC
Wright OP

# Appendix C:
# Supporting Documentation

# THIS APPENDIX IS INTENTIONALLY LEFT BLANK.

# Appendix D:
# EMG Accessibility Checklist

**Property Name:** Lawton Elementary

**EMG Project Number:** 129010.18R000-016.354

| Abbreviated Accessibility Checklist | | | | | |
|---|---|---|---|---|---|
| | **Building History** | **Y** | **N** | **U** | **Comments** |
| **1** | Has an ADA survey previously been completed for this property? | | | X | |
| **2** | Have any ADA improvements been made to the property since original construction? | X | | | |
| **3** | Has building ownership/management reported any ADA complaints or litigation? | | | X | |
| | **Parking** | **Y** | **N** | **NA** | **Comments** |
| **1** | Does the required number of standard ADA designated spaces appear to be provided? | X | | | With addition of sign |
| **2** | Does the required number of van-accessible designated spaces appear to be provided? | **X** | | | |
| **3** | Are accessible spaces on the shortest accessible route to an accessible building entrance? | X | | | |
| **4** | Does parking signage include the International Symbol of Accessibility? | X | | | |
| **5** | Does each accessible space have an adjacent access aisle? | X | | | |
| **6** | Do parking spaces and access aisles appear to be relatively level and without obstruction | X | | | |
| | **Exterior Accessible Route** | **Y** | **N** | **NA** | **Comments** |
| **1** | Is an accessible route present from public transportation stops and municipal sidewalks on or immediately adjacent to the property? | X | | | |
| **2** | Does a minimum of one accessible route appear to connect all public areas on the exterior, such as parking and other outdoor amenities, to accessible building entrances? | X | | | |
| **3** | Are curb ramps present at transitions through raised curbs on all accessible routes? | X | | | |
| **4** | Do curb ramps appear to have compliant slopes for all components? | X | | | |
| **5** | Do ramp runs on an accessible route appear to have compliant slopes? | X | | | |
| **6** | Do ramp runs on an accessible route appear to have a compliant rise and width? | X | | | |
| **7** | Do ramps on an accessible route appear to have compliant end and intermediate landings? | X | | | |
| **8** | Do ramps on an accessible route appear to have compliant handrails? | X | | | |

| | Building Entrances | Y | N | NA | Comments |
|---|---|---|---|---|---|
| **1** | Do a sufficient number of accessible entrances appear to be provided? | X | | | |
| **2** | If the main entrance is not accessible, is an alternate accessible entrance provided? | X | | | |
| **3** | Is signage provided indicating the location of alternate accessible entrances? | | X | | |
| **4** | Do doors at accessible entrances appear to have compliant maneuvering clearance area on each side? | X | | | |
| **5** | Do doors at accessible entrances appear to have compliant hardware? | X | | | |
| **6** | Do doors at accessible entrances appear to have a compliant clear opening width? | X | | | |
| **7** | Do pairs of accessible entrance doors in series appear to have the minimum clear space between them? | | | X | |
| **8** | Do thresholds at accessible entrances appear to have a compliant height? | X | | | |
| | **Interior Accessible Routes and Amenities** | **Y** | **N** | **NA** | **Comments** |
| **1** | Does an accessible route appear to connect all public areas inside the building? | X | | | |
| **2** | Do accessible routes appear free of obstructions and/or protruding objects? | X | | | |
| **3** | Do ramps on accessible routes appear to have compliant slopes? | X | | | |
| **4** | Do ramp runs on an accessible route appear to have a compliant rise and width? | X | | | |
| **5** | Do ramps on accessible routes appear to have compliant end and intermediate landings? | X | | | |
| **6** | Do ramps on accessible routes appear to have compliant handrails? | X | | | |
| **7** | Are accessible areas of refuge and the accessible means of egress to those areas identified with accessible signage? | | | X | |
| **8** | Do public transaction areas have an accessible, lowered service counter section? | X | | | |
| **9** | Do public telephones appear mounted with an accessible height and location? | | | X | |
| | **Interior Doors** | **Y** | **N** | **NA** | **Comments** |
| **1** | Do doors at interior accessible routes appear to have compliant maneuvering clearance area on each side? | X | | | |
| **2** | Do doors at interior accessible routes appear to have compliant hardware? | X | | | |

| | Interior Doors | Y | N | NA | Comments |
|---|---|---|---|---|---|
| **3** | Do non-fire hinged, sliding, or folding doors on interior accessible routes appear to have compliant opening force? | | | X | |
| **4** | Do doors on interior accessible routes appear to have a compliant clear opening width? | X | | | |
| | **Elevators** | **Y** | **N** | **NA** | **Comments** |
| **1** | Are hallway call buttons configured with the “UP” button above the “DOWN” button? | | | X | |
| **2** | Is accessible floor identification signage present on the hoistway sidewalls on each level? | | | X | |
| **3** | Do the elevators have audible and visual arrival indicators at the entrances? | | | X | |
| **4** | Do the elevator hoistway and car interior appear to have a minimum compliant clear floor area? | | | X | |
| **5** | Do the elevator car doors have automatic re-opening devices to prevent closure on obstructions? | | | X | |
| **6** | Do elevator car control buttons appear to be mounted at a compliant height? | | | X | |
| **7** | Are tactile and Braille characters mounted to the left of each elevator car control button? | | | X | |
| **8** | Are audible and visual floor position indicators provided in the elevator car? | | | X | |
| **9** | Is the emergency call system at the base of the control panel and does it not require voice communication? | | | X | |
| | **Common Area Toilet Rooms** | **Y** | **N** | **NA** | |
| **1** | Do publicly accessible toilet rooms appear to have a minimum compliant floor area? | X | | | |
| **2** | Does the lavatory appear to be mounted at a compliant height and with compliant knee area? | X | | | |
| **3** | Does the lavatory faucet have compliant handles? | X | | | |
| **4** | Is the plumbing piping under lavatories configured to protect against contact? | | X | | |
| **5** | Are grab bars provided at compliant locations around the toilet? | X | | | |
| **6** | Do toilet stall doors appear to provide the minimum compliant clear width? | X | | | |
| **7** | Do toilet stalls appear to provide the minimum compliant clear floor area? | X | | | |
| **8** | Does minimum one urinal appear to be mounted at a compliant height and with compliant approach width? | X | | | |

| | Common Area Toilet Rooms | Y | N | NA | |
|---|---|---|---|---|---|
| 9 | Do accessories and mirrors appear to be mounted at a compliant height? | X | | | |
| | **Hospitality** | **Y** | **N** | **NA** | **Comments** |
| 1 | Does there appear to be adequate clear floor space around the exercise machines/equipment? | | | X | |
| 2 | Does property management report there are a sufficient number of ADA guest rooms without roll-in showers? | | | X | |
| 3 | Does property management report there are a sufficient number of ADA guest rooms with roll-in showers? | | | X | |
| 4 | Does property management report there are a sufficient number of ADA guest rooms with communications features? | | | X | |
| 5 | Does property management report there are a sufficient number of portable communications kits available, where built-in communication features are not provided? | | | X | |
| 6 | Are publicly accessible swimming pools equipped with an entrance lift? | | | X | |
| | **Self- Service Storage** | **Y** | **N** | **NA** | **Comments** |
| 1 | Does property management report there are a sufficient number of ADA self-service storage units? | | | X | |
| 2 | Does it appear that the accessible unit doors are accessible? | | | X | |

| Abbreviated Fair Housing Act and ADA Accessibility Checklist | | | | | |
|---|---|---|---|---|---|
| | **History** | **Y** | **N** | **U** | **Comments** |
| 1 | Was first residential occupancy at the property after March 13, 1991? | | | X | |
| 2 | Does the property consist of four or more dwelling units in each building | | | X | |
| 4 | Is property management or the owner aware of any areas of accessibility non-compliance resulting in litigation? | | | X | |
| | **Exterior Accessible Route and Building Entrance** | **Y** | **N** | **NA** | **Comments** |
| 1 | Do designated accessible parking spaces appear to be provided in sufficient number at appropriate locations? | X | | | |
| 2 | Do appropriate transitions from vehicular areas to sidewalks appear to be provided? | X | | | |
| 3 | Do walkway running slopes and cross slopes appear to be compliant and not excessive? | X | | | |
| 4 | Do walkways appear to be the correct width, and clear of obstructions, including overhanging vehicles? | X | | | |

| Abbreviated Fair Housing Act and ADA Accessibility Checklist | | | | | |
|---|---|---|---|---|---|
| | **Exterior Accessible Route and Building Entrance** | **Y** | **N** | **NA** | **Comments** |
| **5** | Do ramps appear to have handrails and edge protection where required? | X | | | |
| **6** | Do building entry points/accessible doors appear to be provided along an apparent accessible route? | X | | | |
| **7** | Do the main entrances appear to be barrier free and readily accessible, without steps, obstacles, or revolving doors required for access? | X | | | |
| | **Accessible Common Areas** | **Y** | **N** | **NA** | **Comments** |
| **1** | Does a continuous accessible route appear to be provided throughout the property, including the site, parking areas and amenities? | X | | | |
| **2** | Do common area/visitor restrooms appear to be barrier free and readily accessible? | X | | | |
| **3** | Do the amenities appear to be barrier free and readily accessible? | X | | | |
| **4** | Do doors/entries appear to be designed for accessibility? | X | | | |
| **5** | Do interior doors appear to be designed for accessibility? | X | | | |
| | **Covered Units** | **Y** | **N** | **NA** | **Comments** |
| **1** | Do the interiors of the "covered" units appear to provide adequate maneuverability? | | | X | |
| **2** | Do the environmental controls within the "covered" units appear to be at appropriate heights/locations? | | | X | |
| **3** | Are reinforcements reportedly provided for future installation of grab bars at appropriate locations in the "covered" units? | | | X | |
| **4** | Do the interior kitchen areas of the "covered" units appear to provide adequate clearances for maneuverability? | | | X | |
| **5** | Do the bathrooms of the "covered" units appear to provide adequate clearances? | | | X | |

# Appendix E:
# Pre-Survey Questionnaire

# EMG FACILITY CONDITION ASSESSMENT: PRE-SURVEY QUESTIONNAIRE

**Building / Facility Name:** _____

**Name of person completing form:** _____

**Title / Association with property:** _____

**Length of time associated w/ property:** _____

**Date Completed:** _____

**Phone Number:** _____

**Directions:** Please answer all questions to the best of your knowledge and in good faith. Please provide additional details in the Comments column, or backup documentation for any ***Yes*** responses.

| DATA OVERVIEW | | RESPONSE | | | |
|---|---|---|---|---|---|
| 1 | Year/s constructed | | | | |
| 2 | Building size in SF | | | | |
| 3 | Major Renovation Dates | Façade | | HVAC | |
| | | Roof | | Electrical | |
| | | Interiors | | Site Pavement | |
| | | Accessibility | | other | |

| QUESTION | | RESPONSE |
|---|---|---|
| 4 | Provide additional detail about the scope of the MAJOR additions, renovations, or systemic rehabilitations since construction (referenced above in Question 3). | |
| 5 | List other significant but somewhat lesser capital improvements, focusing on recent years (provide approximate year completed). | |
| 6 | List any major capital expenditures planned/requested for the next few years. Have they been budgeted? | |
| 7 | Describe any on-going extremely problematic, historically chronic, or immediate facility needs. | |

| Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any ***Yes*** responses. (**NA** indicates "*Not Applicable*", **Unk** indicates *"Unknown"*) | | | | | | |
|---|---|---|---|---|---|---|
| QUESTION | | RESPONSE | | | | COMMENTS |
| | | Yes | No | Unk | NA | |
| 8 | Are there any problems with foundations or structures, like excessive settlement? | | | | | |
| 9 | Has any part of the facility ever contained visible suspect mold growth, or have there been any indoor air quality or mold related complaints from occupants? | | | | | |
| 10 | Are there any wall, window, basement or roof leaks? | | | | | |
| 11 | Are there any plumbing leaks, water pressure, or clogging/back-up problems? | | | | | |
| 12 | Have there been any leaks or pressure problems with natural gas, HVAC supply/return lines, or steam service? | | | | | |
| 13 | Are any areas of the facility inadequately heated, cooled or ventilated? Any poorly insulated areas? | | | | | |
| 14 | Is the electrical service outdated, undersized, or otherwise problematic? | | | | | |
| 15 | Are there any problems or inadequacies with exterior building-mounted lighting? | | | | | |
| 16 | Is site/parking drainage inadequate, with excessive ponding or other problems? | | | | | |
| 17 | Are there any other unresolved construction defects or significant issues/hazards at the property that have not yet been identified above? | | | | | |
| 18 | ADA: Has an accessibility study been performed at the site? If so, indicate when. | | | | | |
| 19 | ADA: If a study has occurred, have the associated recommendations been addressed? In full or in part? | | | | | |
| 20 | ADA: Have there been regular complaints about accessibility issues, or associated previous or pending litigation? | | | | | |

On the day of the site visit, provide EMG's Field Observer access to all of the available documents listed below. Provide copies if possible.

| INFORMATION REQUIRED | |
|---|---|
| 1. All available construction documents (blueprints) for the original construction of the building or for any tenant improvement work or other recent construction work.<br><br>2. A site plan, preferably 8 1/2" X 11", which depicts the arrangement of buildings, roads, parking stalls, and other site features.<br><br>3. For commercial properties, provide a tenant list which identifies the names of each tenant, vacant tenant units, the floor area of each tenant space, and the gross and net leasable area of the building(s).<br><br>4. For apartment properties, provide a summary of the apartment unit types and apartment unit type quantities, including the floor area of each apartment unit as measured in square feet.<br><br>5. For hotel or nursing home properties, provide a summary of the room types and room type quantities.<br><br>6. Copies of Certificates of Occupancy, building permits, fire or health department inspection reports, elevator inspection certificates, roof or HVAC warranties, or any other similar, relevant documents.<br><br>7. The names of the local utility companies which serve the property, including the water, sewer, electric, gas, and phone companies. | 8. The company name, phone number, and contact person of all outside vendors who serve the property, such as mechanical contractors, roof contractors, fire sprinkler or fire extinguisher testing contractors, and elevator contractors.<br><br>9. A summary of recent (over the last 5 years) capital improvement work which describes the scope of the work and the estimated cost of the improvements. Executed contracts or proposals for improvements. Historical costs for repairs, improvements, and replacements.<br><br>10. Records of system & material ages (roof, MEP, paving, finishes, furnishings).<br><br>11. Any brochures or marketing information.<br><br>12. Appraisal, either current or previously prepared.<br><br>13. Current occupancy percentage and typical turnover rate records (for commercial and apartment properties).<br><br>14. Previous reports pertaining to the physical condition of property.<br><br>15. ADA survey and status of improvements implemented.<br><br>16. Current / pending litigation related to property condition. |

Your timely compliance with this request is greatly appreciated.