

FACILITY CONDITION ASSESSMENT

Prepared for

Town of Dedham Schools
100 Whiting Avenue
Dedham, Massachusetts 02026



FACILITY CONDITION ASSESSMENT
OF THE
DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

PREPARED BY:

EMG

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EMG PROJECT #:

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DATE OF REPORT:

December 27, 2016

ONSITE DATE:

October 19, 2016



engineering | environmental | capital planning | project management



Immediate Repairs Report
Dedham Middle School
12/27/2016



Location Name	EMG Renamed Item Number	ID	Cost Description	QuantityUnit		Unit Cost	Subtotal	Deficiency	
								*Repair Estimate	
Dedham Middle School	3.1	529468	Z106X ADA, Parking, Designated Stall with Pavement Markings & Signage (Van), Install	1	EA	\$1,391.50	\$1,392		\$1,392
Dedham Middle School	5.2	529470	G2022 Parking Lots, Asphalt Pavement, Full Depth (includes sub-base), Repair	200	SF	\$5.90	\$1,180		\$1,180
Dedham Middle School	5.2	529473	G2031 Pedestrian Pavement, Sidewalk, Concrete, Repair	150	SF	\$28.94	\$4,342		\$4,342
Dedham Middle School	5.5	529550	G2016 Signage, Building Mounted, Individual Letters, Install/Replace	10	EA	\$150.00	\$1,500		\$1,500
Dedham Middle School	6.3	529565	B3011 Roof, Single-Ply EPDM Membrane, Repair	1000	SF	\$22.60	\$22,600		\$22,600
Dedham Middle School	6.5	529571	B1015 Exterior Stairs, Concrete, Repair	100	SF	\$3.88	\$388		\$388
Dedham Middle School	6.5	529573	B2011 Exterior Wall, Concrete, 1-2 Stories, Repair	125	SF	\$26.01	\$3,251		\$3,251
Dedham Middle School	7.1	529606	D3041 HVAC System Ductwork, Sheet Metal, Replace	75	SF	\$15.00	\$1,125		\$1,125
Immediate Repairs Total									\$35,777

* Location Factor included in totals.

Replacement Reserves Report

Dedham Middle School

12/27/2016



Location Name	EMG Renamed Item Number	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	Subtotal	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Deficiency Repair Estimate
Dedham Middle School	3.1	529468	ADA, Parking, Designated Stall with Pavement Markings & Signage (Van), Install		0	0	0	1	EA	\$1,391.50	\$1,392	\$1,392																			\$1,392
Dedham Middle School	5.2	529470	Parking Lots, Asphalt Pavement, Cut and Patch, Repair		0	10	0	200	SF	\$5.90	\$1,180	\$1,180																			\$1,180
Dedham Middle School	5.2	529476	Parking Lots & Driveways, Asphalt Pavement, Seal & Stripe		5	3	2	86500	SF	\$0.38	\$32,827			\$32,827				\$32,827					\$32,827					\$32,827			\$131,307
Dedham Middle School	5.2	529475	Parking Lots & Driveways, Asphalt Pavement & Curbs, Mill & Overlay		25	10	15	86500	SF	\$3.28	\$283,755														\$283,755						\$283,755
Dedham Middle School	5.2	529473	Pedestrian Pavement, Sidewalk, Concrete, Repair		0	10	0	150	SF	\$28.94	\$4,342	\$4,342																			\$4,342
Dedham Middle School	5.4	529486	Irrigation Pump, 3 to 7.5 HP, Replace		15	5	10	1	EA	\$3,414.40	\$3,414										\$3,414										\$3,414
Dedham Middle School	5.4	529479	Irrigation System, , Replace		25	8	17	100000	SF	\$3.16	\$316,250																\$316,250				\$316,250
Dedham Middle School	5.5	529509	Metal Halide Lighting Fixture w/ Electronic Ballast, Wall Mount, 150 W, Replace		20	10	10	14	EA	\$574.32	\$8,041										\$8,041										\$8,041
Dedham Middle School	5.5	529550	Signage, Building Mounted, Individual Letters, Replace		20	20	0	10	EA	\$150.00	\$1,500	\$1,500																			\$1,500
Dedham Middle School	5.5	529548	Dumpster Accessories, Enclosures, Wood 8' High, Install		20	19	* 1	30	LF	\$99.72	\$2,992										\$2,992										\$2,992
Dedham Middle School	5.5	529549	Dumpster Accessories, Enclosures, Wood, 8' High, Replace		20	10	10	30	LF	\$99.72	\$2,992										\$2,992										\$2,992
Dedham Middle School	5.5	529547	Pole Light, Exterior, 80 to 100 W LED (Fixture & Bracket Arm Only), Replace		20	10	10	23	EA	\$2,721.00	\$62,583										\$62,583										\$62,583
Dedham Middle School	6.3	529782	Insulation & Air Barrier Sealing, Blown-in, Celulose & Spray Foam, Install		30	29	1	6000	SF	\$1.31	\$7,860		\$7,860																		\$7,860
Dedham Middle School	6.3	529565	Roof, Single-Ply EPDM Membrane & Asphalt Shingle Roofing, Repair		0	10	0	1000	SF	\$22.60	\$22,600	\$22,600																			\$22,600
Dedham Middle School	6.3	529560	Roof, Single-Ply EPDM Membrane, Replace		20	10	10	36825	SF	\$10.52	\$387,399										\$387,399										\$387,399
Dedham Middle School	6.3	529555	Roof, Asphalt Shingle Premium Grade, Replace		30	11	19	57425	SF	\$5.04	\$289,411																		\$289,411		\$289,411
Dedham Middle School	6.3	529562	Roof Skylight, Plexiglass Dome Fixed 9-20 SF, Replace		30	11	19	6	EA	\$1,207.20	\$7,243																		\$7,243		\$7,243
Dedham Middle School	6.3	529563	Roof Skylight, Plexiglass Dome Fixed 40-50 SF, Replace		30	11	19	11	EA	\$1,207.20	\$13,279																		\$13,279		\$13,279
Dedham Middle School	6.4	529569	Exterior Sealant Joints, Caulking, 0" to 1/2", 1-2 Stories, Replace		10	9	1	3000	LF	\$2.82	\$8,460		\$8,460								\$8,460										\$16,920
Dedham Middle School	6.4	529568	Exterior Wall, Brick or Brick Veneer, 3+ Stories, Repoint		25	10	15	2500	SF	\$45.45	\$113,623														\$113,623						\$113,623
Dedham Middle School	6.5	529571	Exterior Stairs, Concrete, Repair		0	10	0	100	SF	\$3.88	\$388	\$388																			\$388
Dedham Middle School	6.5	529573	Loading Dock, Concrete, Repair		0	10	0	125	SF	\$26.01	\$3,251	\$3,251																			\$3,251
Dedham Middle School	6.6	529575	Window, Aluminum Double-Glazed 24 SF, 3+ Stories, Replace		30	12	18	138	EA	\$934.82	\$129,006																	\$129,006			\$129,006
Dedham Middle School	6.6	529576	Window, Aluminum Double-Glazed Gas-Filled 12 SF, 3+ Stories, Replace		30	12	18	17	EA	\$628.02	\$10,676																	\$10,676			\$10,676
Dedham Middle School	6.6	529578	Storefront, Metal-Framed Windows w/out Door(s), Replace		30	12	18	400	SF	\$48.00	\$19,200																	\$19,200			\$19,200
Dedham Middle School	6.6	529582	Exterior Door, Fully-Glazed Aluminum-Framed Swinging, Replace		30	12	18	24	EA	\$2,106.57	\$50,558																\$50,558			\$50,558	
Dedham Middle School	6.6	529583	Exterior Door, Steel Insulated, Replace		25	10	* 15	16	EA	\$1,577.53	\$25,240															\$25,240				\$25,240	
Dedham Middle School	7.1	529005	Boiler - Boiler 1, Gas, 2,702 MBH, Replace		25	9	16	1	EA	\$120,905.15	\$120,905															\$120,905				\$120,905	
Dedham Middle School	7.1	529006	Boiler - Boiler 2, Gas, 2,334 MBH, Replace		25	9	16	1	EA	\$54,195.22	\$54,195															\$54,195				\$54,195	
Dedham Middle School	7.1	529057	Expansion Tank, 101 to 175 GAL, Replace		25	8	17	1	EA	\$3,998.56	\$3,999																\$3,999			\$3,999	
Dedham Middle School	7.1	529054	Expansion Tank, 35 GAL, Replace		25	8	17	1	EA	\$2,483.48	\$2,483																\$2,483			\$2,483	
Dedham Middle School	7.1	527110	Ductless Split System - DCU-8, Single Zone, 1.5 Ton, Replace		15	8	7	1	EA	\$4,473.11	\$4,473							\$4,473												\$4,473	
Dedham Middle School	7.1	527952	Ductless Split System - DCU-1, Single Zone, 1 Ton, Replace		15	8	7	1	EA	\$3,221.22	\$3,221							\$3,221												\$3,221	
Dedham Middle School	7.1	527096	Ductless Split System - DCU-9, Single Zone, 1 Ton, Replace		15	8	7	1	EA	\$3,221.22	\$3,221							\$3,221												\$3,221	
Dedham Middle School	7.1	528410	Ductless Split System - DCU-6, Single Zone, 1 Ton, Replace		15	8	7	1	EA	\$3,221.22	\$3,221							\$3,221												\$3,221	
Dedham Middle School	7.1	528104	Ductless Split System - DCU-10, Single Zone, 2 Ton, Replace		15	8	7	1	EA	\$4,473.11	\$4,473							\$4,473												\$4,473	
Dedham Middle School	7.1	527960	Ductless Split System - DCU-7, Single Zone, 1.5 Ton, Replace		15	8	7	1	EA	\$4,473.11	\$4,473							\$4,473												\$4,473	
Dedham Middle School	7.1	528087	Condensing Unit, Split System, 7.5 Ton, Replace		15	8	7	1	EA	\$11,591.12	\$11,591							\$11,591												\$11,591	
Dedham Middle School	7.1	528100	Condensing Unit, Split System, 3.5 Ton, Replace		15	8	7	1	EA	\$4,129.27	\$4,129							\$4,129												\$4,129	
Dedham Middle School	7.1	528018	Condensing Unit, Split System, 3.5 Ton, Replace		15	8	7	1	EA	\$4,129.27	\$4,129							\$4,129												\$4,129	
Dedham Middle School	7.1	527097	Ductless Split System - DCU-5, Single Zone, 1 Ton, Replace		15	8	7	1	EA	\$3,221.22	\$3,221							\$3,221												\$3,221	
Dedham Middle School	7.1	528105	Ductless Split System - DCU-4, Single Zone, 3 Ton, Replace		15	8	7	1	EA	\$6,577.13	\$6,577							\$6,577												\$6,577	
Dedham Middle School	7.1	527093	Condensing Unit/Heat Pump, Split System, 3.5 Ton, Replace		15	8	7	1	EA	\$4,129.27	\$4,129							\$4,129												\$4,129	
Dedham Middle School	7.1	527951	Ductless Split System - DCU-2, Single Zone, 1 Ton, Replace		15	8	7	1	EA	\$3,221.22	\$3,221							\$3,221												\$3,221	
Dedham Middle School	7.1	527089	Condensing Unit, Split System, Air-Cooled, 3.5 Ton, Replace		15	8	7	1	EA	\$4,129.27	\$4,129							\$4,129												\$4,129	
Dedham Middle School	7.1	527127	Condensing Unit, Split System, Walk-In Cooler/Freezer, 2.5 Ton, Replace		15	8	7	1	EA	\$3,366.36	\$3,366							\$3,366												\$3,366	
Dedham Middle School	7.1	527959	Ductless Split System - DCU-3, Single Zone, 1.5 Ton, Replace		15	8	7	1	EA	\$4,473.11	\$4,473							\$4,473												\$4,473	
Dedham Middle School	7.1	528408	Ductless Split System - DCU-11, Single Zone, 3 Ton, Replace		15	8	7	1	EA	\$6,577.13	\$6,577							\$6,577												\$6,577	
Dedham Middle School	7.1	529606	Boiler Exhaust Duct, Sheet Metal, Repair		30	30	0	75	SF	\$15.00	\$1,125	\$1,125																		\$1,125	
Dedham Middle School	7.1	527146	Energy Recovery Unit- ERV-2, Exterior, 5000 CFM, Replace		15	8	7	1	EA	\$11,358.00	\$11,358							\$11,358												\$11,358	
Dedham Middle School	7.1	527147	Energy Recovery Unit- ERV-1, Exterior, 5000 CFM, Replace		15	8	7	1	EA	\$11,358.00	\$11,358							\$11,358												\$11,358	
Dedham Middle School	7.1	529608	Variable Air Volume (VAV) Unit, 100 to 400 CFM, Replace		15	5	10	7	EA	\$4,141.92	\$28,993									\$28,993										\$28,993	

Location Name	EMG	Renamed ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	Subtotal	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Deficiency
	Item																														Number
Dedham Middle School		7.1	529610	Variable Air Volume (VAV) Unit, 801 to 1,300 CFM, Replace	15	5	10	4	EA	\$6,038.83	\$24,155										\$24,155										\$24,155
Dedham Middle School		7.1	529609	Variable Air Volume (VAV) Unit, 401 to 800 CFM, Replace	15	5	10	5	EA	\$4,983.58	\$24,918										\$24,918										\$24,918
Dedham Middle School		7.1	529616	Fan Coil Unit, Hydronic, 400 to 500 CFM, Replace	15	5	10	25	EA	\$2,198.58	\$54,964										\$54,964										\$54,964
Dedham Middle School		7.1	529614	Unit Ventilator, 1000 to 1200 CFM, Replace	15	5	10	58	EA	\$8,444.15	\$489,761										\$489,761										\$489,761
Dedham Middle School		7.1	527142	Make-Up Air Unit - HRV-3, 1550 CFM, Replace	20	8	12	1	EA	\$32,062.66	\$32,063												\$32,063								\$32,063
Dedham Middle School		7.1	527144	Make-Up Air Unit - HRV-4, 10,800 CFM, Replace	20	8	12	1	EA	\$44,658.41	\$44,658												\$44,658								\$44,658
Dedham Middle School		7.1	528114	Make-Up Air Unit - HRV-1, 2100 CFM, Replace	20	8	12	1	EA	\$32,062.66	\$32,063												\$32,063								\$32,063
Dedham Middle School		7.1	527138	Make-Up Air Unit - HRV-8, 3880 CFM, Replace	20	8	12	1	EA	\$32,062.66	\$32,063												\$32,063								\$32,063
Dedham Middle School		7.1	527145	Make-Up Air Unit - HRV-5, 1550 CFM, Replace	20	8	12	1	EA	\$32,062.66	\$32,063												\$32,063								\$32,063
Dedham Middle School		7.1	527148	Make-Up Air Unit - HRV-6, 10,000 CFM, Replace	20	8	12	1	EA	\$44,658.41	\$44,658												\$44,658								\$44,658
Dedham Middle School		7.1	527136	Make-Up Air Unit - HRV-7, 8040 CFM, Replace	20	8	12	1	EA	\$44,658.41	\$44,658												\$44,658								\$44,658
Dedham Middle School		7.1	527124	Make-Up Air Unit - HRV-2, 3600 CFM, Replace	20	8	12	1	EA	\$32,062.66	\$32,063												\$32,063								\$32,063
Dedham Middle School		7.1	528110	Make-Up Air Unit - HRV-9, 2000 CFM, Replace	20	8	12	1	EA	\$32,062.66	\$32,063												\$32,063								\$32,063
Dedham Middle School		7.1	529277	Air Handler, Interior, 2,500 CFM, Replace	20	5	15	1	EA	\$9,413.96	\$9,414															\$9,414					\$9,414
Dedham Middle School		7.1	527954	Exhaust Fan - EF-3, Centrifugal, 2,550 CFM, Replace	15	5	10	1	EA	\$3,072.78	\$3,073										\$3,073										\$3,073
Dedham Middle School		7.1	527106	Exhaust Fan - EF-10, Centrifugal, 2,400 CFM, Replace	15	5	10	1	EA	\$3,072.78	\$3,073										\$3,073										\$3,073
Dedham Middle School		7.1	527961	Exhaust Fan - EF-14, Centrifugal, 300 CFM, Replace	15	5	10	1	EA	\$2,021.87	\$2,022										\$2,022										\$2,022
Dedham Middle School		7.1	527956	Exhaust Fan - EF-5, Centrifugal, 2,500 CFM, Replace	15	5	10	1	EA	\$3,072.78	\$3,073										\$3,073										\$3,073
Dedham Middle School		7.1	527121	Exhaust Fan - EF-33, Centrifugal, 500 CFM, Replace	15	5	10	1	EA	\$2,021.87	\$2,022										\$2,022										\$2,022
Dedham Middle School		7.1	527125	Exhaust Fan - EF-31, Centrifugal, 800 CFM, Replace	15	5	10	1	EA	\$2,021.87	\$2,022										\$2,022										\$2,022
Dedham Middle School		7.1	527134	Exhaust Fan - EF-32, Centrifugal, 755 CFM, Replace	15	5	10	1	EA	\$2,021.87	\$2,022										\$2,022										\$2,022
Dedham Middle School		7.1	527955	Exhaust Fan - EF-17, Centrifugal, 300 CFM, Replace	15	5	10	1	EA	\$2,021.87	\$2,022										\$2,022										\$2,022
Dedham Middle School		7.1	527135	Exhaust Fan - EF-30, Centrifugal, 3,375 CFM, Replace	15	5	10	1	EA	\$4,322.55	\$4,323										\$4,323										\$4,323
Dedham Middle School		7.1	528926	Exhaust Fan - EF-39, Centrifugal, 500 CFM, Replace	15	5	10	1	EA	\$2,021.87	\$2,022										\$2,022										\$2,022
Dedham Middle School		7.1	527108	Exhaust Fan - EF-26, Centrifugal, 500 CFM, Replace	15	5	10	1	EA	\$2,021.87	\$2,022										\$2,022										\$2,022
Dedham Middle School		7.1	527966	Exhaust Fan - EF-34, Centrifugal, 220 CFM, Replace	15	5	10	1	EA	\$889.90	\$890										\$890										\$890
Dedham Middle School		7.1	527967	Exhaust Fan - EF-1, Centrifugal, 2,625 CFM, Replace	15	5	10	1	EA	\$3,072.78	\$3,073										\$3,073										\$3,073
Dedham Middle School		7.1	527962	Exhaust Fan - EF-19, Centrifugal, 1,225 CFM, Replace	15	5	10	1	EA	\$2,664.18	\$2,664										\$2,664										\$2,664
Dedham Middle School		7.1	528099	Exhaust Fan - EF-24, Centrifugal, 700 CFM, Replace	15	5	10	1	EA	\$2,021.87	\$2,022										\$2,022										\$2,022
Dedham Middle School		7.1	527103	Exhaust Fan - EF-35, Centrifugal, 635 CFM, Replace	15	5	10	1	EA	\$2,021.87	\$2,022										\$2,022										\$2,022
Dedham Middle School		7.1	528106	Exhaust Fan - EF-29, Centrifugal, 355 CFM, Replace	15	5	10	1	EA	\$2,021.87	\$2,																				

Location Name	EMG Renamed Item Number	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	Subtotal	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Deficiency Repair Estimate
Dedham Middle School	7.1	529618	Unit Heater, Hydronic, 13 to 36 MBH, Replace	20	8	12	18	EA	\$1,516.80	\$27,302													\$27,302							\$27,302	
Dedham Middle School	7.1	528085	Package Unit - RTU-4, 15 Ton, Replace	15	8	7	1	EA	\$26,845.87	\$26,846								\$26,846												\$26,846	
Dedham Middle School	7.1	528094	Package Unit - RTU-3, 40 Ton, Replace	15	8	7	1	EA	\$83,488.40	\$83,488								\$83,488												\$83,488	
Dedham Middle School	7.1	528108	Package Unit - RTU-2, 12.5 Ton, Replace	15	8	7	1	EA	\$22,713.37	\$22,713								\$22,713												\$22,713	
Dedham Middle School	7.1	527141	Package Unit - RTU-1, 12.5 Ton, Replace	15	8	7	1	EA	\$22,713.37	\$22,713								\$22,713												\$22,713	
Dedham Middle School	7.1	529272	Building Automation System (HVAC Controls), Upgrade	20	8	12	169681	SF	\$5.36	\$909,914													\$909,914							\$909,914	
Dedham Middle School	7.1	529063	Variable Frequency Drive (VFD), 10 HP Motor, Heating Hot Water Circulation Pumps, Replace	20	10	10	2	EA	\$6,304.96	\$12,610											\$12,610									\$12,610	
Dedham Middle School	7.2	529652	Toilet, Tankless (Water Closet), Replace	20	8	12	56	EA	\$842.97	\$47,206													\$47,206							\$47,206	
Dedham Middle School	7.2	529656	Urinal, Vitreous China, Replace	20	8	12	12	EA	\$1,193.44	\$14,321													\$14,321							\$14,321	
Dedham Middle School	7.2	529653	Sink, Vitreous China, Replace	20	8	12	54	EA	\$861.51	\$46,521													\$46,521							\$46,521	
Dedham Middle School	7.2	529660	Shower Valve With Head, Exposed, Replace	20	8	12	8	EA	\$901.00	\$7,208													\$7,208							\$7,208	
Dedham Middle School	7.2	529384	Emergency Eye Wash & Shower Station, Replace	15	10	5	8	EA	\$2,114.70	\$16,918						\$16,918														\$16,918	
Dedham Middle School	7.2	529055	Backflow Preventer, 1", Boiler Feed, Replace	15	12	3	1	EA	\$1,276.01	\$1,276				\$1,276														\$1,276		\$2,552	
Dedham Middle School	7.2	529388	Backflow Preventer, 2", Replace	15	10	5	1	EA	\$2,603.17	\$2,603						\$2,603														\$2,603	
Dedham Middle School	7.2	528414	Backflow Preventer, 2", Gray Water System, Replace	15	10	5	1	EA	\$2,603.17	\$2,603						\$2,603														\$2,603	
Dedham Middle School	7.2	529382	Backflow Preventer, 1.5", Replace	15	10	5	1	EA	\$2,603.17	\$2,603						\$2,603														\$2,603	
Dedham Middle School	7.2	529494	Circulator Pump, Gray Water System, 1-3 HP, Replace	15	10	5	1	EA	\$4,287.43	\$4,287						\$4,287														\$4,287	
Dedham Middle School	7.2	529051	Circulator Pump, 0.75 HP, Replace	15	10	5	1	EA	\$4,017.16	\$4,017						\$4,017														\$4,017	
Dedham Middle School	7.2	529493	Circulator Pump, Gray Water System, 1-3 HP, Replace	15	10	5	1	EA	\$4,287.43	\$4,287						\$4,287														\$4,287	
Dedham Middle School	7.2	528413	Water Supply System, Grey Water for Restrooms and Irrigation, Complete System Excluding Main Plumbing, Replace	20	10	10	1	LS	\$91,119.72	\$91,120											\$91,120									\$91,120	
Dedham Middle School	7.2	529040	Domestic Boiler, Gas, 750 MBH, Replace	22	12	10	1	EA	\$34,559.38	\$34,559											\$34,559									\$34,559	
Dedham Middle School	7.2	529381	Water Heater, Electric, Commercial, 40 GAL, Replace	15	5	10	1	EA	\$6,963.24	\$6,963											\$6,963									\$6,963	
Dedham Middle School	7.2	528415	Booster Pump - Pump 1, Gray Water System, 7.5 HP, Replace	20	10	10	1	EA	\$11,641.34	\$11,641											\$11,641									\$11,641	
Dedham Middle School	7.2	528416	Booster Pump - Pump 2, Gray Water System, 7.5 HP, Replace	20	10	10	1	EA	\$11,641.34	\$11,641											\$11,641									\$11,641	
Dedham Middle School	7.2	529386	Water Heater, Electric, Commercial, 40 GAL, Replace	15	3	12	1	EA	\$6,963.24	\$6,963													\$6,963							\$6,963	
Dedham Middle School	7.2	529016	Water Storage Tank, 115 GAL, Replace	20	0	* 20	1	EA	\$2,140.56	\$2,141																		\$2,141		\$2,141	
Dedham Middle School	7.2	529015	Water Storage Tank, 115 GAL, Replace	20	0	* 20	1	EA	\$2,140.56	\$2,141																		\$2,141		\$2,141	
Dedham Middle School	7.2	529269	Grease Trap/Interceptor, Underground, Replace	10	7	3	2	EA	\$10,850.00	\$21,700				\$21,700										\$21,700						\$43,400	
Dedham Middle School	7.4	528298	Solar Panel, 24 SF, Replace	15	10	5	96	EA	\$1,634.07	\$156,871						\$156,871														\$156,871	
Dedham Middle School	7.4	528989	Transfer Switch - ATS-1, Automatic (ATS), 600 V, 100 Amp, Replace	18	8	10	1	EA	\$7,671.31	\$7,671											\$7,671									\$7,671	
Dedham Middle School	7.4	528990	Transfer Switch - ATS-2, Automatic (ATS), 600 V, 400 Amp, Replace	18	8	10	1	EA	\$12,045.75	\$12,046											\$12,046									\$12,046	
Dedham Middle School	7.4	529121	Light Dimming Panel, Stage Lighting, Replace	15	10	5	1	EA	\$4,261.42	\$4,261						\$4,261														\$4,261	
Dedham Middle School	7.4	528996	Lighting System, Interior, School, Upgrade	25	9	16	169681	SF	\$15.36	\$2,606,877																\$2,606,877				\$2,606,877	

Location Name	EMG Renamed Item ID Number	Cost Description	Lifespan (EUL)	EA	RUL	Quantity	Unit	Unit Cost	Subtotal	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Deficiency Repair Estimate
Dedham Middle School	8.1	529123	Auditorium Chair, Fixed, Replace	20	5	15	480	EA	\$400.00	\$192,000														\$192,000					\$192,000	
Dedham Middle School	8.2	529256	Dishwasher, Commercial, Replace	10	7	3	1	EA	\$19,661.82	\$19,662			\$19,662									\$19,662							\$39,324	
Dedham Middle School	8.2	529264	Convection Oven, Single, Replace	10	6	4	1	EA	\$5,077.62	\$5,078				\$5,078									\$5,078						\$10,155	
Dedham Middle School	8.2	529262	Steamer, Freestanding, Replace	10	6	4	1	EA	\$9,516.00	\$9,516				\$9,516									\$9,516						\$19,032	
Dedham Middle School	8.2	529251	Steam Table, Sealed Well, 3-Well, Replace	15	10	5	1	EA	\$4,191.00	\$4,191					\$4,191														\$4,191	
Dedham Middle School	8.2	529249	Refrigerator, Milk-Cooler, Replace	15	10	5	1	EA	\$2,515.00	\$2,515					\$2,515														\$2,515	
Dedham Middle School	8.2	529255	Refrigerator - Refrigerator 1, 4 Small Door Reach-In, Replace	15	10	5	1	EA	\$4,256.00	\$4,256					\$4,256														\$4,256	
Dedham Middle School	8.2	529252	Steam Table, Sealed Well, 3-Well, Replace	15	10	5	1	EA	\$4,191.00	\$4,191					\$4,191														\$4,191	
Dedham Middle School	8.2	529248	Refrigerator, Self-Serve Display/Merchandiser, Replace	15	10	5	1	EA	\$6,708.00	\$6,708					\$6,708														\$6,708	
Dedham Middle School	8.2	529247	Refrigerator, Milk-Cooler, Replace	15	10	5	1	EA	\$2,515.00	\$2,515					\$2,515														\$2,515	
Dedham Middle School	8.2	529254	Refrigerator - Refrigerator 3, 4 Small Door Reach-In, Replace	15	10	5	1	EA	\$4,256.00	\$4,256					\$4,256														\$4,256	
Dedham Middle School	8.2	529261	Convection Oven, Double, Replace	10	4	6	1	EA	\$8,643.00	\$8,643						\$8,643									\$8,643				\$17,286	
Dedham Middle School	8.2	529260	Kitchen Exhaust Hood, Commercial, No Damper, Replace	15	8	7	1	EA	\$7,571.72	\$7,572							\$7,572												\$7,572	
Dedham Middle School	8.2	529253	Food Warmer, Commercial, Replace	15	8	7	1	EA	\$1,551.91	\$1,552							\$1,552												\$1,552	
Dedham Middle School	8.2	529259	Food Warmer, Commercial, Replace	15	8	7	1	EA	\$1,551.91	\$1,552							\$1,552												\$1,552	
Dedham Middle School	8.2	529257	Exhaust Hood, Dishwasher Station, Replace	15	8	7	1	EA	\$7,571.72	\$7,572							\$7,572												\$7,572	
Dedham Middle School	8.2	529258	Freezer, 1-Door, Reach-In, Replace	15	7	8	1	EA	\$2,838.00	\$2,838								\$2,838											\$2,838	
Dedham Middle School	8.2	529263	Steam Kettle, 40 GAL, Replace	20	10	10	1	EA	\$26,840.00	\$26,840									\$26,840										\$26,840	
Dedham Middle School	8.2	529268	Walk-In Freezer - Freezer 2, , Replace	20	10	10	1	EA	\$22,317.14	\$22,317									\$22,317										\$22,317	
Dedham Middle School	8.2	529246	Refrigerator, 3-Door Reach-In, Replace	15	2	13	1	EA	\$5,804.00	\$5,804												\$5,804							\$5,804	
Totals, Unescalated										\$35,777	\$16,320	\$32,827	\$780,275	\$123,438	\$230,572	\$157,897	\$893,595	\$45,619	\$0	\$2,234,714	\$8,460	\$1,576,965	\$1,135,528	\$596,382	\$1,312,070	\$2,790,620	\$380,799	\$426,569	\$309,933	\$13,088,361
Totals, Escalated (3.0% inflation, compounded annually)										\$35,777	\$16,810	\$34,826	\$852,628	\$138,931	\$267,297	\$188,538	\$1,099,009	\$57,789	\$0	\$3,003,269	\$11,711	\$2,248,375	\$1,667,560	\$902,081	\$2,044,162	\$4,478,127	\$629,403	\$726,205	\$543,469	\$18,945,966

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FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

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:	70 Whiting Avenue, Dedham, Norfolk County, Massachusetts 02026
Year Constructed/Renovated:	2006
Current Occupants:	Dedham Middle School
Percent Utilization:	100%
Management Point of Contact:	Town of Dedham-Dedham Public Schools, Denise Moroney, Director of Facilities & Maintenance 781.752.7812 phone dmoroney@dedham.k12.ma.us email
Property Type:	Middle School
Site Area:	9.00 acres
Building Area:	169,681 SF
Number of Buildings:	One
Number of Stories:	Three
Parking Type and Number of Spaces:	119 spaces in open lots
Building Construction:	Steel frame with concrete-topped metal decks.
Roof Construction:	Gabled roofs with asphalt shingles. Flat roofs with single-ply membrane
Exterior Finishes:	Brick Veneer
Heating, Ventilation & Air Conditioning:	Central system with boilers, feeding an air handler, unit ventilators, unit heaters, hydronic baseboard radiators and cabinets Individual package units Supplemental components: ductless split-systems and make-up air unit.
Fire and Life/Safety:	Fire sprinklers, hydrants, smoke detectors, alarms, strobes, extinguishers, pull stations, alarm panel, exit signs, and emergency lighting
Dates of Visit:	October 19 & 20, 2016
On-Site Point of Contact (POC):	Donald Lazdowsky
Assessment and Report Prepared by:	Josh Hogan, Project Manager
Reviewed by:	Dan McCrary, Report Reviewer for: Bill Champion, Program Manager bchampion@emgcorp.com 800.733.0660 x6234

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SYSTEMIC CONDITION SUMMARY			
Site	Good	HVAC	Good
Structure	Good	Plumbing	Good
Roof	Fair	Electrical	Good
Vertical Envelope	Fair	Elevators	Good
Interiors	Good	Fire	Good

The following bullet points highlight the most significant short term and modernization recommendations:

- Sealing and striping of the asphalt paved parking lots
- Installation of an enclosure at the loading dock dumpster
- Replacement of the exterior building sealants
- Sealing and insulating the soffit adjacent to the administration offices and media center

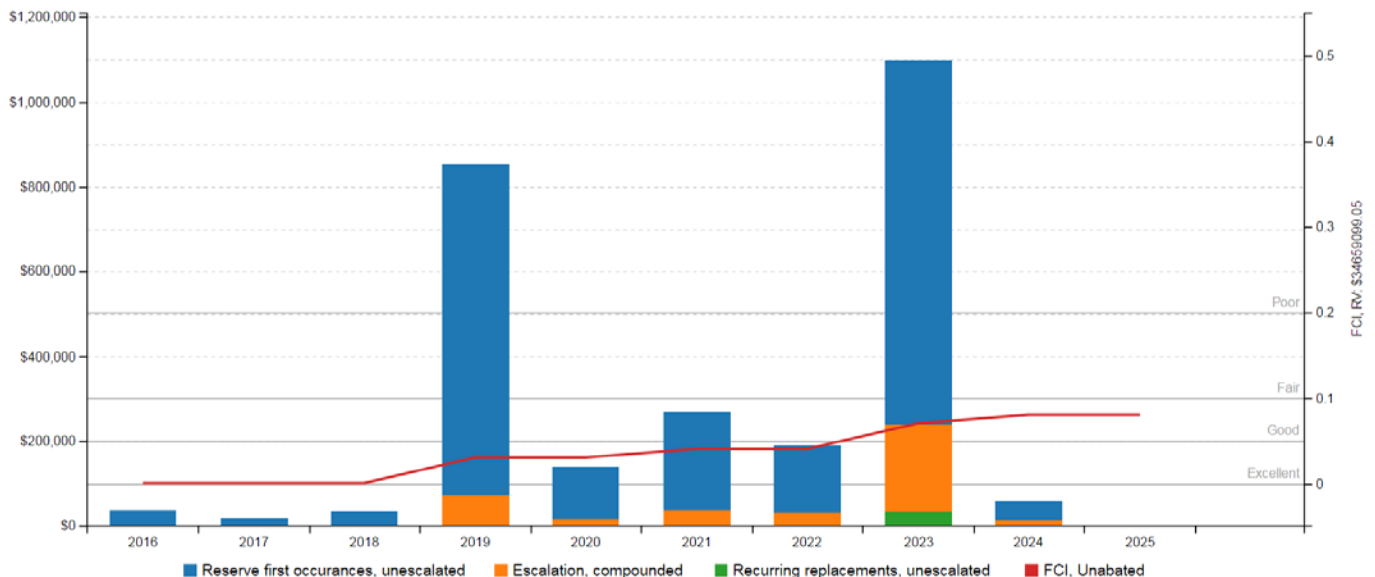
Generally, the property appears to have been constructed within industry standards in force at the time of construction. The property appears to have been well maintained since it was first occupied and is in good overall condition.

The property has had no major capital improvements. The property is less than ten years old and has not required any major capital improvements.

1.2 FACILITY CONDITION INDEX (FCI)

FCI Analysis: Dedham Middle School

Replacement Value: \$ 34,659,099; Inflation rate: 3.0%



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.

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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 5%
Fair	Subjected to wear and soiling but is still in a serviceable and functioning condition.	> than 5% 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) $FCI = (IR)/(CRV)$	0.001%	Fair
10-Year Facility Condition Index (FCI) $FCI = (RR)/(CRV)$	0.164%	Good
Current Replacement Value (CRV)	169,681 SF * 204.26 / SF = \$34,659,099	

Year 0 (Current Year) - Immediate Repairs (IR)	\$34,597
Years 1-10 – Replacement Reserves (RR)	\$5,694,873
Total Capital Needs	\$5,729,470

The major issues contributing to the Immediate Repair Costs and the Current Year FCI ratio are summarized below:

- Repair to active roof leaks and deficient roofing
- Repair to areas of damaged concrete sidewalk
- Repair to areas of damaged concrete stairs
- Repair to areas of damaged concrete loading dock
- Repair to areas of depressed/settled asphalt pavement
- Repair of the active boiler exhaust pipe leaks
- ADA parking upgrades

Further detail on the specific costs that make up the Immediate Repair Costs can be found in the cost tables in the appendices.

1.3 SPECIAL ISSUES AND FOLLOW-UP RECOMMENDATIONS

As part of the FCA, a limited assessment of accessible areas of the building(s) was performed to determine the presence of mold, conditions conducive to mold growth, and/or evidence of moisture. Property personnel were interviewed concerning any known or suspected mold, elevated relative humidity, water intrusion, or mildew-like odors. Sampling is not a part of this assessment.

There are no visual indications of the presence of mold growth, conditions conducive to mold growth, or evidence of moisture in representative readily accessible areas of the property.



1.4 OPINIONS OF PROBABLE COST

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 PCR.

1.4.1 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.

1.4.2 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.

1.4.3 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.

2 PURPOSE AND SCOPE

2.1 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.

FORMAT OF THE BODY OF THE REPORT:

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.

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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.

2.2 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 mold, conditions conducive to mold growth, and/or evidence of moisture. EMG will also interview Project personnel regarding the presence of any known or suspected mold, 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.

The expanded scope of this assessment includes the following:

- Verify equipment and building components related to the property manager's preventative maintenance database.



FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
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2.3 PERSONNEL INTERVIEWED

The management and maintenance staff were interviewed for specific information relating to the physical property, available maintenance procedures, historical performance of key building systems and components, available drawings and other documentation. The following personnel from the facility and government agencies were interviewed in the process of conducting the FCA:

NAME AND TITLE	ORGANIZATION	PHONE NUMBER
Denise Moroney Director of Facilities & Maintenance	Town of Dedham-Dedham Public Schools	781.752.7812
Donald Lazdowsky Facilities & Maintenance	Town of Dedham-Dedham Public Schools	781.310.1141

The FCA was performed with the assistance of Donald Lazdowski, Facilities and Maintenance, Town of Dedham, the onsite Point of Contact (POC), who was cooperative and provided information that appeared to be accurate based upon subsequent site observations. The onsite contact is completely knowledgeable about the subject property and answered most questions posed during the interview process. The POC's management involvement at the property has been for the past ten years.

2.4 DOCUMENTATION REVIEWED

Prior to the FCA, relevant documentation was requested that could aid in the knowledge of the subject property's physical improvements, extent and type of use, and/or assist in identifying material discrepancies between reported information and observed conditions. The review of submitted documents does not include comment on the accuracy of such documents or their preparation, methodology, or protocol. The Documentation Request Form is provided in Appendix E.

Although Appendix E provides a summary of the documents requested or obtained, the following list provides more specific details about some of the documents that were reviewed or obtained during the site visit.

- Original construction documents by Dore & Whittier Architects, dated 01/02/2004

2.5 PRE-SURVEY QUESTIONNAIRE

A Pre-Survey Questionnaire was sent to the POC prior to the site visit. The questionnaire is included in Appendix E. Information obtained from the questionnaire has been used in preparation of this report.

2.6 WEATHER CONDITIONS

October 19, 2016: Clear, with temperatures in the 70s (°F) and light winds

October 20, 2016: Clear, with temperatures in the 60s (°F) and light winds

3 ACCESSIBILITY & PROPERTY RESEARCH

3.1 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:

Parking

- Adequate number of designated parking stalls and signage for vans are not provided.

A full ADA Compliance Survey may reveal additional 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. The cost to address the achievable items noted above is included in the cost tables.

4 EXISTING BUILDING ASSESSMENT

4.1 UNIT OR SPACE TYPES

All 169,681 square feet of the building are occupied by Dedham Public Schools. The spaces are a combination of classrooms, administrative offices, a gymnasium, an auditorium, cafeteria and supporting restrooms, commercial kitchen, mechanical and other utility spaces.

4.2 INACCESSIBLE AREAS OR KEY SPACES NOT OBSERVED

Most of the interior spaces were observed in order to gain a clear understanding of the property's overall condition. A representative sample of classrooms was observed, as some of the classrooms were occupied at the time of the assessment. Other areas accessed included the site within the property boundaries, exterior of the property and portions of the roof. Access to some sections of the steep-sloped roof areas was not possible at the time of the assessment.

A "down unit" or area is a term used to describe a unit or space that cannot be occupied due to poor conditions such as fire damage, water damage, missing equipment, damaged floor, wall or ceiling surfaces, or other significant deficiencies. There are no down units or areas.

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5 SITE IMPROVEMENTS

5.1 UTILITIES

The following table identifies the utility suppliers and the condition and adequacy of the services.

SITE UTILITIES		
UTILITY	SUPPLIER	CONDITION & ADEQUACY
Sanitary sewer	Town of Dedham Department of Public Works	Good
Storm sewer	Town of Dedham Department of Public Works	Good
Domestic water	Dedham-Westwood Water District	Good
Electric service	Eversource Energy	Good
Natural gas service	Eversource Energy	Good

Actions/Comments:

- According to the POC, the utilities provided are adequate for the property. There are no unique, onsite utility systems such as emergency electrical generators, septic systems, water or waste water treatment plants, or propane gas tanks.

5.2 PARKING, PAVING, AND SIDEWALKS

ITEM	DESCRIPTION
Main Ingress and Egress	Whiting Avenue
Access from	South
Additional Entrance	East Street
Additional Access from	West
Additional Entrance	Mout Vernon Street
Additional Access from	East

PAVING AND FLATWORK			
ITEM	MATERIAL	LAST WORK DONE	CONDITION
Entrance Driveway Apron	Asphalt	2006	Fair
Parking Lot	Asphalt	2006	Fair
Drive Aisles	Asphalt	2006	Fair
Service Aisles	Asphalt	2006	Fair
Sidewalks	Concrete	2006	Fair
Curbs	Stone and Asphalt	2006	Fair
Site Stairs	Cast-in-place concrete	2006	Good
Pedestrian Ramps	None	N/A	N/A

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PARKING COUNT				
OPEN LOT	CARPORT	PRIVATE GARAGE	SUBTERRANEAN GARAGE	FREESTANDING PARKING STRUCTURE
119	0	0	0	0
Total Number of ADA Compliant Spaces			7	
Number of ADA Compliant Spaces for Vans			0	
Total Parking Spaces			119	
Parking Ratio (Spaces/1000 Square Feet)			0.71	
Method of Obtaining Parking Count			Physical count	

EXTERIOR STAIRS			
LOCATION	MATERIAL	HANDRAILS	CONDITION
Southwest site limits/sidewalk	Concrete stairs	Metal	Good

Anticipated Lifecycle Replacements:

- Asphalt seal coating
- Asphalt pavement and asphalt curbs (mill & overlay)

Actions/Comments:

- Isolated areas of localized depression were observed adjacent to a catch basin near the northeast corner of the main (east) parking lot. The property manager reported that storm water drainage is reported to be inadequate at this location. The depressed asphalt must be cut and patched in order to maintain adequate drainage.
- The concrete sidewalks have isolated areas of settlement and cracking. Some areas of damage are a potential tripping hazard to pedestrians. The damaged areas of concrete sidewalks require immediate repair.

5.3 DRAINAGE SYSTEMS AND EROSION CONTROL

DRAINAGE SYSTEM AND EROSION CONTROL		
SYSTEM	EXISTS AT SITE	CONDITION
Surface Flow	<input checked="" type="checkbox"/>	Good
Inlets	<input checked="" type="checkbox"/>	Good
Swales	<input type="checkbox"/>	--
Detention pond	<input type="checkbox"/>	--
Lagoons	<input type="checkbox"/>	--
Ponds	<input type="checkbox"/>	--
Underground Piping	<input checked="" type="checkbox"/>	Good
Pits	<input type="checkbox"/>	--

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DRAINAGE SYSTEM AND EROSION CONTROL		
SYSTEM	EXISTS AT SITE	CONDITION
Municipal System	<input checked="" type="checkbox"/>	Good
Dry Well	<input type="checkbox"/>	--

Anticipated Lifecycle Replacements:

- No components of significance

Actions/Comments:

- There is no 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.

5.4 TOPOGRAPHY AND LANDSCAPING

ITEM	DESCRIPTION						
Site Topography	The site is generally flat						
Landscaping	Trees	Grass	Flower Beds	Planters	Drought Tolerant Plants	Decorative Stone	None
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landscaping Condition	Good						
Irrigation	Automatic Underground		Drip		Hand Watering		None
	<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Irrigation Condition	Fair						

RETAINING WALLS		
TYPE	LOCATION	CONDITION
Concrete	Southwest site limits/site stairs	Good
Keystone	Sports field	Good

Anticipated Lifecycle Replacements:

- Irrigation system components
- Irrigation pump

Actions/Comments:

- The topography and adjacent uses do not appear to present conditions detrimental to the property. There are no significant areas of erosion.
- The irrigation system is fed by the gray water plumbing supply system. The property manager reported that the irrigation system has been not utilized within the past two years due to low-levels of precipitation and a water ban during the summer months.

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5.5 GENERAL SITE IMPROVEMENTS

PROPERTY SIGNAGE	
Property Signage	Building mounted
Street Address Displayed?	No

SITE AND BUILDING LIGHTING					
Site Lighting	None	Pole Mounted	Bollard Lights	Ground Mounted	Parking Lot Pole Type
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Fair				
Building Lighting	None		Wall Mounted		Recessed Soffit
	<input type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
	Fair				

SITE FENCING		
TYPE	LOCATION	CONDITION
Chain link with metal posts	Sports field	Good
Stained wood board and posts	North property limits	Fair
Chain link with metal posts	Northeast property limits	Fair

REFUSE DISPOSAL				
Refuse Disposal	Common area dumpsters			
Dumpster Locations	Mounting	Enclosure	Contracted?	Condition
Loading dock	Asphalt paving	None	Yes	Good
North parking lot	Asphalt paving	Wood board fence (partial)	Yes	Good
Northwest site limits	Asphalt paving	Wood board fence	Yes	Good

OTHER SITE AMENITIES			
	DESCRIPTION	LOCATION	CONDITION
Playground Equipment	None	N/A	--
Tennis Courts	None	N/A	--
Basketball Court	None	N/A	--
Swimming Pool	None	N/A	--

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Anticipated Lifecycle Replacements:

- Exterior building-mounted lighting
- Exterior pole-mounted lighting
- Wooden dumpster enclosures

Actions/Comments:

- The current building-mounted signage does not display the property address. The lack of adequate signage may impede the timely arrival of emergency services personnel and equipment. Additional identification signage must be installed which displays the full property address.
- There is currently no enclosure at the dumpster located at the loading dock. It is strongly recommended that a dumpster enclosure be installed to help contain refuse within the dumpster location, increase security related to dumpster use, and improve the aesthetics of the site.

6 BUILDING ARCHITECTURAL AND STRUCTURAL SYSTEMS

6.1 FOUNDATIONS

BUILDING FOUNDATION		
ITEM	DESCRIPTION	CONDITION
Foundation	Slab on grade with integral footings	Good
Basement and Crawl Space	None	N/A

Anticipated Lifecycle Replacements:

- No components of significance

Actions/Comments:

- The foundation systems are concealed. There are no significant signs of settlement, deflection, or movement. There is no evidence water infiltration at the slab.

6.2 SUPERSTRUCTURE

BUILDING SUPERSTRUCTURE		
ITEM	DESCRIPTION	CONDITION
Framing / Load-Bearing Walls	Steel columns and beams	Good
Ground Floor	Concrete slab	Good
Upper Floor Framing	Steel beams	Good
Upper Floor Decking	Metal decking with concrete topping	Good
Roof Framing	Steel trusses and steel bar joists	Good
Roof Decking	Metal decking	Good

Anticipated Lifecycle Replacements:

- No components of significance

Actions/Comments:

- The superstructure is exposed in some locations, which allows for limited observation. Walls and floors appear to be plumb, level, and stable. There are no significant signs of deflection or movement.

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6.3 ROOFING

PRIMARY ROOF			
Type / Geometry	Low-sloped (flat)	Finish	Single-ply membrane
Maintenance	Outside Contractor	Roof Age	2006
Flashing	Membrane	Warranties	None
Parapet Copings	Parapet with sheet metal coping	Roof Drains	Internal drains
Fascia	Metal Panel	Insulation	Rigid Board
Soffits	Concealed Soffits	Skylights	Yes
Attics	None	Ponding	No
Ventilation Source-1	None	Leaks Observed	No
Ventilation Source-2	None	Roof Condition	Fair

The primary roof is located at the mechanical wells and above the interior building spaces.

SECONDARY ROOF			
Type / Geometry	Gable Roof	Finish	Asphalt shingles
Maintenance	Outside Contractor	Roof Age	2006
Flashing	Sheet metal	Warranties	Product warranty – asphalt shingles
Parapet Copings	None	Roof Drains	Gutters and downspouts
Fascia	Metal Panel	Insulation	Rigid Board
Soffits	Concealed Soffits	Skylights	Yes
Attics	None	Ponding	No
Ventilation Source-1	None	Leaks Observed	No
Ventilation Source-2	None	Roof Condition	Fair

The secondary roof is located at the building perimeter and above the cafeteria and gymnasium spaces.

Anticipated Lifecycle Replacements:

- Asphalt shingles
- Single-ply EPDM roof membrane
- Roof flashings (included as part of overall membrane replacement)
- Parapet wall copings (included as part of overall membrane replacement)
- Skylights

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Actions/Comments:

- The roof finishes were reportedly installed in 2006. The asphalt shingles are covered by a product manufacturer's warranty. A copy of the warranty was requested but was not available. Additional information regarding roof warranties or bonds was not available. The roofs are maintained by an outside contractor.
- 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 the property management's routine maintenance and operations program.
- Roof leaks are reported to have occurred since the building was constructed. The property manager reported that some of these leaks remain active. The leaks are reported to occur throughout the building during periods of heavy precipitation. All active leaks must be repaired. A budgetary cost to repair has been included to perform these repairs.
- The property manager reported that the administration office and media center are drafty due to insufficient insulation and sealing of the soffits at the building perimeter at these locations. Installation of additional soffit and above ceiling insulation, as well as proper sealing of the adjacent exterior soffit areas is required. A budgetary cost to perform these repairs has been included.

6.4 EXTERIOR WALLS

BUILDING EXTERIOR WALLS		
TYPE	LOCATION	CONDITION
Primary Finish	Brick veneer	Good
Secondary Finish	Brick veneer	Good
Accented with	None	--
Soffits	Concealed	Good

Building sealants (caulking) are located between dissimilar materials, at joints, and around window and door openings.

Anticipated Lifecycle Replacements:

- Masonry re-pointing
- Building sealants (caulking)

Actions/Comments:

- No significant issues with the exterior brick masonry were reported or observed. It is highly recommended that a cost allowance for periodic cleaning and repointing of the brick masonry veneer is anticipated as part of the property management's routine maintenance program. A cost for this work has been included in the replacement reserve tables.
- Building sealants are brittle, deteriorated, and missing at the exterior masonry control joints, window and door frame perimeters, and other building finish transitions. Deteriorated sealant must be replaced.

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6.5 EXTERIOR AND INTERIOR STAIRS

BUILDING EXTERIOR AND INTERIOR STAIRS					
TYPE	DESCRIPTION	RISER	HANDRAIL	BALUSTERS	CONDITION
Building Exterior Stairs	Concrete stairs	Closed	Metal	Metal	Good
Building Interior Stairs	Steel framed with pan-filled concrete	Closed	Metal	Metal	Good

Anticipated Lifecycle Replacements:

- No components of significance

Actions/Comments:

- The exterior concrete stairs at the west building entrance have isolated areas of cracking at the base of the handrails. The damaged areas of concrete must be repaired.
- Isolated concrete spalls and cracks were observed at the cafeteria loading dock. The damaged areas of concrete must be repaired to prevent additional damage and deterioration.

6.6 EXTERIOR WINDOWS AND DOORS

BUILDING WINDOWS				
WINDOW FRAMING	GLAZING	LOCATION	WINDOW SCREEN	CONDITION
Vinyl framed, operable	Double glaze	Building Exterior	<input checked="" type="checkbox"/>	Good
Aluminum framed storefront	Double glaze	Building Entrances	<input type="checkbox"/>	Good

BUILDING DOORS		
Main Entrance Doors	Door Type	Condition
	Fully glazed, metal framed	Good
Secondary Entrance Doors	Fully glazed, metal framed	Good
Service Doors	Metal, insulated	Good
Overhead Doors	Aluminium	Good

Anticipated Lifecycle Replacements:

- Windows
- Storefront glazing
- Exterior metal service doors
- Exterior fully glazed doors

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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.
- The property manager reported that there was a previous issue related to window frame separation and resulting window damage shortly after the building was constructed. It was reported that locations of significant frame separation and damage have been addressed by the window system manufacturer, and that any future areas of frame separation or other product-related deficiencies are anticipated to be addressed by the window manufacturer.

6.7 PATIO, TERRACE, AND BALCONY

Not applicable. There are no patios, terraces, or balconies.

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7 BUILDING MECHANICAL AND PLUMBING SYSTEMS

7.1 BUILDING HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)

BUILDING CENTRAL HEATING SYSTEM	
Primary Heating System Type	Hot water boilers
Quantity and Capacity of Major Components	Two boilers at 810 and 2,335 MBH each
Total Heating Capacity	3,145 MBH
Heating Fuel	Natural gas
Location of Major Equipment	Boiler Room
Space Served by System	Entire building
Age Ranges	All units dated 2006
Boiler Condition	Good
Heat Exchanger Condition	None

BUILDING CENTRAL COOLING SYSTEM	
Primary Cooling System Type	None
Quantity and Capacity of Major Components	N/A
Total Cooling Capacity	N/A
Refrigerant	None
Cooling Towers	None
Location of Major Equipment	N/A
Space Served by System	N/A
Age Ranges	N/A
Chiller Condition	N/A
Cooling Tower Condition	N/A

DISTRIBUTION SYSTEM	
HVAC Water Distribution System	Two-pipe
Heating Water Circulation Pump Size & Quantity	Two pumps at 10 HP each
Chilled Water Circulation Pump Size & Quantity	NA
Condenser Water Circulation Pump Size & Quantity	NA

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DISTRIBUTION SYSTEM	
Pump Condition	Fair
Air Distribution System	Variable volume
Quantity and Capacity of Air Handlers	One air handler at 2,500 CFM
Location of Air Handlers	Above ceiling
Large Spaces the Larger Dedicated AHU's Serve	Distance Learning Lab & Media Center
Age of Air Handlers	Unit dated 2006
Air Handler Condition	Good
Terminal Units	Fan coil units, unit ventilators, VAV boxes, unit heaters, fin-tube radiators
Quantity and Capacity of Terminal Units	<p>Approximately 58 unit ventilators ranging from 250 to 500 CFM each</p> <p>Approximately 25 fan coil units ranging from 400 to 500 CFM each</p> <p>Approximately 18 unit heaters ranging from 18-32 MBH each</p> <p>Approximately VAV boxes ranging from 200 to 1,450 CFM each</p> <p>Approximately 48 fin tube radiator sections/convection units (cabinets) ranging from 0.75 to 7.5 MBH each</p>
Location of Terminal Units	Within interior spaces
Spaces Served by Terminal Units	Throughout facility
Terminal Unit Condition	Good

SUPPLEMENTAL COMPONENTS	
Supplemental Component #1	Package units
Location / Space Served by package units	Entire Building
Package units condition	Fair
Supplemental Component #2	Split-system air conditioners (ductless)
Location / Space Served by split-system air conditioners	Computer rooms, IT rooms, individual offices
Split-system air conditioners condition	Fair
Supplemental Component #3	Heating and ventilating units
Location / Space Served by heating and ventilating units	Boiler room, kitchen, locker rooms, gymnasium, cafeteria, lobby, music room
Heating and ventilating units condition	Fair

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SUPPLEMENTAL COMPONENTS	
Supplemental Component #1	Split-system condensing units
Location / Space Served by split system condensing units	Air handling unit and isolated unit ventilators
Split system condensing units condition	Fair

CONTROLS & VENTILATION	
HVAC Control System	BAS, direct digital controls (DDC)
HVAC Control System Condition	Good
Building Ventilation	Roof top exhaust fans
Ventilation System Condition	Fair

Anticipated Lifecycle Replacements:

- Boilers
- Air handling unit
- Circulation pumps and motors
- Variable frequency drives
- VAV boxes
- Fan coil units
- Unit ventilators
- Unit heaters
- Package units
- Split system condensing units
- Ductless split system air conditioners
- Rooftop exhaust fans
- Direct digital HVAC controls

Actions/Comments:

- The HVAC systems are maintained by the in-house maintenance staff. Records of the installation, maintenance, upgrades, and replacement of the HVAC equipment at the property have been maintained since the property was first occupied.
- The property is relatively new and has not required any major HVAC equipment replacements.
- The HVAC equipment appears to be functioning adequately overall. The property management staff was interviewed about the historical and recent performance of the equipment and systems. No chronic problems were reported and an overall sense of satisfaction with the systems was conveyed. However, due to the inevitable failure of parts and components over time, some of the equipment will require replacement.
- The property manager reported an ongoing leak at the boiler-exhaust duct, which has led to moisture infiltration within the boiler room space. Water staining from the leak was observed at the boiler room floor and boiler exhaust ductwork. The leak should be repaired immediately, to prevent additional moisture infiltration within the boiler room, and potential damage to the surrounding building components and finishes. A budgetary cost to perform these repairs has been included.

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7.2 BUILDING PLUMBING AND DOMESTIC HOT WATER

BUILDING PLUMBING SYSTEM		
TYPE	DESCRIPTION	CONDITION
Water Supply Piping	Copper	Good
Waste/Sewer Piping	Cast iron	Good
Vent Piping	Cast iron	Good
Water Meter Location	Boiler Room	

DOMESTIC WATER HEATERS OR BOILERS	
Components	Water Heaters
Fuel	Natural gas & electric
Quantity and Input Capacity	One unit at 750 MBH Two units at 3 kW each (serve science labs)
Storage Capacity	NA
Boiler or Water Heater Condition	Fair
Supplementary Storage Tanks?	Yes
Storage Tank Quantity & Volume	Two units at 115 gallons each
Quantity of Storage Tanks	Two
Storage Tank Condition	Excellent
Domestic Hot Water Circulation Pumps (3 HP and over)	No
Adequacy of Hot Water	Adequate
Adequacy of Water Pressure	Adequate

PLUMBING FIXTURES	
Water Closets	Commercial
Toilet (Water Closet) Flush Rating	1.6 GPF
Common Area Faucet Nominal Flow Rate	0.5 GPM
Condition	Good

Anticipated Lifecycle Replacements:

- Water boiler (and circulation pumps)
- Storage tanks
- Gray water system
- Gray water system booster pumps
- Toilets
- Urinals
- Sinks
- Shower heads and control valves



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- Grease traps
- Emergency eyewash/shower stations

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.
- The building is served by a gray water system, which provides non-potable water for the toilets and urinals throughout the building. Gray water is collected via the roof storm water drainage system. The system consists of an underground gray water holding tank, supply pumps, a filtration system, indoor gray water storage tank, and gray water booster pumps. The gray water system also has the ability to feed the irrigation system for the adjacent sports field. The gray water system is reported to be functioning properly, with no significant issues reported or observed. Lifecycle replacement of some of the gray water system components is anticipated.

7.3 BUILDING GAS DISTRIBUTION

Gas service is supplied from the gas main on the adjacent public street. The gas meters and regulators are located north exterior elevation 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.

7.4 BUILDING ELECTRICAL

BUILDING ELECTRICAL SYSTEMS			
Electrical Lines	Underground	Transformer	Pad-mounted
Main Service Size	2000 Amps	Volts	277/480 Volt, three-phase
Meter & Panel Location	Main Electrical Room	Branch Wiring	Copper
Conduit	Metallic	Step-Down Transformers?	Yes
Security / Surveillance System?	Yes	Building Intercom System?	Yes
Lighting Fixtures	T-8 and CFL		
Main Distribution Condition	Good		
Secondary Panel and Transformer Condition	Good		
Lighting Condition	Fair		

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BUILDING EMERGENCY SYSTEM			
Size	180 kW	Fuel	Diesel
Generator / UPS Serves	Emergency lights, elevators, etc.	Tank Location	Beneath Generator
Testing Frequency	Weekly	Tank Type	Integral ("belly") tank
Generator / UPS Condition	Good		

Anticipated Lifecycle Replacements:

- Interior light fixtures
- Emergency generator
- Automatic transfer switches
- Solar panels
- Surveillance system
- Kitchen fire suppression system

Actions/Comments:

- The onsite electrical systems up to the meters are owned and maintained by the respective utility company.
- The electrical service and capacity appear to be adequate for the property's demands.
- The school owns and maintains the roof-mounted solar panels and associated equipment. The owner reported that electricity from the solar panels is sold back to the electrical company for an energy credit. Lifecycle replacement of the solar panels and associated components is anticipated.

7.5 BUILDING ELEVATORS AND CONVEYING SYSTEMS

	ELEVATOR-1	ELEVATOR-2
Building Name	East Wing	West Wing
Elevator Category	Passenger	Passenger
Elevator Type	Hydraulic	Hydraulic
Elevator Capacity	3500 Lbs.	3500 Lbs.
Elevator Manufacturer	ThyssenKrupp	ThyssenKrupp
Equipment Location	Ground floor or basement adjacent to shaft	Ground floor or basement adjacent to shaft
Elevator Safety Stop	Electronic	Electronic
Elevator Emergency Communication	Yes	Yes
Elevator Cab Floor	vinyl-tile	vinyl-tile
Elevator Cab Wall	stainless steel	stainless steel
Elevator Cabin Lighting	T-8 fluorescent	T-8 fluorescent

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	ELEVATOR-1	ELEVATOR-2
Machinery Condition	Good	Good
Controls Condition	Good	Good
Cab Finish Condition	Fair	Fair

Anticipated Lifecycle Replacements:

- Elevator cab finishes

Actions/Comments:

- The elevators are serviced by Atlantic Elevator on a routine basis. The elevator machinery and controls are the originally installed system.
- The elevators are inspected on an annual basis by the municipality, and a certificate of inspection is displayed in each elevator cab.
- The emergency communication equipment in the elevator cabs appears to be functional. Equipment testing is not within the scope of the work.

7.6 FIRE PROTECTION AND SECURITY SYSTEMS

ITEM	DESCRIPTION					
Sprinkler System Type	Wet pipe with partial dry pipe system					
Fire Alarm System	Central Alarm Panel	<input checked="" type="checkbox"/>	Battery-Operated Smoke Detectors	<input type="checkbox"/>	Alarm Horns	<input checked="" type="checkbox"/>
	Annunciator Panels	<input type="checkbox"/>	Hard-Wired Smoke Detectors	<input checked="" type="checkbox"/>	Strobe Light Alarms	<input checked="" type="checkbox"/>
	Pull Stations	<input checked="" type="checkbox"/>	Emergency Battery-Pack Lighting	<input checked="" type="checkbox"/>	Illuminated EXIT Signs	<input checked="" type="checkbox"/>
Alarm System Condition	Good					
Sprinkler System	None	<input type="checkbox"/>	Standpipes	<input checked="" type="checkbox"/>	Backflow Preventer	<input type="checkbox"/>
	Hose Cabinets	<input type="checkbox"/>	Fire Pumps	<input type="checkbox"/>	Siamese Connections	<input checked="" type="checkbox"/>
Suppression Condition	Good					
Central Alarm Panel System	Location of Alarm Panel			Installation Date of Alarm Panel		
	Main entrance foyer			2006		
Fire Extinguishers	Last Service Date			Servicing Current?		
	June, 2016			Yes		

FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

ITEM	DESCRIPTION			
Sprinkler System Type	Wet pipe with partial dry pipe system			
Hydrant Location	Whiting Avenue			
Siamese Location	Exterior building elevations			
Special Systems	Kitchen Suppression System	<input checked="" type="checkbox"/>	Computer Room Suppression System	<input type="checkbox"/>

Anticipated Lifecycle Replacements:

- Central alarm panel
- Alarm devices and system
- Sprinkler heads
- Backflow preventer (fire sprinkler)

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.

FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

8 INTERIOR SPACES

8.1 INTERIOR FINISHES

The facility is used as a middle school.

The most significant interior spaces include classrooms, offices, a gymnasium, an auditorium, cafeteria and a media center. Supporting areas include hallways, stairs, building entrances, restrooms, locker rooms, staff break rooms, mechanical rooms, and utility closets.

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

TYPICAL FLOOR FINISHES		
FLOOR FINISH	LOCATIONS	GENERAL CONDITION
Vinyl tile	Hallways, classrooms, auditorium	Fair
Carpet	Media center, auditorium, distance learning lab	Fair
Ceramic tile	Locker rooms, restrooms	Good
Quarry tile	Lobby, kitchen	Good
Hardwood	Gymnasium	Good
Rubber flooring	Fitness center	Fair
Unfinished	Boiler room, mechanical spaces, electrical room	Good
TYPICAL WALL FINISHES		
WALL FINISH	LOCATIONS	GENERAL CONDITION
Painted drywall	Lobby, hallways, classrooms, offices, cafeteria, auditorium, media center, restrooms	Good
Painted CMU	Gymnasium, restrooms, locker rooms, mechanical spaces	Good
Exposed CMU/masonry	Cafeteria, lobby	Good
TYPICAL CEILING FINISHES		
CEILING FINISH	LOCATIONS	GENERAL CONDITION
Suspended T-bar (Acoustic)	Lobby, classrooms, offices, hallways, media center, cafeteria, kitchen	Good
Exposed structure	Gymnasium, auditorium, cafeteria	Good
Painted drywall	Restrooms, locker rooms	Good

FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

INTERIOR DOORS		
ITEM	TYPE	CONDITION
Interior Doors	Solid core wood	Good
Door Framing	Metal	Good
Fire Doors	Yes	Good

Anticipated Lifecycle Replacements:

- Carpet flooring
- Vinyl tile flooring
- Hardwood flooring (refinish)
- Rubber flooring
- Interior paint
- Suspended acoustic ceiling tile
- Interior doors
- Indoor bleachers
- Auditorium seating
- Fixed lecture seating and tables (distance learning lab)
- Lockers
- Interior casework
- Restroom partitions

Actions/Comments:

- The property is relatively new and the interior finishes have not required replacement since the original 2006 construction.
- 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.

8.2 COMMERCIAL KITCHEN & LAUNDRY EQUIPMENT

The cafeteria kitchen has a variety of commercial kitchen appliances, fixtures, and equipment. The equipment is owned and maintained in-house.

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

COMMERCIAL KITCHEN		
APPLIANCE	COMMENT	CONDITION
Refrigerators	Up-right and under-counter	Fair
Freezers	Walk-in and up-right	Fair
Ranges	Gas	Fair
Ovens	Gas	Fair
Griddles / Grills	Gas	Fair

FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

COMMERCIAL KITCHEN		
APPLIANCE	COMMENT	CONDITION
Fryers	None	Fair
Hood	Exhaust ducted to exterior	Fair
Dishwasher	Owned	Fair
Microwave	<input checked="" type="checkbox"/>	Fair
Ice Machines	<input checked="" type="checkbox"/>	Fair
Steam Tables	<input checked="" type="checkbox"/>	Fair
Work Tables	<input checked="" type="checkbox"/>	Fair
Shelving	<input checked="" type="checkbox"/>	Fair

COMMERCIAL LAUNDRY		
EQUIPMENT	COMMENT	CONDITION
Commercial Washing Machines	None	--
Commercial Dryers	None	--
Residential Washers	<input type="checkbox"/>	--
Residential Dryers	<input type="checkbox"/>	--

Anticipated Lifecycle Replacements:

- Commercial kitchen equipment

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.

FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

9 OTHER STRUCTURES

Not applicable. There are no major accessory structures.

FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

10 CERTIFICATION

The Town of Dedham Schools retained EMG to perform this Facility Condition Assessment in connection with its continued operation of Dedham-Dedham Middle School, 70 Whiting Avenue, Dedham, Massachusetts, the "Property". It is our understanding that the primary interest of The Town of Dedham 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 Town of Dedham Schools for the purpose stated within Section 2. of this report. The report, or any excerpt thereof, shall not be used by any party other than The Town of Dedham Schools or for any other purpose than that specifically stated in our agreement or within Section 2. of this report without the express written consent of EMG.

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

Prepared by: Joshua Hogan, PE
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FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

11 APPENDICES

- APPENDIX A: PHOTOGRAPHIC RECORD
- APPENDIX B: SITE AND FLOOR PLANS
- APPENDIX C: SUPPORTING DOCUMENTATION
- APPENDIX D: EMG ACCESSIBILITY CHECKLIST
- APPENDIX E: PRE-SURVEY QUESTIONNAIRE

FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

APPENDIX A:

PHOTOGRAPHIC RECORD





PHOTO #1: MAIN BUILDING ENTRANCE



PHOTO #2: SOUTH ELEVATION



PHOTO #3: EAST ELEVATION



PHOTO #4: NORTH ELEVATION



PHOTO #5: WEST ELEVATION



PHOTO #6: MAIN PARKING LOT



PHOTO #7: ADA ACCESSIBLE PARKING



PHOTO #8: DEPRESSED ASPHALT PAVEMENT AT A CATCH BASIN



PHOTO #9: CONCRETE SIDEWALK AND POLE-MOUNTED SITE LIGHTING



PHOTO #10: SETTLED SECTION OF CONCRETE SIDEWALK – POTENTIAL TRIPPING HAZARD



PHOTO #11: CONCRETE SITE STAIRS AND ADJACENT RETAINING WALL



PHOTO #12: CRACKED CONCRETE STAIR AT A HANDRAIL BASE



PHOTO #13: CRACKED CONCRETE AT THE NORTH LOADING DOCK



PHOTO #14: GRASS TURF FIELD AND ADJACENT BASEBALL FIELD



PHOTO #15: STRUCTURAL STEEL ROOF FRAMING



PHOTO #16: LOW-SLOPED SINGLE-PLY ROOFING



PHOTO #17: STEEP-SLOPED ASPHALT SHINGLE ROOFING AND SKYLIGHTS



PHOTO #18: ROOF-MOUNTED SOLAR PANELS



PHOTO #19: DAMAGED SOLAR PANEL



PHOTO #20: EXTERIOR BRICK MASONRY FAÇADE AND ALUMINUM-FRAMED WINDOWS



PHOTO #21: DETERIORATED BRICK MASONRY EXPANSION JOINT



PHOTO #22: ALUMINUM-FRAMED WINDOWS



PHOTO #23: TRANSLUCENT SANDWICH PANELS AT THE UPPER GYMNASIUM ELEVATION



PHOTO #24: MAIN ENTRY DOORS AND ADJACENT STOREFRONT GLAZING



PHOTO #25: BOILER ROOM



PHOTO #26: HEATING BOILERS



PHOTO #27: HOT WATER CIRCULATION PUMPS

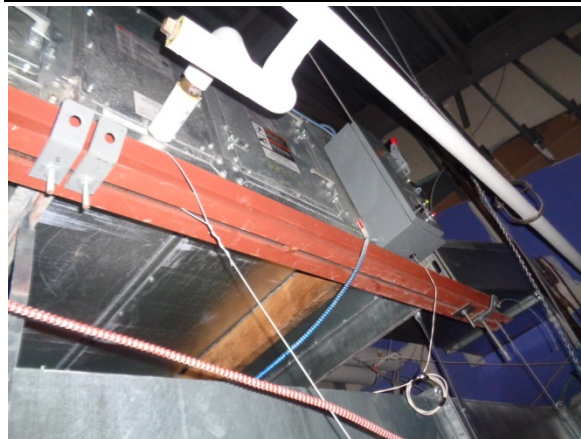


PHOTO #28: ABOVE-CEILING AIR HANDLING UNIT



PHOTO #29: ROOF-MOUNTED MECHANICAL EQUIPMENT



PHOTO #30: MINOR CORROSION AT THE BASE OF A ROOFTOP PACKAGE UNIT



PHOTO #31: *CEILING-MOUNTED FAN COIL UNIT*



PHOTO #32: *DOMESTIC WATER HEATER*



PHOTO #33: *GRAY WATER HOLDING TANK AND FILTRATION SYSTEM*



PHOTO #34: *MAIN ELECTRICAL SERVICE*



PHOTO #35: *ELECTRICAL COMPONENTS* SERVICE



PHOTO #36: *INTERIOR LIGHTING*



PHOTO #37: EMERGENCY GENERATOR



PHOTO #38: WET-PIPE SPRINKLER SYSTEM CONTROL VALVE AND BACKFLOW PREVENTER



PHOTO #39: DRY-PIPE SPRINKLER SYSTEM



PHOTO #40: FIRE ALARM CONTROL PANEL



PHOTO #41: ELEVATOR MACHINERY AND CONTROLS

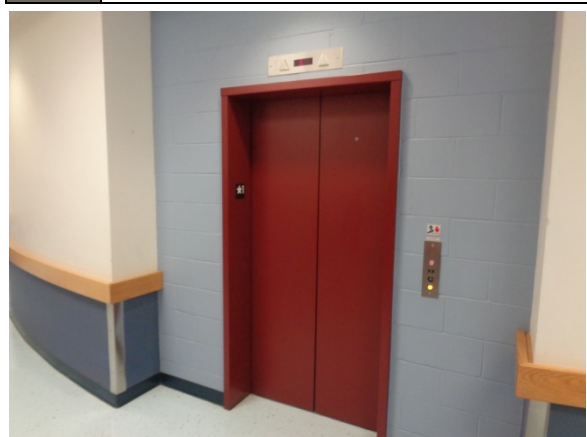


PHOTO #42: ELEVATOR



PHOTO #43: COMMERCIAL KITCHEN EQUIPMENT



PHOTO #44: LIBRARY AND MEDIA CENTER SPACE

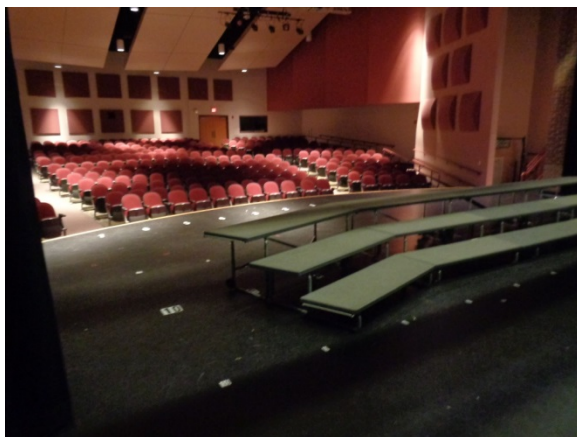


PHOTO #45: AUDITORIUM AND STAGE



PHOTO #46: CAFETERIA



PHOTO #47: LECTURE CLASSROOM SPACE



PHOTO #48: GYMNASIUM

FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

APPENDIX B: SITE AND FLOOR PLANS



Site Plan



Project Name:

Dedham – Dedham Middle School

Project Number:

121711.16R000-003.322

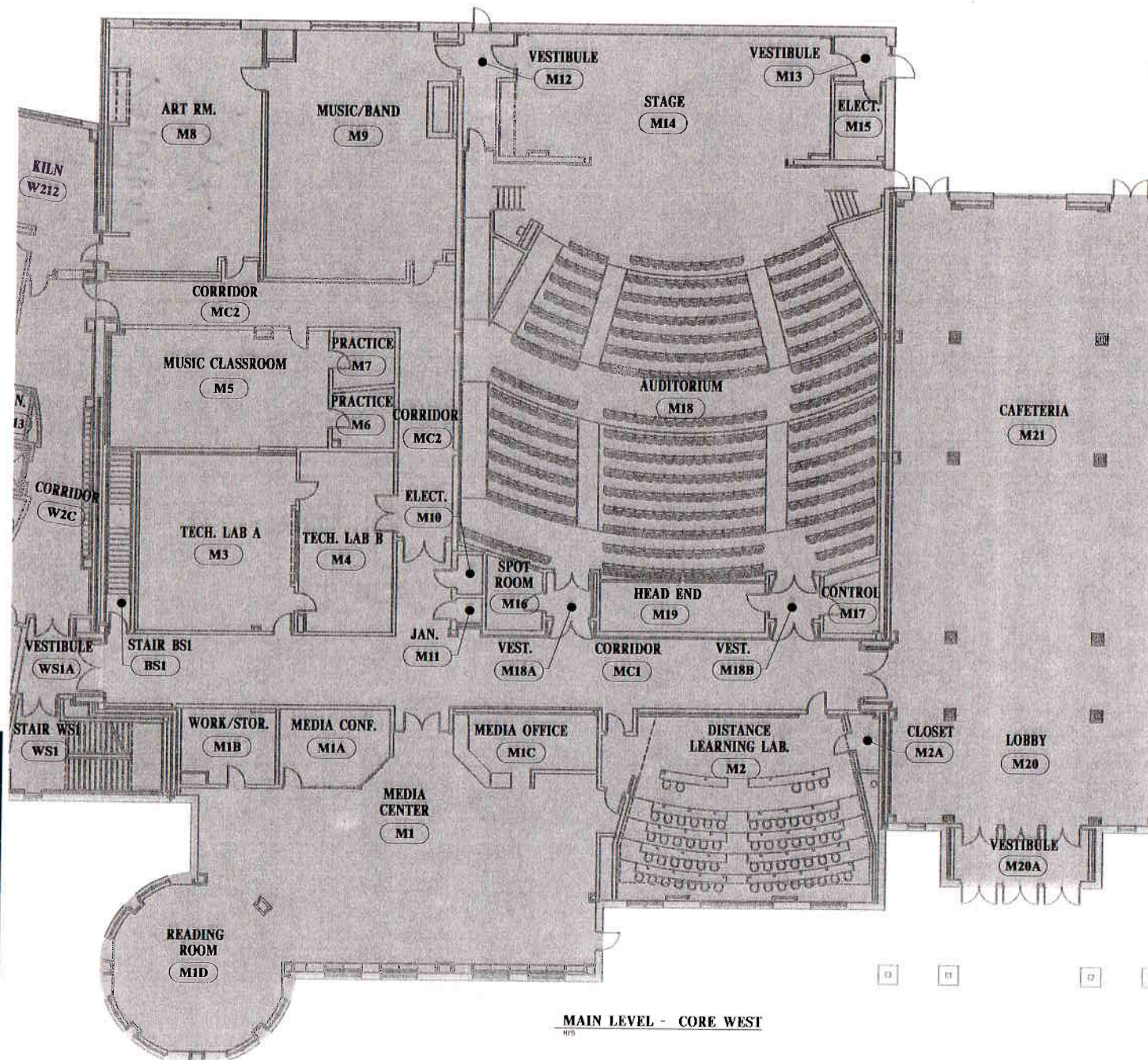
Source:

Google Earth

On-Site Date:

October 19 & 20, 2016

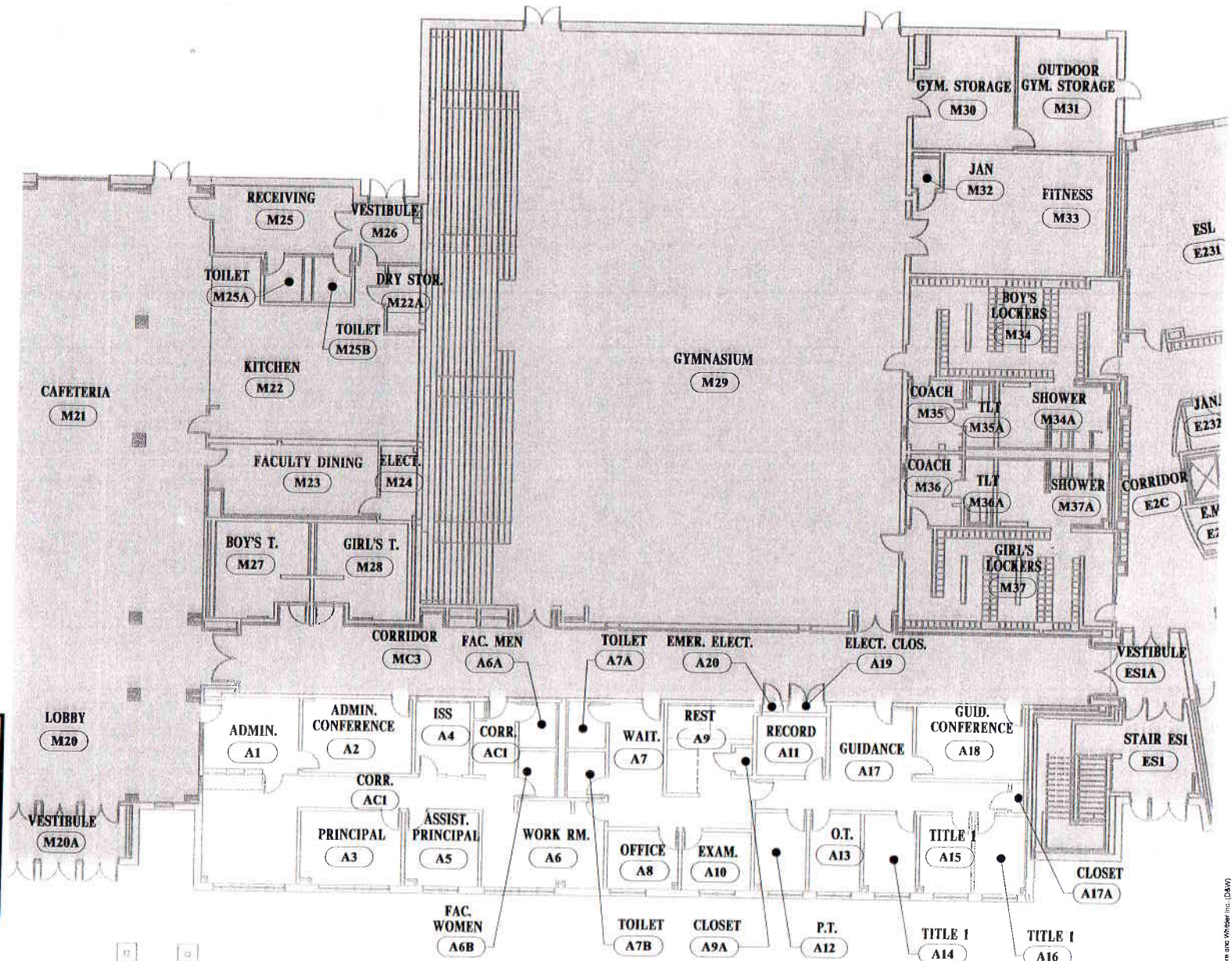
Main
West



DEDHAM MIDDLE SCHOOL
DEDHAM MASSACHUSETTS

Main

ROOMNAMES & NUMBERS LEGEND	
XX	ROOM NUMBERS
	ADMINISTRATIVE WING (A)
	MAIN BUILDING (M)
	EAST WING (E) - FIRST FLOOR = 200's SECOND FLOOR = 300's
	WEST WING (W) - FIRST FLOOR = 100's SECOND FLOOR = 200's THIRD FLOOR = 300's
	BASEMENT (B)



MAIN LEVEL - CORE EAST

DEDHAM MIDDLE SCHOOL
DEDHAM MASSACHUSETTS

TOILET
E229A

GYM. STORAGE
M30

OUTDOOR GYM. STORAGE
M31

JAN
M32

FITNESS
M33

BOY'S LOCKERS
M34

COACH
M35

SHOWER
M34A

COACH
M36

TLT
M36A

SHOWER
M37A

GIRL'S LOCKERS
M37

CORRIDOR
E2C

JAN
E232

RESOURCE
E234

EMER. ELEC.
E238A

SP. ED.
E229

BOOK STORAGE
E228

COMP. LAB.
E227

W. LANGUAGE
E226

STAIR ES2
ES2

VEST.
ES2A

CORRIDOR
E2C

W. LANGUAGE
E225

W. LANGUAGE
E222

LANG. LAB.
E224

BOOK STORAGE
E223

RESOURCE
E220

SPED CONF.
E220A

W. LANGUAGE
E221

CORRIDOR
E2C

T. PLANNING
E235

FAC. ME.
E235B

GIRL'S T.
E236

FAC. WOMEN
E235A

CORRIDOR
E2C

STAIR ES1
ES1

VESTIBULE
ES1A

CLOSET
A17A

TITLE
A15

TITLE 1
A14

TITLE 1
A16

GUID. CONFERENCE
A18

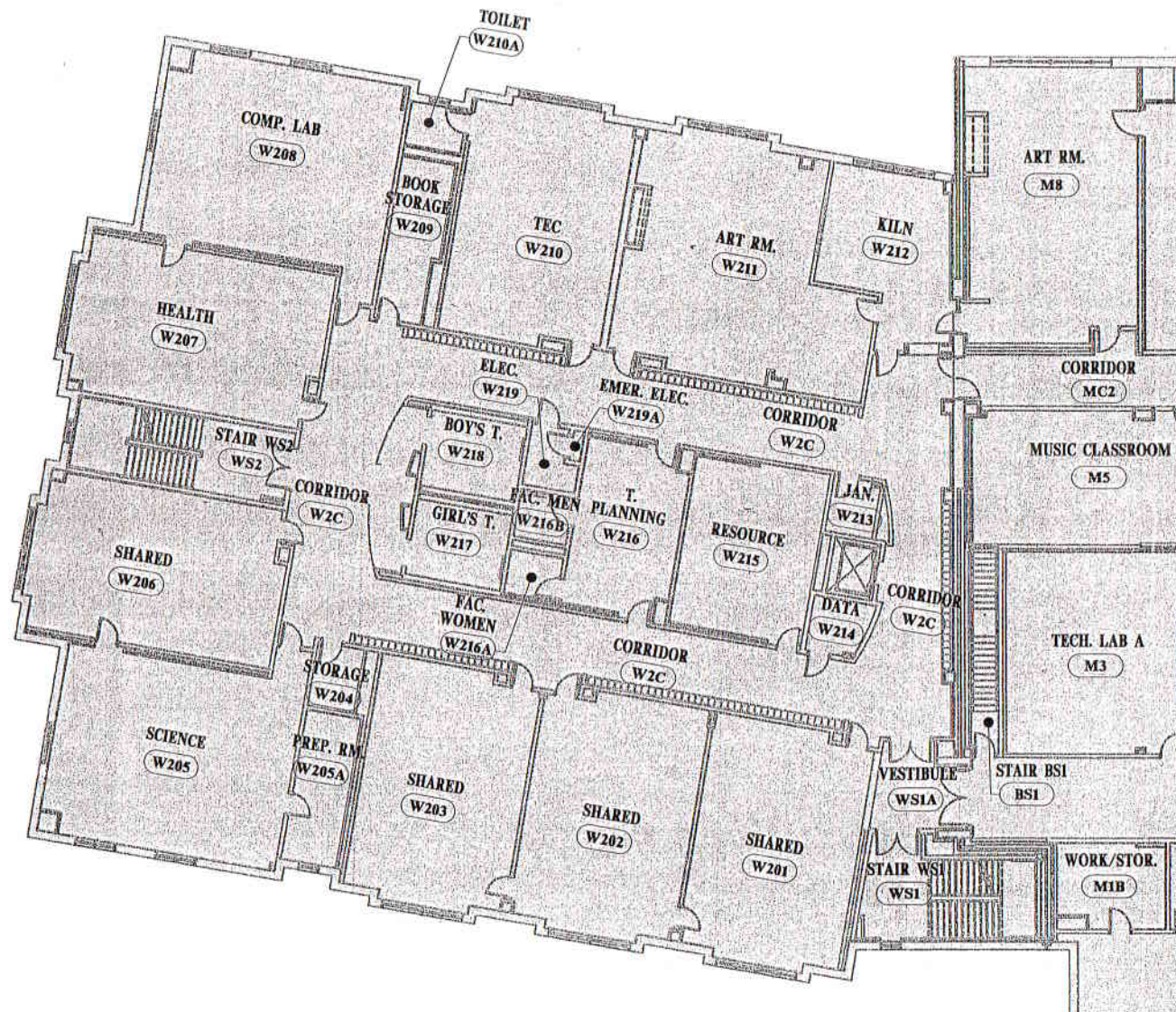
ENTRANCE 7

BASEMENT (B)

MAIN LEVEL - EAST

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West
Main
Level



ROOMNAMES & NUMBERS LEGEND

(XX) ROOM NUMBERS

ADMINISTRATIVE WING (A)

MAIN BUILDING (M)

EAST WING (E) - FIRST FLOOR = 200's
SECOND FLOOR = 300's

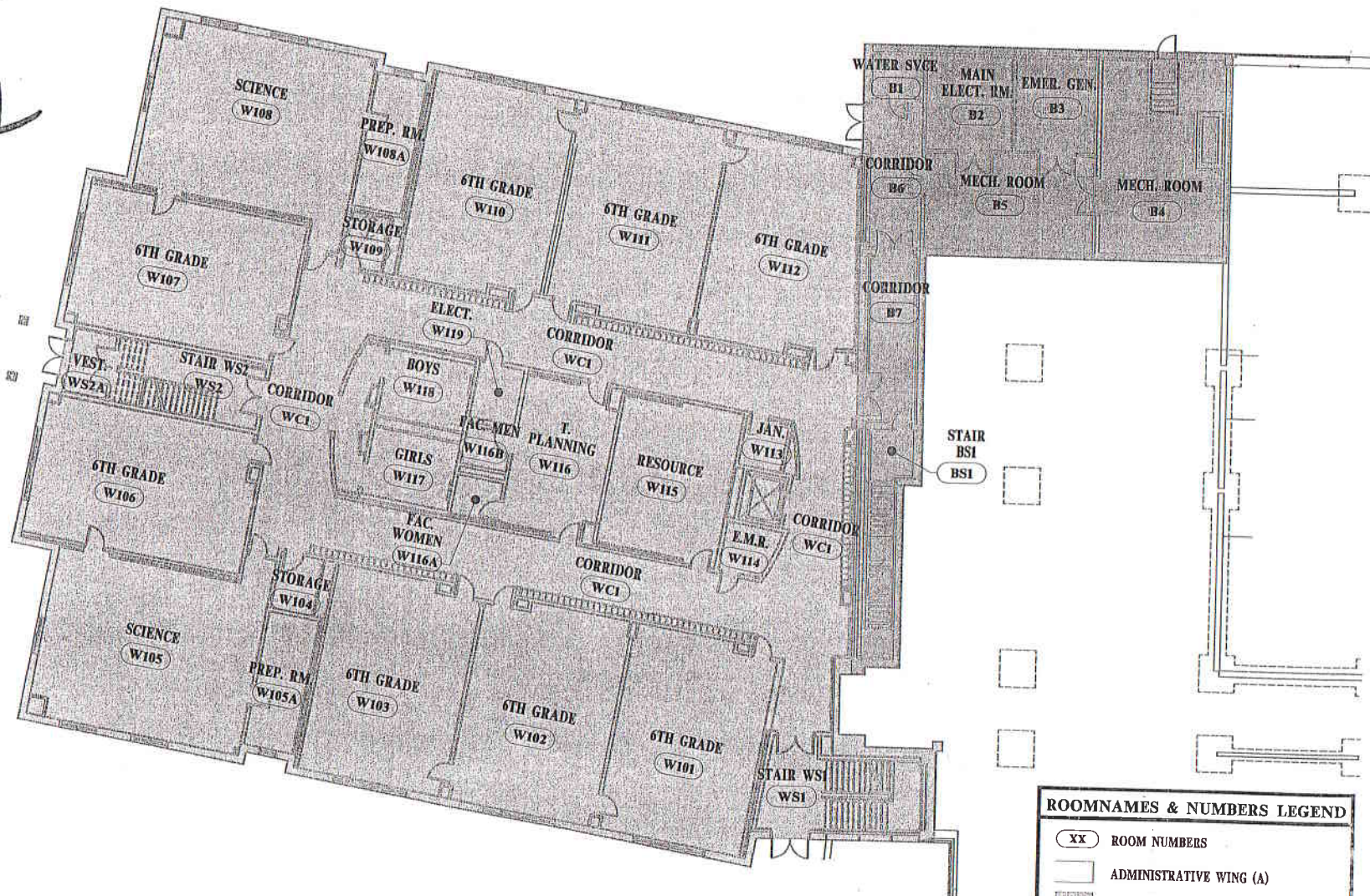
WEST WING (W) - FIRST FLOOR = 100's
SECOND FLOOR = 200's
THIRD FLOOR = 300's

BASEMENT (B)

MAIN LEVEL - WEST

DEDHAM MIDDLE SCHOOL
DEDHAM MASSACHUSETTS

West
Lower
Level

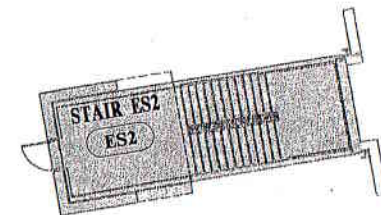


LOWER LEVEL - OVERALL

ROOMNAMES & NUMBERS LEGEND	
XX	ROOM NUMBERS
[Pattern]	ADMINISTRATIVE WING (A)
[Pattern]	MAIN BUILDING (M)
[Pattern]	EAST WING (E) - FIRST FLOOR = 200's SECOND FLOOR = 300's
[Pattern]	WEST WING (W) - FIRST FLOOR = 100's SECOND FLOOR = 200's THIRD FLOOR = 300's
[Pattern]	BASEMENT (B)

DEDHAM MIDDLE SCHOOL
DEDHAM MASSACHUSETTS

EAST
Upper
Level



ROOF LEVEL - EAST
RTS

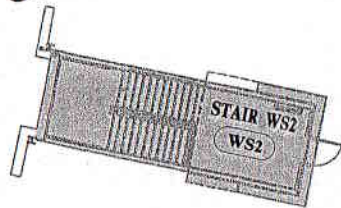


UPPER LEVEL - EAST
RTS

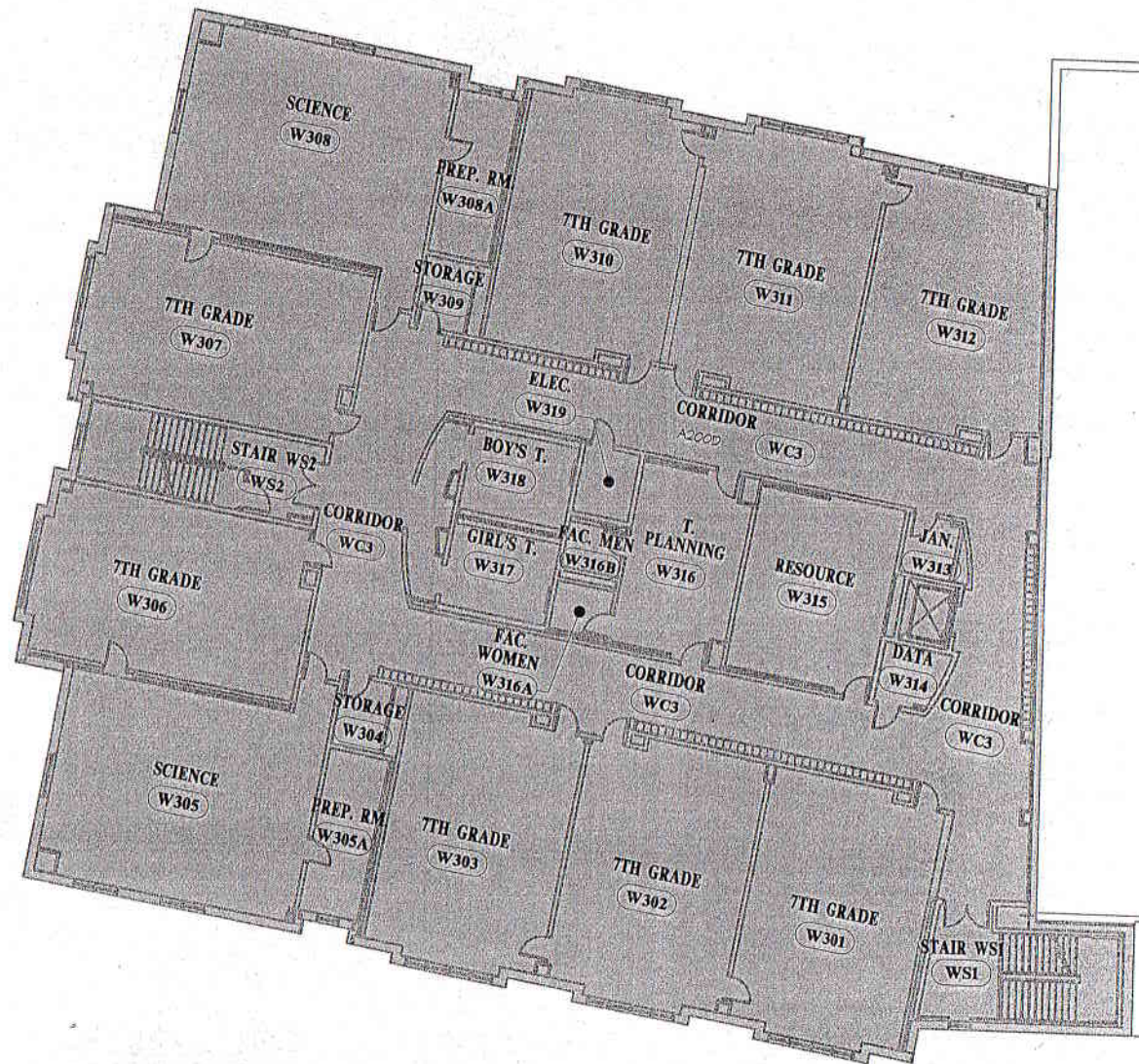
ROOMNAMES & NUMBERS LEGEND	
(XX)	ROOM NUMBERS
[Pattern]	ADMINISTRATIVE WING (A)
[Pattern]	MAIN BUILDING (M)
[Pattern]	EAST WING (E) - FIRST FLOOR = 200's SECOND FLOOR = 300's
[Pattern]	WEST WING (W) - FIRST FLOOR = 100's SECOND FLOOR = 200's THIRD FLOOR = 300's
[Pattern]	BASEMENT (B)

DEDHAM MIDDLE SCHOOL
DEDHAM MASSACHUSETTS

West
Upper
Level



ROOF LEVEL - WEST
NTS



UPPER LEVEL - WEST
NTS

ROOMNAMES & NUMBERS LEGEND

(XX)	ROOM NUMBERS
---	ADMINISTRATIVE WING (A)
■	MAIN BUILDING (M)
■	EAST WING (E) - FIRST FLOOR = 200's SECOND FLOOR = 300's
■	WEST WING (W) - FIRST FLOOR = 100's SECOND FLOOR = 200's THIRD FLOOR = 300's
■	BASEMENT (B)

DEDHAM MIDDLE SCHOOL
DEDHAM MASSACHUSETTS



ROOMNAMES & NUMBERS LEGEND

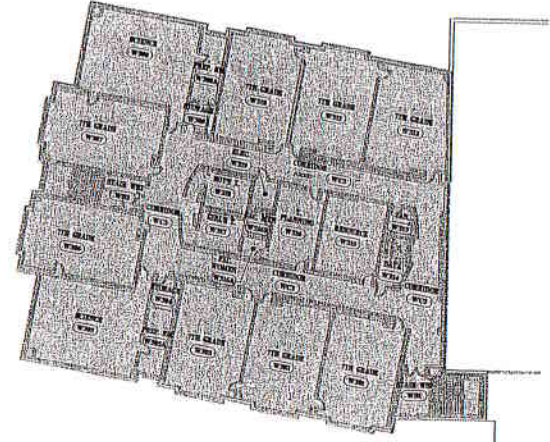
- XX ROOM NUMBERS
- ADMINISTRATIVE WING (A)
- MAIN BUILDING (M)
- EAST WING (E) - FIRST FLOOR = 200's
SECOND FLOOR = 300's
- WEST WING (W) - FIRST FLOOR = 100's
SECOND FLOOR = 200's
THIRD FLOOR = 300's
- BASEMENT (B)

Flooring Legend

- Blank
- Carpet
- Quarry Tile
- Wxl Tile
- Wood
- Roof Level - East
- Structural CC Placed

MAIN LEVEL - OVERALL

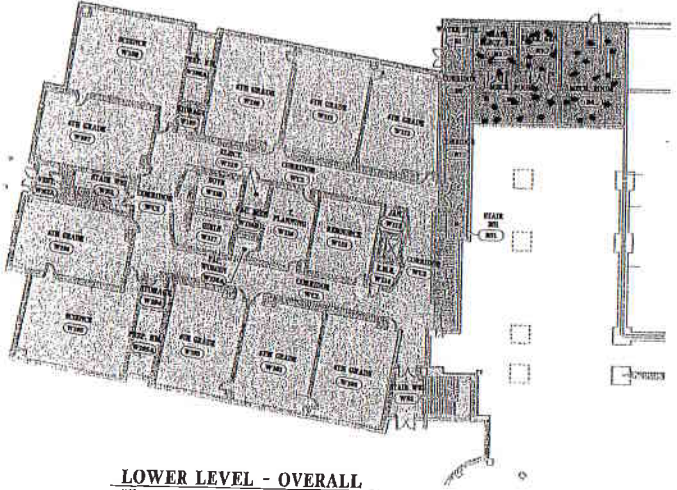
ROOF LEVEL - WEST



UPPER LEVEL - WEST

DEDHAM MIDDLE SCHOOL DEDHAM MASSACHUSETTS

LOWER LEVEL - OVERALL



UPPER LEVEL - EAST



FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

APPENDIX C: SUPPORTING DOCUMENTATION



FCA Inventory Requirements						
Item	Description	Exists	Verified	Type	Quantity	Sizing Unit
1	Elevator(s)	Yes	PM Confirmed	Hydraulic / Traction	2	LBS / FLOORS
2	Emergency Generator	Yes	PM Confirmed	GAS / DIESEL	1	KW
3	Automatic Transfer Switch	Yes	PM Confirmed	Automatic	2	AMP
4	Transformer	Yes	PM Confirmed	Dry / Oil Filled	8	kVA
5	Switchgear	Yes	PM Confirmed	N/A	1	VOLT / AMP
6	Main Distribution Panel	Yes	PM Confirmed	N/A	2	VOLT / AMP
7	Fire Alarm System	Yes	PM Confirmed	N/A	1	N/A
8	Sprinkler System	Yes	PM Confirmed	N/A	1	N/A
9	Fire Pump	No - Not Needed This Building	PM Confirmed	Jockey / Main	0	HP
10	Kitchen Equipment (Commercial)	Yes	PM Confirmed	N/A	20	N/A
11	Boiler (& pumps)	Yes	PM Confirmed	Gas Fired / Electric	4	MBH / KW (HP)
12	Building Automation System	Yes	PM Confirmed	N/A	1	N/A
12	Chiller (& pumps)	No - Not Needed This Building	PM Confirmed	Air / Water Cooled	0	TON (HP)
13	Cooling Tower (& pumps)	No - Not Needed This Building	PM Confirmed	N/A	0	TON (HP)
14	Air handler (Air Conditioner)	Yes	PM Confirmed	Single / Multi Zone	1	CFM (TON)
15	Package Units (HVAC)	Yes	PM Confirmed	Rooftop / Ground	20	TON
16	Water Heater (Domestic)	Yes	PM Confirmed	Electric / Gas / Instant	3	GALLON / MBH / KW
17	Backflow Preventer	Yes	PM Confirmed	N/A	5	INCH
18	Sump Pumps	No - Not Needed This Building	PM Confirmed	N/A	0	HP
19	Fuel Tanks	No - Not Needed This Building	PM Confirmed	GAS / DIESEL	0	TON

FCA Building Components Requirements						
Item	Description	Exists	Verified	Type	Quantity	Sizing Unit
1	Roof (epdm, top, wood/asphalt shingles)	Yes	PM Confirmed	EPDM & Asphalt Shingle	70000	SQF
2	Exterior Finish (Paint, Stucco,veneer, brick)	Yes	PM Confirmed	Brick & Metal Panel	120000	SQF
3	Sidewalks, Curbs, Gutters	Yes	PM Confirmed	Concrete	10000	SQF
4	Stairs (Indoor, Outdoor), Ramps	Yes	PM Confirmed	Concrete	450	SQF
5	Windows (metal, wood, vinyl)	Yes	PM Confirmed	Metal	200	QUANTITY
6	Doors (solid/hollow core, metal/wood)	Yes	PM Confirmed	Metal and Wood	500	QUANTITY
7	Floor Finishes (Vinyl, Carpet, Wood, Stone)	Yes	PM Confirmed	Carpet, VCT, Ceramic Tile	161000	SQF
8	Parking Lot (Concrete, Asphalt)	Yes	PM Confirmed	Asphalt	30000	SQF
9	Interior Finishes	Yes	PM Confirmed	Varies	560000	SQF
10	Fence (Chanlink, Wood, PVC)	Yes	PM Confirmed	Chain Link & Metal Post	7500	LF
11	Retaining Wall	Yes	PM Confirmed	Concrete Block & Cast in	1500	SQF
12	site (catch basin, retantion pond, inlet, dry wells,	Yes	PM Confirmed	Catch Basin	45	QUANTITY
13						

FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

APPENDIX D: EMG ACCESSIBILITY CHECKLIST



Date Completed: October 19, 2016

Property Name: Dedham-Dedham Middle School

EMG Project Number: 121711.16R000-003.322

	Building History	Yes	No	Unk	Comments
1	Has an ADA survey previously been completed for this property?		✓		Building reported to be constructed in accordance with ADA standards at time of construction
2	Have any ADA improvements been made to the property?		✓		
3	Does a Transition Plan / Barrier Removal Plan exist for the property?		✓		
4	Has building ownership or management received any ADA related complaints that have not been resolved?		✓		
5	Is any litigation pending related to ADA issues?		✓		
	Parking	Yes	No	NA	Comments
1	Are there sufficient accessible parking spaces with respect to the total number of reported spaces?	✓			
2	Are there sufficient van-accessible parking spaces available?		✓		There are no ADA van spaces on site
3	Are accessible spaces marked with the International Symbol of Accessibility? Are there signs reading "Van Accessible" at van spaces?	✓			No van spaces
4	Is there at least one accessible route provided within the boundary of the site from public transportation stops, accessible parking spaces, passenger loading zones, if provided, and public streets and sidewalks?	✓			
5	Do curbs on the accessible route have depressed, ramped curb cuts at drives, paths, and drop-offs?	✓			
6	If required does signage exist directing you to accessible parking and an accessible building entrance?	✓			
	Ramps	Yes	No	NA	Comments
1*	Do all ramps along accessible path of travel appear to meet slope requirements? (1:12 or less)			✓	
2	Are ramps that appear longer than 6 ft complete with railings on both sides?			✓	

	Ramps	Yes	No	NA	Comments
3	Does the width between railings appear at least 36 inches?			✓	
4	Is there a level landing for approximately every 30 ft horizontal length of ramp, at the top and at the bottom of ramps and switchbacks?			✓	
	Entrances/Exits	Yes	No	NA	Comments
1	Do all required accessible entrance doorways appear at least 32 inches wide and not a revolving door?	✓			
2	If the main entrance is inaccessible, are there alternate accessible entrances?	✓			
3	Is the door hardware easy to operate (lever/push type hardware, no twisting required and not higher than approximately 48 inches above the floor)?	✓			
	Paths of Travel	Yes	No	NA	Comments
1	Are all paths of travel free of obstruction and wide enough for a wheelchair (appear at least 36 inches wide)?	✓			
2	Are wheelchair-accessible facilities (toilet rooms, exits, etc.) identified with signage?	✓			
3	Is there a path of travel that does not require the use of stairs?	✓			
	Elevators	Yes	No	NA	Comments
1	Do the call buttons have visual and audible signals to indicate when a call is registered and answered when car arrives?	✓			
2	Are there visual and audible signals inside cars indicating floor change?	✓			
3	Are there standard raised and Braille marking on both jambs of each hoist way entrance as well as all cab/call buttons?	✓			
4	Do elevator doors have a reopening device that will stop and reopen a car door if an object or a person obstructs the door?	✓			
5	Are elevator controls low enough to be reached from a wheelchair (appears to be between 15 and 48 inches)?	✓			

	Elevators	Yes	No	NA	Comments
6	If a two-way emergency communication system is provided within the elevator cab, is it usable without voice communication?	✓			
	Toilet Rooms	Yes	No	NA	Comments
1	Are common area public restrooms located on an accessible route?	✓			
2	Are pull handles push/pull or lever type?	✓			
3	Are there audible and visual fire alarm devices in the toilet rooms?	✓			
4	Are toilet room access doors wheelchair-accessible (appear to be at least 32 inches wide)?	✓			
5	Are public restrooms large enough to accommodate a wheelchair turnaround (appear to have 60" turning diameter)?	✓			
6	In unisex toilet rooms, are there safety alarms with pull cords?	✓			
7	Are toilet stall doors wheelchair accessible (appear to be at least 32" wide)?	✓			
8	Are grab bars provided in toilet stalls?	✓			
9	Are sinks provided with clearance for a wheelchair to roll under (appear to have 29" clearance)?	✓			
10	Are sink handles operable with one hand without grasping, pinching or twisting?	✓			
11	Are exposed pipes under sink sufficiently insulated against contact?	✓			
	Guest Rooms	Yes	No	NA	Comments
1	How many total accessible sleeping rooms does the property management report to have? Provide specific number in comment field. Are there sufficient reported accessible sleeping rooms with respect to the total number of reported guestrooms? See attached hot sheet.			✓	

	Guest Rooms	Yes	No	NA	Comments
2	How many of the accessible sleeping rooms per property management have roll-in showers? Provide specific number in comment field. Are there sufficient reported accessible rooms with roll-in showers with respect to the total number of reported accessible guestrooms? See attached hot sheet.			√	
3	How many assistive listening kits and/or rooms with communication features are available per property management? Provide specific number in comment field. Are there sufficient reported assistive listening devices with respect to the total number of rooms? See attached hot sheet.			√	
	Pools	Yes	No	NA	Comments
1	Are public access pools provided? If the answer is no, please disregard this section.			√	
2	How many accessible access points are provided to each pool/spa? Provide number in comment field. Is at least one fixed lift or sloped entry to the pool provided?			√	
	Play Area	Yes	No	NA	Comments
1	Has the play area been reviewed for accessibility? All public playgrounds are subject to ADAAG standards.			√	
	Exercise Equipment	Yes	No	NA	Comments
1	Does there appear to be adequate clear floor space around the machines/equipment (30" by 48" minimum)?	√			Exercise equipment is movable to accommodate needs

**Based on visual observation only. The slope was not confirmed through measurements.*

FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

APPENDIX E:

PRE-SURVEY QUESTIONNAIRE





FCA (Town of Dedham Schools) Pre-Survey Questionnaire

This questionnaire must be completed by the property owner, the owner's designated representative, or someone knowledgeable about the subject property. If the form is not completed, EMG's Project Manager will require **additional time** during the on-site visit with such a knowledgeable person in order to complete the questionnaire. During the site visit, EMG's Field Observer may ask for details associated with selected questions. This questionnaire will be utilized as an exhibit in EMG's final report.

Name of Institution:	Town of Dedham		
Name of Building:	Dedham Middle School	Building #:	
Name of person completing questionnaire:	Donald Lazdaosky		
Length of Association With the Property:	10 years	Phone Number:	Not Provided

Site Information	
Year of Construction?	2006
No. of Stories?	3 Floors.
Total Site Area?	Unknown Acres Google Earth
Total Building Area?	169,681 Sqft

Inspections	Date of Last Inspection	List of Any Outstanding Repairs Required
1. Elevators	Unknown	Check Certificate
2. HVAC Mechanical, Electric, Plumbing?	Fall 2016	
3. Life-Safety/Fire?	Spring 2016	
4. Roofs?	Spring 2016	

Key Questions	Response
Major Capital Improvements in Last 3 yrs.	None
Planned Capital Expenditure For Next Year?	Roof Repairs (Leaks)
Age of the Roof?	10 years
What bldg. Systems Are Responsibilities of Tenants? (HVAC/Roof/Interior/Exterior/Paving)	None

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	Y	N	Unk	NA	COMMENTS
ZONING, BUILDING DESIGN & LIFE SAFETY ISSUES					
1 Are there any unresolved building, fire, or zoning code issues?		✓			
2 Is there any pending litigation concerning the property?		✓			
3 Are there any other significant issues/hazards with the property?		✓			
4 Are there any unresolved construction defects at the property?		✓			



FCA (Town of Dedham Schools) Pre-Survey Questionnaire

5	Has any part of the property ever contained visible suspect mold growth?		✓			
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	Y	N	Unk	NA	COMMENTS
6	Is there a mold Operations and Maintenance Plan?		✓			
7	Are there any recalled fire sprinkler heads (Star, GEM, Central, and Omega)?		✓			
8	Have there been indoor air quality or mold related complaints from tenants?		✓			
GENERAL SITE						
9	Are there any problems with erosion, storm water drainage or areas of paving that do not drain?	✓				• Horse shoe parking area does not drain properly.
10	Are there any problems with the landscape irrigation systems?		✓			Graywater irrigation system ↳ Has not been used in 2+ years
BUILDING STRUCTURE						
11	Are there any problems with foundations or structures?		✓			
12	Is there any water infiltration in basements or crawl spaces?		✓			
13	Has a termite/wood boring insect inspection been performed within the last year?		✓			
BUILDING ENVELOPE						
14	Are there any wall, or window leaks?		✓			• Window leaks have been repaired
15	Are there any roof leaks?	✓				• Roof leaks throughout building
16	Is the roofing covered by a warranty or bond?		✓			
17	Are there any poorly insulated areas?	✓				Administration area + media center ceilings (from soffits)



FCA (Town of Dedham Schools) Pre-Survey Questionnaire

18	Is Fire Retardant Treated (FRT) plywood used?			✓		
19	Is exterior insulation and finish system (EIFS) or a synthetic stucco finish used?		✓			
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	Y	N	Unk	NA	COMMENTS	
BUILDING HVAC AND ELECTRICAL						
20	Are there any leaks or pressure problems with natural gas service?		✓			
21	Does any part of the electrical system use aluminum wiring?		✓			
22	Do Residential units have a less than 60-Amp service?				✓	
23	Do Commercial units have less than 200-Amp service?		✓			
24	Are there any problems with the utilities, such as inadequate capacities?		✓			
ADA						
25	Has the management previously completed an ADA review?				✓	• Building was constructed in compliance w/ ADA code @ time
26	Have any ADA improvements been made to the property?		✓			
27	Does a Barrier Removal Plan exist for the property?		✓			
28	Has the Barrier Removal Plan been approved by an arms-length third party?				✓	
29	Has building ownership or management received any ADA related complaints?	✓	unmarked			• Relocate some ADA parking closer to main (accessible) entrance.
30	Does elevator equipment require upgrades to meet ADA standards?		✓			



FCA (Town of Dedham Schools) Pre-Survey Questionnaire

PLUMBING					
31	Is the property served by private water well?		<input checked="" type="checkbox"/>		
32	Is the property served by a private septic system or other waste treatment systems?		<input checked="" type="checkbox"/>		
33	Is polybutylene piping used?		<input checked="" type="checkbox"/>		
34	Are there any plumbing leaks or water pressure problems?		<input checked="" type="checkbox"/>		

Additional Issues or Concerns That EMG Should Know About?	
1.	There was a previous issue with window Frame/mullion separation that has been addressed / Fixed where worst issues / cases had occurred.
2.	
3.	

Items Provided to EMG Auditors				
	Yes	No	N/A	Additional Comments?
Access to All Mechanical Spaces	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Access to Roof/Attic Space	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Some metal Peds N/A
Access to Building As-Built Drawings	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Site plan with bldg., roads, parking and other features	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Floor Plans Provided
Contact Details for Mech, Elevator, Roof, Fire Contractors:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
List of Commercial Tenants in the property	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Previous reports pertaining to the physical condition of property.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
ADA survey and status of improvements implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Verbal
Current / pending litigation related to property condition.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Verbal
Any brochures or marketing information.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Dan L. Lofthouse

Signature of person Interviewed or completing form

10-19-16

Date

FACILITY CONDITION ASSESSMENT

DEDHAM-DEDHAM MIDDLE SCHOOL
70 WHITING AVENUE
DEDHAM, MASSACHUSETTS 02026

EMG PROJECT NO: 121711.16R000-003.322

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

- | | |
|---|---|
| <ol style="list-style-type: none">1. All available construction documents (blueprints) for the original construction of the building or for any tenant improvement work or other recent construction work.2. A site plan, preferably 8 1/2" X 11", which depicts the arrangement of buildings, roads, parking stalls, and other site features.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).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.5. For hotel or nursing home properties, provide a summary of the room types and room type quantities.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.7. The names of the local utility companies which serve the property, including the water, sewer, electric, gas, and phone companies. | <ol style="list-style-type: none">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.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.10. Records of system & material ages (roof, MEP, paving, finishes, furnishings).11. Any brochures or marketing information.12. Appraisal, either current or previously prepared.13. Current occupancy percentage and typical turnover rate records (for commercial and apartment properties).14. Previous reports pertaining to the physical condition of property.15. ADA survey and status of improvements implemented.16. Current / pending litigation related to property condition. |
|---|---|

Your timely compliance with this request is greatly appreciated.

