



Newton Schools

Long-Range Facilities Master Plan

Newton, MA

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VOLUME II

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- | | |
|---|--|
| Elementary schools:
Angier
Bowen
Burr
Cabot
Countryside
Franklin
Horace Mann
Lincoln-Eliot
Mason-Rice
Memorial-Spaulding
Peirce
Underwood
Ward
Williams
Zervas | Middle schools:
Bigelow
Brown
Day
Oak Hill

Other:
Carr
Education Center |
|---|--|

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A

Elementary and Middle School Standards for Facility, Systems and Site

ELEMENTARY/MIDDLE SCHOOL STANDARDS
 (Preliminary)

Facility Standards

	Options	Recommendation	Owner Input/Comments
EXTERIOR			
Roof Systems	Flat	EPDM membrane	
		Thermoplastic membrane – light colored Compliant with Energy Star program	
	Sloped	Asphalt shingles	Slate shingles on older buildings
		Prefabricated or site fabricated metal	
		Meet energy code reqmts	
Exterior Walls	Masonry	Brick, block, stone	
	Siding	Metal or wood	
		Air barrier in compliance with ABAA Quality Assurance Program	
		Insulation: 2" R=10	
		Meet energy code reqmts	
Windows		Fiberglass or metal Compliance with AAMA/NWWDA 101/I.S.2	
		Double-glazing, Low-E coating for solar control, screens at operable windows	Prefer hopper and/or awning type operable windows
		Meet energy code reqmts	
Doors		Aluminum storefront or metal	Prefer pebble textured, fiberglass sheeting over aluminum; removable center mullion required
		Meet accessibility reqmts	

	Options	Recommendation	Owner Input/Comments
		Compliance with AAMA/NWWDA 101/I.S.2	
	Hardware		Best hardware, Von Duprin auto closures
INTERIOR			
Partitions	Gypsum wallboard	High impact/ abuse resistant, low VOC paint, meet acoustic	To be wainscot height minimum @corridors
	Concrete block	separation & treatment needs,	
	Ceramic wall tile	meet fire code reqmts	
Floors	Resilient	VCT/ linoleum/ rubber	At corridors and classrooms
	Carpeting	Tile/ roll	At admin., library, auditorium
	Tile/ hard surfaced	Ceramic/ quarry/ terrazzo, epoxy flooring	
	Entry mat systems	3-part system to meet indoor air quality recommendations	
		Low VOC materials/adhesives	
		Hard surface flooring to meet ADA/MAAB requirements for slip resistance.	
	Wood flooring		At platform/stage
Ceilings	Acoustic ceiling tile (ACT)	Meet acoustic and light reflectance reqmts, washable in service areas	Prefer no spline
	Exposed acoustic deck		
Doors/ Borrowed Lights		Steel door frames, wood doors	Prefer borrowed lights (windows) in doors
		Meet code reqmts for access, fire and egress	

	Options	Recommendation	Owner Input/Comments
Interior Built-ins	Casework	Wood or straw fiberboard core	
		Plastic laminate or resin surfaces	
		Meet accessibility code reqmts, meet	
		storage needs, high recycle content	
	Lockers/ cubbies	Metal or wood	Prefer metal lockers, double-tiered and wide (15")
		Meet accessibility code reqmts	
Window Treatments	Varies: vertical, horizontal, rolling	To control daylight	Prefer rolling shades
Visual Display Boards		White markerboard	Prefer electronic white board
		Cork tackboard	
Stairs		Rubber flooring, steel hand & guard rails	
		Meet code reqmts for access, fire and egress	
Elevator		Meet accessibility code	
Toilet Rooms		Solid surfacing partitions, stain resistant	
		Impervious floor and wall surfaces	
		Meet accessibility code	
Signage		Meet code reqmts for access, fire and egress	

	Options	Recommendation	Owner Input/Comments
Hardware		Meet code reqmts for access, fire and egress	
OTHER			
Audio/Visual		Replace outdated systems	
Gymnasium		Athletic sports flooring to meet DIN standards	Prefer wood athletic floor
		Replace outdated equipment	
		Meet accessibility code	
Kitchen	Full service or warming	Replace malfunctioning, inefficient equipment or replace equipment that is 30 years or older	
Lab Equipment		Replace outdated equipment	
	Note: All to meet MA Building Code requirements		

ELEMENTARY/MIDDLE SCHOOL STANDARDS
 (Preliminary)

Systems Standards

Discipline/Trade	System or Equipment	TMP/Industry Recommendation	Owner Input/Comments
FIRE PROTECTION	Sprinklers (wet)	Per Code, required for new and substantial renovation.	
PLUMBING	Water Heaters	Dedicated (separate from boiler). Single unit (dual for Middle Schools) Gas Recirculation (by code)	
	Fixtures	Wall-hung Flush valve styles Hands off/sensor?	
	Valves	Ball type	
	Green/Environmental	Waterless urinals? Ultra low flow (1/2 gal)? Dual flush water closets?	
HVAC			
Heating & Ventilating	Boilers	Cast iron sectionals Condensing/high efficiency Multiple for back-up (minimum of 2 at 2/3 load each). Gas with modulating burners.	
		Hot water/glycol (30%); multiple pumps, primary and standby.	
	Terminal Equipment	Unit ventilators (Note: would not meet new CHPS 35db standards (if floor mounted), if adopted.) Available floor mounted and ceiling recessed and ducted. Fin tube radiation, convectors, unit heaters.	
		Indoor air units or rooftop units for assembly areas: cafeteria, gym, auditorium, libraries.	

Discipline/Trade	System or Equipment	TMP/Industry Recommendation	Owner Input/Comments
		Fan coil units (Note: would not meet new CHPS 35db standards (if floor mounted), if adopted.) Available floor mounted and ceiling recessed and ducted. Should be used only if cooling is part of design or future cooling a strong possibility.	
	Controls	Direct Digital Controls (DDC) prefer systems not be proprietary to control costs. Controls to allow for occupied/ unoccupied temperature settings and scheduling of on/off operation of all equipment.	
		Individual space temperature control. (Possibly shared in similar spaces in Administration areas.)	
	Valves	Ball, butterfly	
	Ventilation	Minimum code is 15 cfm/student (ducted systems being designed with 20 cfm / student). Increase to 20 to 25 cfm/student for areas with odors (Art, Science, Home Economics, etc.).	
		Fan coil systems require dedicated 100% outside air systems with heat recovery if over 5000 CFM (serving 10 +/- classrooms).	
	Temperature	72°F Winter (60° +/- adjustable unoccupied setback) 75°F Summer (with cooling) (Systems off in unoccupied.)	
	Moisture Control	Winter - No humidification Summer - No specific dehumidification criteria but is a by-product of air conditioning.	
Air Conditioning	(Administration/Health/Guidance /Library/Media/ Auditorium/Assembly spaces/interior spaces)	DX split systems using interior air handling unit and exterior air cooled condensing units (pending load and location of spaces).	
		Rooftop units/Hydronic or gas fired heating with DX cooling	

Discipline/Trade	System or Equipment	TMP/Industry Recommendation	Owner Input/Comments
		Most prudent budget choice is air cooled liquid chiller (required if fan coils or unit vents used for cooling; assume two-pipe/not four-pipe systems). Note that system can be set up for future cooling and chiller added later. If noise is an issue in an acoustically sensitive neighborhood, cooling tower with attenuators may be necessary with indoor chiller.	
ELECTRICAL	Service and Service Equipment	Connection to utility company services.	
		Sized per Massachusetts Electrical Code (MEC).	
		20% spare capacity.	
	Distribution	Main switchboard with aluminum bus. Panelboards with bolt-on circuit breakers and copper busway.	
		20% spare capacity.	
		Conduit and wire feeders and branch circuits. Metal-clad cable as allowed by MEC.	
	Emergency	Per MEC, Massachusetts State Building Code and NFPA.	
		Generator if fire pump is required and more than 300 occupants. Minimum 24-hour fuel storage for generator.	
		Life safety: specific lighting in large group and egress areas; connection to fire alarm system and security system.	
		Standby: connection to sump/ejector pumps; kitchen refrigeration, heating system to prevent freeze-up.	
	Fire Alarm	Per Massachusetts State Building Code, MEC, NFPA 72 and local Fire Department.	
		Automatic, fully supervised, analog addressable (voice/tone where required) evacuation type.	
		Manual pull stations and audible/visual (ADA approved) signals throughout facility.	

Discipline/Trade	System or Equipment	TMP/Industry Recommendation	Owner Input/Comments
		Visual signals in small toilets and conference rooms.	
		Voice evacuation provisions for auditorium/gymnasiums.	
		Smoke detectors in electric, telephone/ data, elevator machine rooms, elevator lobbies for elevator recall and in HVAC units.	
		Connections to sprinkler system.	
		Annunciator at front entrance and exterior beacon.	
		Connection to local fire department and UL Central Station.	
	Telephone	Connection to Verizon services.	
		Minimum of eight simultaneously used outside lines.	
		Outlet in all offices and classrooms.	
	Lighting	Per Massachusetts State Building Code, Chapter 13, Energy Conservation.	
		Per Illuminating Engineering Society (IES)	
		High efficiency energy savings lamps and electronic ballasts and LED exit signs.	
		Daylight harvesting where appropriate with photo cells/ dimming ballasts.	
		Occupancy sensors in classrooms, offices, conference rooms, small toilets, and storage rooms.	
	Convenience Power	Per Massachusetts Electric Code.	
		Duplex receptacles in all rooms with minimum of eight per classroom, three per office, and one per fifty feet in corridors.	
		Heavy duty receptacles for special equipment.	
	Sound and Intercom	Speakers throughout facility.	
		Administrative phone with zone paging and intercom to each classroom and teacher's room.	

Discipline/Trade	System or Equipment	TMP/Industry Recommendation	Owner Input/Comments
		Local sound system in auditorium, gymnasium.	
	Clock and Program	Master clock and program controller with system corrected clock throughout facility.	
		Connection to sound system for program tones.	
	Information Technology	Data/video headend equipment room.	
		Minimum one outlet per office/ conference room.	
		Minimum five per classroom/teaching space.	
		Minimum ten in Library.	
	Intrusion Alarm	Perimeter door status monitoring.	
		Motion detection in grade level classrooms with windows, at main and secondary entrances and all corridors/stairs, and high value rooms.	
		Closed circuit television surveillance at exterior and interior main entrance.	
		Card access readers at main and secondary entrances.	
		Notification of local Police Department.	
	Lightning Protection	Recommended for public buildings, not required by Code.	
	Seismic Restraints	Per Massachusetts State Building Code and Massachusetts Electrical Code.	
		Electrical system components secured to resist seismic forces as determined by Code.	

ELEMENTARY/MIDDLE SCHOOL STANDARDS
(Preliminary)

Site Standards

	Options	Recommendation	Owner Input/Comments
VEHICLE AC-COMODATIONS			
Parking	Bituminous Concrete	Clearly delineated parking provided for staff, short-term parent drop off/pickup and visitor parking.	
		Handicapped parking and accessible routes to building entrances.	
		Site lighting provided in all parking areas.	
Bus Drop-Off/Pickup	Blue Curb	Clearly delineated bus drop off, safe and accessible route from drop-off area to school entrance or student waiting area.	
		Pedestrian path to avoid crossing parking, drives or other vehicular areas.	
	On-site drive	Clearly delineated bus drop off, safe and accessible route from drop-off area to school entrance or student waiting area.	
		Drive wide enough to allow other vehicles to pass when busses are parked- must consider snowplowing and width of drive in winter conditions.	
		Pedestrian path to avoid crossing parking, drives or other vehicular areas.	
		Adequate site lighting provided for on site drives.	
Parent Drop-Off/Pickup	Blue Curb	Clearly delineated parent drop off, safe and accessible route from drop-off area to school entrance	
		Easily monitored site to avoid parking in drop-off space	
		Pedestrian path to avoid crossing parking, drives or other vehicular areas.	
	On Site drive	Clearly delineated parent drop off, safe and accessible route from drop-off area to school entrance	

	Options	Recommendation	Owner Input/Comments
		Drive wide enough to allow other vehicles to pass when parents are dropping off – must consider snowplowing and width of drive in winter conditions.	
		Easily monitored site to avoid parking in drop-off space	
		Adequate site lighting provided for on site drives.	
Pedestrian Routes to School		Curb cuts and marked crosswalks at all pedestrian crossings of external roads and interior drives.	
		Accessible sidewalks to accessible building entrances and egresses (including emergency egress).	
		Paths wide enough to accommodate foot traffic and plowing (5 feet minimum width, 8' typical for popular paths of travel).	
		No pedestrian routes through parking areas.	
RECREATION			
	Play structures (elementary school).	Two separate play structures preferred for children of different ages and abilities. Size of structures to accommodate number of children out at same time.	
		Swings where space allows.	
		Non-splintering materials – powder coated steel or aluminum framework, steel or recycled materials for decks.	
		Accessible play surfacing – poured in place polyurethane play surface designed for fall height of structure.	
		Accessible route into play area – no raised curbing at access points.	
		Trees or other method of providing shade in play areas.	
		Seating and trash receptacles provided for both school and after-school community use.	

	Options	Recommendation	Owner Input/Comments
	Paved Area Play	Smoothly paved bituminous concrete area for court sports (basketball most popular), wall ball or other ball sports and flexible play, which requires paved space (four squares, other).	
		Size of space adequate for ball sports and dependent upon number of students using facility at one time.	
	Turf Play	Large turf area to accommodate informal play such as running games, soccer drills etc. at a minimum to designed fields for baseball, softball and/or soccer.	
		Good drainage for all fields.	
		Irrigation may be provided where fields are also intensely used by competitive school or league play and require irrigation for turf health.	
		Size of turf fields dependant on type of sport and number of students (and after-school community users) out at one time.	
	General	Accessible, safe paths to all recreation areas.	
		Separation (planting, fences...) from roads, parking and vehicular areas.	
		Paths to recreation areas not to cross through parking areas and to avoid drive and other vehicular areas crossings.	
		Shaded seating provided for students, supervisors and/or spectators.	
PLANTING/ OTHER		Attractive plantings at entrances, outdoor common spaces and other site facilities.	
		Screening of dumpsters and utility areas.	
		Restoration/replacement of turf areas.	
	Concrete ramps & compliant metal hand-rails.	Accessible entrances and egress from building.	

	Options	Recommendation	Owner Input/Comments
	Paved accessible walks.		
		Provide outdoor education – gardens, outdoor classrooms, nature walks specific to individual school needs and programs.	
SECURITY		Fencing separating play areas from surrounding properties, roadways, parking and other unsafe areas for students.	
		Outdoor lighting around entire building face and any site facilities in use in the evenings.	
		Pruning/clearing of shrub beds where they pose safety issues for students (playing ball or hiding).	

B

Preliminary Elementary Educational Specifications

Preliminary Elementary Educational Specifications

TWO UNIT ELEMENTARY

Number of Students	252		300	
	No.	HMFH	No.	MSBA
Description of Spaces				
Kindergarten CR w/sink	2	2000	2	2400
First Grade CR w/sink	2	1700	2	1900
Second Grade CR w/sink	2	1700	2	1900
Third Grade CR w/sink	2	1700	3	1900
Fourth Grade CR w/sink	2	1700	2	1900
Fifth Grade CR w/sink	2	1700	2	1900
Classroom Subtotal	12	10,500		11,900
Average Size	12	875	13	915
Art Room	1	1000	1	1000
Art Storage	1	150	1	150
Music	1	1000	1	1200
Music Storage/Ensemble	2	150	2	150
After School Home Base	1	850	0	0
After School Office/Storage	1	250	0	0
Library	1	1500	1	2020
Learning Center/Sp&Lang	1	500	0	0
Conference Room	1	150	0	0
Resource Center	1	400	2	1000
Literacy Specialist/Reading	1	250	1	500
Self-Contained SPED CR	0	0	2	1900
Self-Contained SPED Toilet	0	0	2	120
Occupational Therapy	1	250	0	0
Physical Therapy	1	400	0	0
Gymnasium	1	3000	1	6000
Gym Storage	1	300	1	150
P.E. Office	1	150	1	150
Cafetorium + Storage	1	2250	1	1500
Stage	1	750	1	1000
ChairTable/Equipment Storage	0	0	1	200
Kitchen	1	750	1	1600
Teachers' Lunch Room	1	200	1	200
Teachers' Work Room/Lounge	1	350	1	300
General Office/Reception	0	250	1	300
Secretary/Waiting Room	1	125	1	125
Principal	1	250	1	375
Assistant Principal	0	0		0
Mail Room	1	100	1	100
Duplicating Room	1	150	1	150
Records Room	1	110	1	110
Conference	1	250	1	250
Spare Office	0	0	1	120
Nurse	1	200	1	250
Changing Room	1	100	1	60
Shower/ Exam Rooms	1	100	2	200
Guidance Office	1	150	1	150
Guidance Storeroom	1	35	1	35
Psychologist	1	200	0	0
Safe Room (ABA)	1	150	0	0
MCAS Testing	1	250	0	0
Reach Program	1	275	0	0
ELL Program	1	500	0	0
Mentor Program	1	275	0	0
Autism Therapy	1	250	0	0
Observation	1	150	0	0
Storage for Ski Club, etc.	1	300	0	0
Custodial/Storage/etc.	1	2100	1	2100
Support/Shared Space Subtotal		20,870		23,465
Total Net Area		31,370		35,365
Gross @ 1.50 Net-to-Gross		47,055		53,048
GSF/Pupil		187		177

THREE UNIT ELEMENTARY

Number of Students	350		355	
	No.	HMFH	No.	MSBA
Description of Spaces				
Kindergarten CR w/sink	3	3000	2	2400
First Grade CR w/sink	3	2550	3	2850
Second Grade CR w/sink	3	2550	2	1900
Third Grade CR w/sink	3	2550	3	2850
Fourth Grade CR w/sink	3	2550	2	1900
Fifth Grade CR w/sink	3	2550	3	2850
Classroom Subtotal	18	15750	15	14750
Average Size	18	875	15	983
Art Room	1	1000	1	1000
Art Storage	1	150	1	150
Music	1	1200	1	1200
Music Storage/Ensemble	2	150	2	150
After School Home Base	1	1000	0	0
After School Office/Storage	1	250	0	0
Library	1	2000	1	2450
Learning Center/Sp&Lang	1	500	0	0
Conference Room	1	150	0	0
Resource Center	2	800	2	1000
Literacy Specialist/Reading	1	500	1	500
Self-Contained SPED CR	0	0	2	1900
Self-Contained SPED Toilet	0	0	2	120
Occupational Therapy	1	250	0	0
Physical Therapy	1	500	0	0
Gymnasium	1	4000	1	6000
Gym Storage	1	300	1	150
P.E. Office	1	150	1	150
Cafetorium + Storage	1	2500	1	2000
Stage	1	750	1	1000
ChairTable/Equipment Storage	0	0	1	200
Kitchen	1	1000	1	1700
Teachers' Lunch Room	1	200	1	200
Teachers' Work Room/Lounge	1	350	1	350
General Office/Reception	1	250	1	300
Secretary/Waiting Room	1	125	1	125
Principal	1	250	1	375
Assistant Principal	0	0	0	0
Mail Room	1	100	1	100
Duplicating Room	1	150	1	150
Records Room	1	110	1	110
Conference	1	250	1	250
Spare Office	0	0	0	0
Nurse	1	200	1	250
Changing Room	1	100	1	60
Shower/ Exam Rooms	1	100	2	200
Guidance Office	1	150	1	150
Guidance Storeroom	1	35	1	35
Psychologist	1	200	0	0
Safe Room (ABA)	1	150	0	0
MCAS Testing	1	250	0	0
Reach Program	1	275	0	0
ELL Program	1	650	0	0
Mentor Program	1	275	0	0
Autism Therapy	1	250	0	0
Observation	1	150	0	0
Storage for Ski Club, etc.	1	300	0	0
Custodial/Storage/etc.	1	2200	1	2200
Support/Shared Space Subtotal		24,220		24,525
Total Net Area		39,970		39,275
Gross @ 1.50 Net-to-Gross		59,955		58,913
GSF/Pupil		171		166

FOUR UNIT ELEMENTARY

Number of Students	460		460	
	No.	HMFH	No.	MSBA
Description of Spaces				
Kindergarten CR w/sink	4	4000	3	3600
First Grade CR w/sink	4	3400	3	2850
Second Grade CR w/sink	4	3400	3	2850
Third Grade CR w/sink	4	3400	4	3750
Fourth Grade CR w/sink	4	3400	3	2850
Fifth Grade CR w/sink	4	3400	3	2850
Classroom Subtotal	24	21,000	19	18,750
Average Size	24	875	19	987
Art Room	2	1600	2	2000
Art Storage	2	500	2	300
Music	2	2000	2	2400
Music Storage/Ensemble	2	300	2	300
After School Home Base	1	1200	0	0
After School Office/Storage	1	250	0	0
Library	1	2500	1	2880
Learning Center/Sp&Lang	1	500	0	0
Conference Room	1	150	0	0
Resource Center	3	1500	3	1500
Literacy Specialist/Reading	1	750	1	750
Self-Contained SPED CR	0	0	3	2700
Self-Contained SPED Toilet	0	0	3	180
Occupational Therapy	1	250	0	0
Physical Therapy	1	500	0	0
Gymnasium	1	5000	1	6000
Gym Storage	1	250	1	150
P.E. Office	1	150	1	150
Cafetorium + Storage	1	2750	1	2500
Stage	1	1000	1	1000
ChairTable/Equipment Storage	0	0	1	300
Kitchen	1	1450	1	1800
Teachers' Lunch Room	1	250	1	250
Teachers' Work Room/Lounge	1	400	1	400
General Office/Reception	1	350	1	350
Secretary/Waiting Room	1	125	1	125
Principal	1	300	1	375
Assistant Principal	0	0	1	120
Mail Room	1	100	1	100
Duplicating Room	1	150	1	150
Records Room	1	110	1	110
Conference	1	250	1	250
Spare Office	1	120	1	120
Nurse	1	250	1	250
Changing Room	1	60	1	60
Shower/ Exam Rooms	2	200	2	200
Guidance Office	1	200	1	300
Guidance Storeroom	1	35	1	35
Psychologist	1	200	0	0
Safe Room (ABA)	1	150	0	0
MCAS Testing	1	250	0	0
Reach Program	1	250	0	0
ELL Program	1	650	0	0
Mentor Program	1	275	0	0
Autism Therapy	1	250	0	0
Observation	1	150	0	0
Storage for Ski Club, etc.	1	400	0	0
Custodial/Storage/etc.	1	2300	1	2300
Support/Shared Space Subtotal		30,375		30,405
Total Net Area		51,375		49,155
Gross @ 1.50 Net-to-Gross		77,063		73,733
GSF/Pupil		168		160



C

Preliminary Middle Educational Specifications

Preliminary Middle School Educational Specifications

6-8 MIDDLE (1 team/grade)

Description of Spaces	400	
	No.	MSBA
Classrooms - General	13	12,350
Small Group Seminar	1	500
Science Classroom/Lab	3	3600
Prep Room	2	160
CR, Seminars & Labs Subtotal		16,610
Self-Contained SPED	4	3800
SPED Toilets	3	180
Resource Room	2	1000
Small Group Room/Reading	1	500
Art Classroom	1	1200
Art Workroom/Storage	1	150
Band/Chorus	1	1500
Music/Practice/Ensemble	1	200
Media Center/Reading Room	1	2680
Technical Classroom	1	1200
Technical Shop	1	2000
Gymnasium	1	6000
Gym Storeroom	1	150
Health Instructor's Office	1	250
Locker Rooms	2	2000
Cafetorium (Large Group)	1	2680
Stage	1	1600
Chair/Table/Equipment Storage	1	200
Kitchen	1	1700
Staff Lunch Room	1	200
Teachers' Work Room/Lounge	1	300
General Office/Waiting Room	1	300
Teachers/Mail/Time Room	1	100
Duplicating Room	1	200
Records Room	1	200
Principal's Office/Conference	1	375
Secretary/Waiting	1	125
Assistant Principal's Office	1	150
Supervisory/Spare Office	1	120
General Conference Room	1	350
Nurse's Office/Waiting Room	1	250
Examination Room/Resting	2	200
Medical Suite Toilet	1	60
Guidance Office	2	300
Guidance Waiting Room	1	100
Guidance Storeroom	1	50
Custodian's Office	1	150
Custodian's Workshop	1	250
Custodian's Storage	1	375
Recycling Room / Trash	1	400
Receiving and General Supply	1	200
Storeroom	1	400
Network/Telecom Room	1	200
Support/Shared Space Subtotal		34,345
Total Net Area		50,955
Gross @ 1.50 Net-to-Gross		76,433

6-8 MIDDLE (2 teams/grade)

Description of Spaces	750	
	No.	MSBA
Classrooms - General	25	23,750
Small Group Seminar	2	1000
Science Classroom/Lab	6	7200
Prep Room	3	240
CR, Seminars & Labs Subtotal	36	32,190
Self-Contained SPED	7	6650
SPED Toilets	5	300
Resource Room	4	2000
Small Group Room/Reading	2	1000
Art Classroom	2	2400
Art Workroom/Storage	1	150
Band/Chorus	1	1500
Music/Practice/Ensemble	1	200
Media Center/Reading Room	1	4700
Technical Classroom	2	2400
Technical Shop	2	4000
Gymnasium	1	6000
Gym Storeroom	1	150
Health Instructor's Office	1	250
Locker Rooms	2	2000
Cafetorium (Large Group)	1	5000
Stage	1	1600
Chair/Table/Equipment Storage	1	300
Kitchen	1	2050
Staff Lunch Room	1	300
Teachers' Work Room/Lounge	1	450
General Office/Waiting Room	1	400
Teachers/Mail/Time Room	1	100
Duplicating Room	1	200
Records Room	1	200
Principal's Office/Conference	1	375
Secretary/Waiting	1	125
Assistant Principal's Office	2	300
Supervisory/Spare Office	1	120
General Conference Room	1	350
Nurse's Office/Waiting Room	1	250
Examination Room/Resting	2	200
Medical Suite Toilet	1	60
Guidance Office	4	600
Guidance Waiting Room	1	100
Guidance Storeroom	1	50
Custodian's Office	1	150
Custodian's Workshop	1	250
Custodian's Storage	1	375
Recycling Room / Trash	1	400
Receiving and General Supply	1	300
Storeroom	1	600
Network/Telecom Room	1	200
Support/Shared Space Subtotal		49,105
Total Net Area		81,295
Gross @ 1.50 Net-to-Gross		121,943

D

Middle School Enrollment Projections

MIDDLE SCHOOL ENROLLMENT PROJECTIONS*

School	Grade	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
Bigelow	6	169	151	174	159	154	209	185	211	234	227	225
	7	167	172	152	176	161	156	211	187	214	237	230
	8	159	168	174	153	176	162	156	212	188	215	238
Subtotal		495	491	500	488	491	527	552	610	636	679	693
Brown	6	225	224	241	234	246	241	253	260	265	265	264
	7	201	223	223	240	232	244	240	251	258	263	263
	8	236	203	225	224	241	233	245	240	252	259	264
	SPED	3	3	3	3	3	3	3	3	3	3	3
Subtotal		665	653	692	701	722	722	740	754	777	789	794
Day	6	236	281	247	296	310	311	317	320	335	333	336
	7	257	240	285	250	300	314	316	322	324	339	338
	8	254	258	240	284	250	300	314	315	321	324	339
Subtotal		747	779	772	830	860	925	947	957	980	996	1,013
Oak Hill	6	194	203	207	222	219	230	262	279	292	292	291
	7	185	196	204	209	223	219	231	263	280	293	293
	8	188	187	198	205	209	223	219	231	263	280	293
Subtotal		567	586	609	636	651	672	712	773	835	865	877
Total M.S.	6	824	858	869	911	929	992	1,016	1,070	1,126	1,117	1,117
	7	810	832	864	875	916	934	998	1,022	1,076	1,132	1,124
	8	837	815	836	866	876	917	935	999	1,023	1,077	1,134
	SPED	3	3	3	3	3	3	3	3	3	3	3
Total M.S.		2,474	2,508	2,572	2,655	2,724	2,846	2,952	3,094	3,228	3,330	3,377
Increase/Decrease			34	65	83	69	122	106	142	134	102	47
Cumulative			34	98	181	250	372	478	620	754	856	903

* Source: Newton School Department

E

Assessment Questionnaire



Newton Schools Study
 Assessment Questionnaire

HMFH Architects, Inc.

An initial phase of the citywide schools study process is information gathering. This task begins with asking you to answer the following questions. Feel free to add any additional relevant information. Please email the filled-out form to Heidi.Black@newton.k12.ma.us by **Wednesday, March 14, 2007**.

Feel free to leave any questions blank that are not applicable to you. Thank you for your time.

Name/Title of Respondent: _____ School: _____

1 BUILDING:
 Identify building conditions or materials that interfere with or limit activities within the building.

Are there reoccurring issues, such as roof leaks, security, door/window operation, etc., due to the physical condition of the building?

2 BUILDING SYSTEMS:
 With regard to HVAC systems, identify any conditions that:
 a. interfere with physical or visual comfort in the building

 b. interfere with the ability to teach or learn in the building

With regard to lighting/electrical systems, identify any conditions that:
 a. interfere with physical or visual comfort in the building

 b. interfere with the ability to teach or learn in the building

With regard to plumbing systems, identify any conditions that:
 a. interfere with physical or visual comfort in the building

 b. interfere with the ability to teach or learn in the building

Newton Schools Study
 Assessment Questionnaire

HMFH Architects, Inc.

With regard to technology/communications systems, identify any conditions that:

- a. interfere with physical or visual comfort in the building

- b. interfere with the ability to teach or learn in the building

With regard to security systems, identify any conditions that:

- a. interfere with physical or visual comfort in the building

- b. interfere with the ability to teach or learn in the building

3 SITE:
 Identify existing aspects of the school's site that interfere with safe and efficient operations.

Identify existing site elements that are particularly significant to the schools success and image.

Identify the highest priority improvements for outdoor uses such as for gym/P.E., education, etc.

Identify community use, either after school or during the summer months.

Newton Schools Study
 Assessment Questionnaire

HMFH Architects, Inc.

4 EDUCATIONAL PROGRAM:

From an educational standpoint, what non-existent program space(s) would be the highest priority?

From an educational standpoint, what current program space(s) are not meeting the educational needs?

5 ADDITIONAL COMMENTS:



F

Facility Assessments

Elementary Schools:

- Angier - 19
- Bowen - 27
- Burr - 35
- Cabot - 43
- Countryside - 51
- Franklin - 59
- Horace Mann - 67
- Lincoln-Eliot - 75
- Mason-Rice - 83
- Memorial-Spaulding - 91
- Peirce - 99
- Underwood - 107
- Ward - 115
- Williams - 123
- Zervas - 131

Middle Schools:

- Bigelow - 139
- Brown - 147
- Day - 155
- Oak Hill - 163

Other:

- Carr - 171
- Education Center - 179

Newton Schools Study - Facility Assessment							
ANGIER SCHOOL							
1697 Beacon Steet							
BUILDING DATA:							
	site area:	1.98 Acres					
	zoning district:	PUB					
	building area:	51,300 gross square feet					
	number of floors:	3					
	historical status:	unknown					
	year built:	1919					
	additions/renovations/upgrades:	1936					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof	No active leaks reported, metal roof edge in good condition/ 6 years	NO	NO	NO	NO	1	
Exterior walls	Load bearing masonry, concrete window/door surrounds, watertable and detailing. Newer brick window headers at rear and sides of bldg.	Good/original	NO	NO	NO	NO	1	Repair and clean
Windows	Aluminum w/ thermal break and thermal glazing, fixed, hopper & awning types	Good/unknown	NO	NO	NO	NO	1	Note: Opaque blank off panels at upper windows. Translucent in some areas. All should be replaced with insulated glass panels.
Doors/hardware	Aluminum w/ pebble fiberglass panels	Good condition, hardware is non accessible/recent	NO	YES	NO	NO	2	Replace with accessible hardware & auto-open device
Areaways	Concrete retaining walls with painted steel grates, open steel pipe guardrail.	Steel grates appear sound. Areaways are clean and are well maintained.	NO	NO	YES	NO	3	Replace or modify guardrails.
Exterior steps/ramps	Concrete ramp w/ painted steel pipe guardrail at main door. One step landing at all other doors are non accessible.	Fair condition. Landings are original; ramp's age is unknown	NO	YES	NO	NO	3	Provide accessible entrances
Structural concerns	None.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed brick full height @ upper corridors; painted plaster walls, typical and at basement corridor	Fair/original. Exposed conduit, panels, etc. detract functionally & aesthetically.	NO	NO	NO	NO	3	Note: CMU walls do not adapt well to service upgrades.
Floors	Carpet and VCT	Carpet is in fair condition. VCT is in good condition.	NO	NO	NO	NO	2	Replace carpet w/ VCT.
Ceilings	2x4 ACT and 2x2 ACT; some areas w/ original painted plaster.	Good/recent. Older ceilings have sagging/stained tiles.	NO	NO	NO	NO	2	Replace older tiles.
Doors/borrowed lights	Wood solid core doors w/ wood frames and wire glass lights	Fair/original	NO	NO	NO	NO	3	Refinish or replace.
Hardware		Fair/original	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Minimal. Faculty room has laminate counter/cabinets. Others are wood.	Good/recent. Fair/original	NO	YES	NO	NO	1	Note: minimal storage capacity throughout building.
Lockers/cubbies	Wood cubbies in corridors.	Fair/unknown	NO	NO	YES	NO	3	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Various: vertical & horizontal blinds, and shades	Good/recent; Fair/older versions.	NO	NO	NO	NO	2	Replace/upgrade to provide consistent light control.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Toilet rooms	Adult & Student: CMU, ceramic tile, VCT, plaster; wood/metal partitions	Poor/original. Non accessible	NO	YES	NO	NO	3	Replace/upgrade toilet rooms
Stairs	Concrete w/ steel nosing; metal hand & guardrails	Fair/original. Railings are non accessible.	NO	YES	NO	NO	3	Replace railings.
Elevator	None. Stair lift at main entry stair.	Good/recent. Impedes function of main circulation stair when in use.	NO	YES	NO	NO	3	Note: Stair lift does not provide access to entire building.
Signage	Minimal, mostly on paper.	Poor.	NO	YES	NO	YES	4	Provide code-compliant signage.
Gymnasium equipment	Wood athletic floor; wood backstops. Gym is inaccessible.	Poor/recent. Flooding destroyed recent floor, currently unusable.	NO	YES	NO	NO	4	Replace floor. Provide accessible gymnasium.
Kitchen	Warming Kitchen	Good/functional	NO	NO	NO	NO	1	
Cafeteria	VCT floor/painted plaster walls	Fair/functional	NO	NO	NO	NO	1	Note: "Cafeteria" is located in the basement corridor.
Code concerns	<ul style="list-style-type: none"> 1. Exterior doors are non accessible and entries are at stair landings (split stairs) providing limited access. 2. All door hardware in non accessible. 3. Exposed electrical conduit/panels, piping, etc. throughout building. 4. Doors swing open into original stairwells, obstructing the path of travel. 5. Open cubbies in corridor create a flammability risk. 6. Stair lift does not access all floors of the buiding (excludes gym and two classrooms). 7. No visual of front entry creates a security risk. 8. Quantity and distribution of toilet facilities does not meet code. 							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by oil w/UV's AC in offices	Poor - 86 years	Boiler inefficient	NO	NO	Mechanical ventilation below standard or missing in areas	4	Systems are past their normal useful life
Plumbing	Piping unknown	Poor - 86 years	NO	Student fixtures not accessible; faculty minimal	NO	Fixtures not water conserving	4	Systems are past their normal useful life
Fire Protection	None						-	
Electrical Service Equipment	400A. 3 phase, 4 wire, 120/208V	Fair - + 30 years	NO	NO	NO	Insufficient working clearances	3	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair - + 30 years	NO	NO	NO	NO	3	Should be upgraded.
Emergency System	Two indoor generators; small serves lighting, large serves building.	Fair - + 50 years Fair - + 40 years	NO	NO	NO	Insufficient working clearances; Not 2 hour fire rated room.	3-4	Both generators should be replaced with one Code compliant unit with 2 hour rated room or exterior mounted.
Fire Alarm System	Multi-zone: ADA compliant; corridor smoke detectors and door holders; master box.	Good - 5-10 years	NO	NO	NO	Mounting height and locations of some pull stations.	2	Some pull stations should be relocated.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Telephone System	Multiple outside lines.	Good - 5-10 years	NO	NO	NO	NO	2	New in 2001. Phone lines should be extended to classrooms.
Lighting System	Generally 2x4 recessed fluorescent	Fair to Good - + 20 years	NO	NO	NO	No multiple switches in offices with natural light. No occupancy sensors in classrooms.	2-3	Broken and discolored lenses should be replaced. Additional fixtures needed in some rooms. New energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Fair to Good - + 30 years	NO	NO	NO	NO	3-4	Additional receptacles/circuits needed throughout facility.
Security System	Control panel in Teacher's room closet; keypads at specific doors; Motion detectors in corridors and stairs; Notifies UL Central Station.	Fair - Mixed	NO	NO	NO	NO	3	System will need upgrading.
Sound/Intercom	Dial phone and speaker in classrooms; ceiling speakers in corridors.	Good - 6 years	NO	NO	NO	NO	2	No independent sound systems
Clock/Program Bell System	Classroom and Office battery clock. Corridor and classroom speaker with bell tones.	Good - 6 years	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas; Minimal wireless system.	Good - 6 years	NO	NO	NO	NO	2	Additional data outlets needed in classrooms.
Cablevision System	None						-	Service should be provided.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminoust concrete at side of building, small parking area in rear	Fair. No accessible route from live parking to school; inadequate separation between parking and paved play area.	NO	YES	YES	NO	3	Repair/reconfiguration
Sidewalks/ramps	Concrete	Fair/poor - entrance ramps are in poor condition, concrete sidewalk by play area in disrepair. Rear entrances are not accessible.	NO	YES	NO	NO	3	Reconstruction
Fields	Turf/skinned infield	Drainage problem in field. No accessible route.	NO	YES	NO	NO	3	Repair
Plantings	Attractive groves of trees, lawn and plantings at building		NO	NO	NO	NO		
Play structures	2 separate: K-2 (timber), and 3,4,5 (steel), swingset in adjacent park	K-2 fair/poor - 3,4,5 good. K-2 surfacing/structure is not accessible	NO	YES	NO	NO	3	Reconstruction for K-2
Courts	Bituminous concrete basketball at school, tennis and bb at adjacent park	School basketball/fair, Park facilities/good	NO	NO	NO	NO	3	Reconfigure basketball
Benches/bike racks	Located in front of school and by play area	Good	NO	NO	NO	NO	1	
Fencing	Wire mesh, steel fencing at rear and side perimeter	Good	NO	NO	NO	NO	1	
Lighting	Parking area lighting	None						
	Building flood lights	Fair	NO	NO	NO	NO	3	Replace lighting.
	Exterior door lights	Fair	NO	NO	NO	NO	3	Replace lighting.

Newton Schools Study - Facility Assessment									
BOWEN SCHOOL									
280 CYPRESS STREET									
BUILDING DATA:									
	site area:	11.54 acres							
	zoning district:	PUB							
	building area:	63,915 gross square feet							
	number of floors:	3							
	historical status:	None							
	year built:	1952							
	additions/renovations/upgrades:	1989, 2000							
	assessment value:	n/a							
Key to Rating:									
1 = New or in good condition with ordinary maintenance required									
2 = Good condition with minor repairs required									
3 = Fair condition with repairs or replacement required									
4 = Poor condition with replacement required									



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof	Leak in new stairwell reported, metal roof edge in good condition/10 years	NO	NO	NO	NO	1	
Exterior walls	Load bearing masonry/concrete sills/stone detailing @ main façade.	Good/original. Significant cracks of brickwork and concrete foundation, rusting lintels	NO	NO	NO	NO	2	Repair and clean, see note under "Structural concerns" below.
	Brick veneer, concrete sills	Good/2000	NO	NO	NO	NO	1	
Windows/louvers	Aluminum w/ thermal break and thermal glazing, fixed & single-hung operable and hopper operable; metal louvers	Good/age unknown-single-hung; good/2000-hopper; fair/original-louvers	NO	NO	NO	NO	2	Repair/replace damaged or missing screens. Note: difficult to operate, questionable quality. Replace louvers.
Doors/hardware	Painted metal, metal, aluminum, aluminum w/ pebble fiberglass panels; metal and wood frames	Fair/original or ages unknown; good/newer, hardware is non accessible	YES	YES	NO	NO	3	Replace doors and provide accessible hardware & auto-open device
Canopies	Galvanized sheet metal over original material; metal roof edge	Fair/age unknown, dented, stained	NO	NO	NO	NO	3	Repair/replace
Exterior steps/ramps	Concrete stoops, steps and ramps w/ painted steel pipe guardrails	Good/newer, main entry. Fair/original. Spalling, deteriorating concrete. Rusting handrails, guardrails	NO	YES	NO	NO	2-3	Repair/patch concrete. Replace or repair rails and guardrails.
Structural concerns	Masonry/foundation cracks at exterior	Poor in local areas.	NO	NO	NO	NO	4	Repairs required.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed CMU w/ painted plaster above @ corridors; painted plaster walls, typical; and with 1x1 acoustic treatment at upper walls	Good/original. Refurbished classroom door surrounds are non accessible	NO	YES	NO	NO	2	Modify openings to comply with accessibility codes
	Painted gypsum wallboard w/ vinyl base and wood chair rail.	Good/2000	NO	YES	NO	NO	1	
Floors	Carpet, VAT, VCT, sheet vinyl, slate at entries	Fair/original, ages unknown; good/2000	NO	NO	NO	NO	3	Replace carpet and VAT with VCT
Ceilings	1x1 ACT, painted plaster, 2x4 ACT and 2x2 ACT	Good/2000	NO	NO	NO	NO	1	Replace damaged tiles.
Doors/borrowed lights	Wood solid core doors w/ metal frames	Good/2000; Fair/original	NO	NO	NO	NO	2	See "Partitions" for accessibility issue.
Hardware		Good for ~75%/2000; Fair/original	NO	YES	NO	NO	2	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Wood, metal, laminate	Good/2000; Fair/original	NO	YES	NO	NO	3	Replace casework to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Metal, single-tier, 15" x 60" for 2 students; metal, single-tier, narrow for 1	Good/2000; Fair/original--rusting. Sized too small for shared use, non accessible hardware	NO	YES	NO	NO	3	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Rolling shades, typical, vertical blinds	Good/age unknown	NO	NO	NO	NO	2	
Toilet rooms	Adult: CMU, ceramic tile	Fair/original.	NO	YES	NO	NO	3	Upgrade toilet rooms.
	Student: glazed CMU & ceramic tile; painted metal and wood partitions	Fair/original.	NO	YES	NO	NO	3	Upgrade toilet rooms.
	Ceramic tile floor and wainscot; accessible toilets	Good/2000, accessible	NO	NO	NO	NO	1	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments	
Stairs	Colored, aggregate concrete w/ steel nosing; wood/metal hand & guardrails	Good/original. Railings and stair nosing are non accessible. Horizontal railings are spaced too wide.	NO	YES	YES	NO	3	Modify with wire mesh. Replace stair nosing. Provide guardrails and handrails to meet current code requirements.	
	Concrete/metal pan construction; painted metal hand & guardrails	Good/2000	NO	NO	NO	NO	1		
Elevator		Good/2000	NO	NO	NO	NO	1		
Signage	Plastic plaques	Good/2000; Fair/all other, non accessible	NO	YES	NO	NO	3	Install signage to meet code.	
Gymnasium equipment	Wood athletic floor and backstops	Good/original	NO	NO	NO	NO	1		
	Glazed CMU full height and 2x4 ACT	Good/original	NO	NO	NO	NO	1		
Auditorium	VAT and carpet at aisles	Good/original.	NO	NO	NO	NO	3	Replace VAT with VCT	
	Painted plaster walls, painted wood platform surround; 1x1 ACT	Good/original	NO	NO	NO	NO	2		
	Wood platform/steps; lift; fabric curtain	Unable to view/original. Platform is accessible by a lift from the auditorium. Lift and curtain: good/2000	NO	NO	NO	NO	-	Note: used for Music/Drama	
	Wood seats; 330 seats	Good/2000--accessible seats are not provided	NO	YES	NO	NO	2	Provide accessible seating.	
Kitchen	Warming kitchen	Good/functional	NO	NO	NO	NO	1		
Code concerns	1. "Dead end" corridors do not meet code requirements. 2. At original stairs the guardrail spacing is too open--needs to be modified/replaced.								

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by oil, office by central AC, 3 Special Rooms air conditioned.	Poor/original 57 years	Boiler inefficient	NO	NO	NO	4	One operable boiler. One new boiler, one old (dead). System lousy, hot/cold, variable heat, erratic, potential flooding underground. Storm was blocked in '06, cleaned.
Plumbing	Piping original, unknown.	Poor/original	NO	Accessible toilets in Lobby and Second Floor Girls, Faculty.	NO	Some coverage issues.	2	A and E uses appear not to be separated. No standpipes.
Fire Protection	Sprinkler System	Good/2000	NO	Coverage not to code in some areas	NO	Insufficient working clearances	3	Should be upgraded.
Electrical Service Equipment	400A. 3 phase, 4 wire, 120/208V	Fair - + 50 years and much newer.	NO	NO	NO	Insufficient working clearances	3	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair - + 50 years and much newer	NO	NO	NO	NO	3	Should be upgraded.
Emergency System	Diesel exterior generator serves corridor and stair lighting and boilers. (Probably entire facility.)	Good - + 10 years	NO	NO	NO	No 2-hour fire rated room for life safety system equipment.	2-3	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Fire Alarm System	Multi-zone: ADA compliant; Library and corridor smoke detectors and door holders; exterior master box.	Good - 5 years	NO	NO	NO	Mounting height and locations of some pull stations.	2	Some pull stations should be relocated.
Telephone System	Multiple outside lines.	Good - 5 years	NO	NO	NO	NO	2	
Lighting System	Generally 2x2 and 2x4 recessed fluorescent; surface wrap around in corridors.	Good - + 5 years	NO	NO	NO	NO	3	Energy efficient lamps and electronic ballasts by utility company. Gym lighting should be upgraded.
Receptacles	Generally standard duplex type.	Fair - + 50 years in existing wing; Good - + 5 years in Addition.	NO	NO	NO	NO	3-4	Additional receptacles/circuits needed in existing wing.
Security System	Keypad at Auditorium entrance; Motion detectors in corridors, Library, and stairs; Notifies UL Central Station.	Fair - Mixed - + 5 to 20 years	NO	NO	NO	NO	3	System will need upgrading.
Door Bell System	Push button at front and back doors. Buzzer in Admin. office.	Fair	NO	NO	NO	NO	3-4	
Sound/Intercom System	Surface speakers and dial phone in classrooms; Not heard well in corridors, toilets, and exterior.	Fair - + 30 years and newer.	NO	NO	NO	NO	2-3	Need corridor, toilet and exterior speakers.
Clock/Program Bell System	Classroom and Office battery clocks. No bell tones in corridor or exterior.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	Need bell tones in corridors and exterior.
Information Technology System	Data in classrooms and office areas. Wireless in Library.	Good - 10 years	NO	NO	NO	NO	2	Additional data outlets needed in classrooms.
Cablevision System	Outlets in classrooms and Library.	N/A					-	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Cars parked on concrete sidewalk adjacent to drop-off, bit conc drive and parking around building	Concrete - good, bit conc - fair	NO	YES	NO	NO	1 and 3	Cars block conc sidewalk - access issue, no marked route from hc parking to entrance, bit conc - resurface
Sidewalks/ramps	Concrete front walk	Good	NO	NO	NO	NO	1	
	Brick seating area	Good	NO	NO	NO	NO	1	
	Concrete left entrance ramp	Fair	NO	YES	NO	NO	3	Rails non-compliant
	New concrete sidewalk at back of school	Good	NO	NO	NO	NO	1	Under construction
Fields	Turf and skinned baseline - baseball, soccer	Fair	NO	YES	NO	NO	3	No accessible route from school, turf restoration
Plantings	Attractive plantings at entrance and new play area	Good	NO	NO	NO	NO	1	
Play structures	5-12 timber, new climbing/net structure, new steel swings wood fibre surfacing	Good	NO	YES	NO	NO	2	Wood fiber surfacing
Courts	None seen - under construction							
Benches/bike racks	Wood/steel benches in brick seating area in front	Good	NO	NO	NO	NO	1	
Fencing	Some perimeter CLF	Fair	NO	NO	NO	NO	3	Repair
Lighting	Parking area lighting	None						
	Building flood lights	Fair/original, ages unknown; Good/newer	NO	NO	NO	NO	3	Replace lighting.
	Pole lighting at walkway around building	Good/new	NO	NO	NO	NO	1	
	Exterior door lights at canopies	Poor/original. Rusted, most likely do not work.	NO	NO	NO	NO	4	Replace lighting.

Newton Schools Study - Facility Assessment							
Burr School							
171 Pine Street							
BUILDING DATA:							
	site area:	8.65 acres					
	zoning district:	PUB					
	building area:	53,000 gross square feet					
	number of floors:	2					
	historical status:	None					
	year built:	1967					
	additions/renovations/upgrades:	1998 (walls at 2nd floor classrooms)					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof	No active leaks reported, metal roof edge in good condition/ 20 years	YES	NO	NO	NO	2	Roofing > 20 years old may not meet current codes.
Exterior walls	Exposed concrete structure	Fair. Applied stucco w/ white stone aggregate falling off. Stucco spalling. Original	NO	NO	YES	NO	3	Remove stones, seal concrete and paint.
	Precast concrete and brick infill.	Good/original	NO	NO	NO	NO	1	
Windows/louvers	Aluminum frame, single-pane glazing, no thermal break; wood frame at entry; metal louvers	Frames peeling/deteriorating; windows poorly sealed. Polycarbonate glazing clouded, translucent - no longer transparent.	YES	NO	NO	NO	4	Replace entire window system, scrape and paint louvers.
Doors/hardware	Steel doors; wood doors	Poor condition, hardware is non accessible/original	YES	YES	NO	NO	4	Replace with accessible hardware & auto-open device.
	Aluminum w/ pebble fiberglass panels	Good condition	NO	YES	NO	NO	2	Install auto-open device
Exterior steps/ramps	Concrete stairs and ramp at main entry w/ aluminum rails	Good condition, minor concrete cracks; rusting at railings, railings do not meeting current AAB requirements.	NO	YES	YES	NO	2	Replace guardrails/handrails
Structural concerns	None.							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Painted CMU and painted plaster @ corridors; painted plaster walls, typical.	Good/original	NO	NO	NO	NO	2	
Second floor partitions	Painted gypsum wallboard w/ vinyl base, typical	Good/1998	NO	NO	NO	NO	1	
Floors	Carpet, typical w/ some remaining VAT	Fair	NO	NO	NO	NO	3	Replace carpet and VAT w/ VCT.
	VCT	Good/1998, on-going installation of VCT	NO	NO	NO	NO	1	
Ceilings	2x4 ACT, typical; some 2x2 ACT	Stained, sagging tiles; good condtion overall	NO	NO	NO	NO	2	Replace damaged tiles.
Doors/borrowed lights	Wood solid core doors w/ metal frames	Fair/original; good/1998	NO	NO	NO	NO	2	
Hardware		Good for ~75%/1998; Fair/original	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Stainless steel sink/counters w/ painted wood cabinet, typ.; laminate counter/cabinets	Poor/original; good elsewhere	NO	YES	NO	NO	3	Replace casework to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Wood veneer cubbies	Good/1998	NO	NO	NO	NO	1	
Window treatments	Rolldown shades	Good	NO	NO	NO	NO	1	
Toilet rooms	Adult: painted CMU/ceramic tile walls, VCT; wood/metal partitions	Poor/original. Non accessible	NO	YES	NO	NO	3	Replace/upgrade toilet rooms
	Student: glazed CMU & ceramic tile; metal partitions	Good	NO	NO	NO	NO	1	
Stairs	Concrete w/ steel nosing; wood/metal hand & guardrails	Good/original. Railings and stair nosing are non accessible.	NO	YES	NO	NO	2	Replace railings & stair nosing. Install guard rails.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments	
Elevator		Good	NO	NO	NO	NO	1	Note: elevator does not provide access to all spaces	
Signage	None		NO	YES	NO	NO	2	Install signage per AAB code	
Gymnasium	Wood athletic floor; wood paneling and 1x1 acoustic tiles at walls; wood backstops; operable wall	Good/original. Acoustic tiles are poor/deteriorating. Operable wall does not work.	NO	NO	NO	NO	2	Replace acoustic tile.	
Auditorium / Cafeteria	VCT	Good	NO	NO	NO	NO	1		
	Birch plywood paneling	Good/original	NO	NO	NO	NO	1		
	Wood platform is portable but is never moved; multiple fabric curtains	Good condition but inaccessible; curtains are poor/deteriorating	NO	YES	NO	NO	3	Provide ramp for accessibility; replace curtains.	
Kitchen	Warming kitchen	Good/functional	NO	NO	NO	NO	1		
Code concerns	1. Elevator does not provide access to all floor levels. 2. Open cubbies in corridor create a flammability risk.								



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Hot water by gas, UV's in CR's (poor). AC top floor corridors and offices.	Poor - 45 years	Boiler inefficient	NO	NO	Ventilation issues	3	Central plant in good condition. One new boiler. AC office and CR corridors only. Serious oil in pneumatic lines issues.
Plumbing	Piping original, unknown	Fair - 45 years	NO	Fixtures not accessible	NO	NO	3	
Fire Protection	None							
Electrical Service Equipment	800A. 3 phase, 4 wire, 120/208V	Fair - + 45 years	NO	NO	NO	NO	3-4	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair - 45 years and much newer	NO	NO	NO	NO	3-4	Should be upgraded.
Emergency System	15kW gas indoor generator in boiler room; serves corridor and stair lighting.	Fair - 45 years	NO	NO	NO	Insufficient working clearances; Not 2-hour fire rated room.	3-4	Generator should be replaced with Code compliant unit in 2-hour rated room.
Fire Alarm System	Multi-zone: ADA compliant; classroom, Library, and corridor smoke detectors and door holders; master box.	Good - 3 to 4 years. Can't be heard in some areas.	NO	Mounting height and locations of some pull stations.	NO		2	Some pull stations should be relocated. Add signals in areas where audibility is poor.
Telephone System	Multiple outside lines.	Good - 5 years	NO	NO	NO	NO	2	New in 2002. Phone lines should be extended to classrooms.
Lighting System	Generally 2x2 and 2x4 recessed fluorescent	Good - + 20 years	NO	NO	NO	No multiple switches in classrooms with natural light.	2-3	Broken and discolored lenses should be replaced. New energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Fair to Good - 45 years and much newer; recently upgraded with plugmold.	NO	NO	NO		3	Additional receptacles/circuits should be added throughout.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Security System	Keypads at specific doors; Motion detectors in corridors and stairs; Monitor switches on most exterior doors; interior alarm; Notifies UL Central Station.	Fair - Mixed - 10 years	NO	NO	NO	NO	3	System will need upgrading.
Door Bell System	Push button at front and back entrances.	Fair	NO	NO	NO	NO	3-4	
Sound/Intercom System	Dial phone and speaker in offices; non dial phone in classrooms; ceiling/wall speakers in corridors.	Good - 5 years; allcall paging needs repair and not heard in some areas.	NO	NO	NO	NO	2	Independent sound system in Gym needs repair. Portable system in Auditorium. Add speakers in areas where audibility is poor.
Clock/Program Bell System	Classroom and Office battery clocks. Corridor and classroom speaker with bell tones.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas; Minimal wireless system.	Good - 5 years	NO	NO	NO	NO	2	
Cablevision System	Outlets in Teacher's Room and Library	Good - + 10 years					-	



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete at side of building, no parking outside of teachers drive	Good in front/fair in rear. No accessible route from faculty parking to school	NO	YES	NO	NO	2	Repair
Sidewalks/ramps	Concrete ramps	New ramp to accessible building entrance	NO	NO	NO	NO	1	
		Front stair railing collapsing	NO	YES	YES	NO	4	Repair
		Catch basin at entrance plaza collapsing	NO	YES	YES	NO	4	Repair
	Bituminous concrete sidewalks	Fair	NO	NO	NO	NO	3	Repair
Fields	Turf/skinned base area	Fair	NO	YES	NO	NO	3	Repair, fields constructed over landfill, may be settling/drainage issues. Accessible route needed of some of the fields
Plantings	Mature plantings and lawn areas at front of school, attractive grove of mature trees to side of school	Lawn areas are eroded	NO	NO	NO	NO	3	Reconstruct eroded lawns
Play structures	2 separate: tot swings and garden , and large 3,4,5,	K-2 fair/poor - 3,4,5 good/fair. Surfacing (both) is not accessible	NO	YES	NO	NO	3	Reconstruction for K-2, repair/reconstruction for 3,4,5, need to cross drive to get to play area
Courts	Bituminous concrete basketball & tennis	Poor, no accessible route to tennis	NO	YES	NO	NO	4	Resurface
Benches/bike racks	Benches located at larger play area and in garden area	Good	NO	YES	NO	NO	1	benches in non- accessible areas
Fencing	Wire mesh, steel fencing at rear and side perimeter, separating faculty parking and paved play space	Fair/poor	NO	NO	NO	NO	3	repair/replace
Lighting	Parking area lighting	1 flood light on utility pole - good	NO	NO	NO	NO	1	
	Building flood lights	50% Fair/age unknown; 50% Good/newer	NO	NO	NO	NO	3	Replace lighting.
	Exterior door lights	50% Fair/age unknown; 50% Good/newer	NO	NO	NO	NO	3	Replace lighting.



Newton Schools Study - Facility Assessment							
CABOT SCHOOL							
229 CABOT STREET							
BUILDING DATA:							
	site area:	1 acre					
	zoning district:	PUB					
	building area:	41,000 gross square feet					
	number of floors:	3					
	historical status:	None					
	year built:	1929					
	additions/renovations/upgrades:	1957, 1991-modulars					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Asphalt shingle pitched roof	No active leaks reported, metal roof edge in good condition/14 years	NO	NO	NO	NO	2	
	Flat roof	No active leaks reported, metal roof edge in good condition/14 years	NO	NO	NO	NO	2	
Exterior walls	Load bearing masonry/concrete sills/stone detailing @ main façade.	Good/original. Minor cracks and staining at masonry, rusting lintels	NO	NO	NO	NO	1	Repair and clean
Windows/louvers	Aluminum w/ thermal break and glazing, fixed, hopper and awning types. Opaque panels at top. Replacement plexi-glass/Lexan. Metal louvers.	Good/age unknown; Poor/original--louvers, dented, rusted, peeling	NO	NO	NO	NO	3	Replace translucent windows w/ insulated glass panels. Replace louvers
	Steel single-pane storefront system	Poor/1957	YES	NO	NO	NO	4	Replace system.
Doors/hardware	Aluminum, metal and wood	Poor/ages unknown. Hardware is non accessible.	YES	YES	NO	NO	4	Replace with accessible hardware & auto-open device
Exterior steps/ramps	Concrete stairs, stoops and ramp w/ painted steel pipe guardrails	Fair/original, concrete is deteriorating and railing supports are rusting. Railings do not meet accessibility code.	NO	YES	NO	NO	3	Repair concrete and replace railings
Structural concerns	None.							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Painted plaster and concrete, typical, painted gypsum wallboard	Fair/original, patched, cracks, peeling. Door surrounds do not meet accessibility code.	NO	YES	NO	NO	3	Repair/paint as necessary. Modify door surrounds to meet code.
Floors	Carpet, typical, VCT, VAT, sheet vinyl	Poor/original or ages unknown	NO	NO	NO	NO	4	Replace carpet and VAT w/ VCT.
Ceilings	Painted plaster, 2x4 ACT and 2x2 ACT	Good/original plaster, ACT ages unknown	NO	NO	NO	NO	2	Replace damaged tiles.
Doors/borrowed lights	Wood solid core doors w/ metal frames	Fair/original	NO	NO	NO	NO	3	
Hardware		Fair/original, hardware is non accessible	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Wood, metal, laminate	Fair/original	NO	YES	NO	NO	3	Replace to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Wood cubbies, metal lockers of various sizes	Fair/ages unknown--seem to be "hand-me-down"	NO	YES	NO	NO	3	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Rolling shades, typical	Good/age unknown	NO	NO	NO	NO	2	



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Toilet rooms	Adult: Painted plaster and gypsum wallboard, VAT and VCT; wood/metal partitions	Poor/original. Non accessible	NO	YES	NO	NO	4	Replace/upgrade toilet rooms
	Student: glazed or painted CMU, ceramic tile walls and floors; metal partitions	Poor/original. Non accessible	NO	YES	NO	NO	4	Replace/upgrade toilet rooms
Stairs	Painted concrete w/ steel nosing; wood/metal hand & guardrails	Good/original. Railings and stair nosing are non accessible.	NO	YES	NO	NO	2	Replace railings & stair nosing.
Elevator	None		NO	YES	NO	NO	4	Install elevator
Signage	Plastic plaques	Fair/age unknown	NO	YES	NO	NO	3	Replace signage to include braille
Gymnasium/Assembly	Wood athletic floor and backstops; wood paneling and painted CMU above; exposed acoustic deck	Good/original	NO	NO	NO	NO	2	
	Wood platform; fabric curtains	Fair/original; platform is not accessible; Good/newer curtains	NO	YES	NO	NO	3	Provide ramp or lift solution for access to the platform
Kitchen	Warming kitchen	Functional	NO	NO	NO	NO	2	
Code concerns	<ul style="list-style-type: none"> 1. The majority of the building is inaccessible--no elevator. 2. All hardware is non accessible. 3. Open cubbies in corridor create a flammability risk. 4. No visual of front entry creates a security risk. 5. Kindergarten without windows (one skylight only). 							
Modulars (2 classrooms, 1 support space and toilet rooms)	Wood vertical siding; pre-fab metal walls, ACT and carpet	Poor/~16 years old, siding is deteriorating, physical connection is poor						Due to modular location one room was reduced in size (the library) and a second room does not have windows. Two additional classroom modulars are scheduled for September 2007.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by oil, unit ventilators in Classrooms, some with companion exhausters. AC in Office and modulars.	Poor/original 78 years.	Boiler inefficient. Heat left on over night due to slow warm up.	NO	NO	NO	4	Only one operable boiler. Pipes leaking in Boiler Room.
Plumbing	Piping original, unknown	Poor/original	NO	Fixtures not accessible	NO	No domestic hot water throughout school.	4	Domestic water piping is corroded, pitting on inside, leaks patched with clamps.
Fire Protection	None						-	
Electrical Service Equipment	600A. 3 phase, 4 wire, 120/208V	Fair to Poor - + 50 years	NO	NO	NO	Insufficient working clearances	3-4	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair to Poor - + 50 years	NO	NO	NO	NO	3-4	Should be upgraded.
Emergency System	10kW gas indoor generator in boiler room; serves corridor and stair lighting.	Poor - + 50 years; not working; being fixed.	NO	NO	NO	Insufficient working clearances; Not 2 hour fire rated room.	3-4	Generator should be replaced with Code compliant unit in 2-hour rated room.
Fire Alarm System	Multi-zone: not ADA compliant; Library and corridor smoke detectors and door holders; exterior master box.	Good - + 30 years. Not heard throughout.	NO	NO	NO	Mounting height and locations of some pull stations.	2	All signals need to be ADA; Some pull stations should be relocated. Additional signals needed where audibility is poor.
Telephone System	Multiple outside lines.	Good - 3 years	NO	NO	NO	NO	2	New in 2004.
Lighting System	Generally 2x2 recessed, surface wraps and surface metal box fluorescents.	Good - 10 to 20 years	NO	NO	NO	NO	2-3	Lenses need replacement in some areas. New energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Fair to Good - + 50 years and newer now being installed.	NO	NO	NO	NO	3-4	Additional receptacles/circuits should be added throughout.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Security System	Keypad at Custodian door; Motion detectors in corridors and Administration office; Monitor switches on exterior doors; Notifies UL Central Station.	Fair - Mixed - 10 years	NO	NO	NO	NO	3	System will need upgrading.
Door Bell System	Push button at rear and front entrance; Bell in Admin.	Fair	NO	NO	NO	NO	3-4	
Sound/Intercom System	classrooms and offices; ceiling speakers in corridors; Independent system in Auditorium.	Good - 5 years. Some repairs needed.	NO	NO	NO	NO	2	
Clock/Program Bell System	Classroom and Office battery clocks radio controlled. Corridor and classroom speaker with bell tones.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas; Minimal wireless system.	Good - 6 years	NO	NO	NO	NO	2	Additional data outlets needed in all classrooms.
Cablevision System	Outlets in science classroom and adjacent room.	Good - 20 years					-	



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete	Fair/poor	NO	NO	NO	NO	4	Replace/resurface - repair potholes
Sidewalks/ramps	Concrete curb ramp & entrance ramp & stair	Fair/poor	NO	YES	NO	NO	3	Surface condition
	Concrete/bituminous concrete front walks	Fair	NO	YES	NO	NO	3	Surface condition, some sections need to be replaced
	Concrete ramp to play area entrance	Poor	NO	YES	NO	NO	4	Drop off on stoop/ replace
	Brick seating area at side of school	Good	NO	NO	NO	NO	1	
	Ramp & stairs - access from parking area	Poor	NO	NO	NO	NO	4	Replace
Fields	Turf - skinned base area, L.L. baseball & soccer	Good/fair	NO	YES	NO	NO	2	Some turf restoration needed, curb cut but no accessible route to field
Plantings	Mature trees @ front & play area, turf	Plantings are in good or fair condition/turf is in poor condition	NO	NO	NO	NO	2 and 3	Turf compaction & shaded out
Play structures	5-12 - steel & swings - timber	5-12 is in good condition, swings are in fair condition	NO	YES	NO	NO	1 and 2	Play structure is accessible, swings are not
Courts	Bituminous concrete paved area @ school front for ball sports	Fair/poor	NO	YES	YES	NO	3	Old concrete footing is tripping/safety hazard, resurface
Benches/bike racks	Recycled composite benches by fields, seating area - metal bike rack	Good	NO	NO	NO	NO	1	
Fencing	CLF @ perimeter	Fair	NO	NO	NO	NO	3	Repair framework at front, new fabric in some areas
Lighting	Parking area lighting	None						
	Building flood lights	Fair/age unknown	NO	NO	NO	NO	3	Replace lighting.
	Exterior door lights	Poor/original.	NO	NO	NO	NO	4	Replace lighting.



Newton Schools Study - Facility Assessment							
COUNTRYSIDE SCHOOL							
191 DEDHAM STREET							
BUILDING DATA:							
	site area:	7.39 acres					
	zoning district:	PUB					
	building area:	65,000 gross sq. ft.					
	number of floors:	3					
	historical status:	None					
	year built:	1953					
	additions/renovations/upgrades:	1958, 1988, (1991-M, 1999-M)					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof	Leaks reported/ 20 years, some new sections	YES	NO	NO	NO	2	Roofing >20 years old may not meet current codes.
Exterior walls	Load bearing masonry/concrete sills/polished granite at main entries	Good/original. Staining at concrete sills.	NO	NO	NO	NO	1	Clean concrete
Windows/louvers	Aluminum w/ thermal break and thermal glazing, fixed & single-hung operable; metal louvers	Good/~2001; Poor/original-louvers	NO	NO	NO	NO	3	Repair/replace damaged or missing screens. Note: difficult to operate, questionable quality. Replace louvers.
	Steel frame, single-pane glazing, metal louvers	Poor/original	YES	NO	NO	NO	4	Replace .
Doors/hardware	Metal, wood, aluminum, aluminum w/ pebble fiberglass panels; metal frames	Good/newer; Poor/original and age unknown. Hardware is non accessible.	YES	YES	NO	NO	3	Replace doors, provide accessible hardware & auto-open devices.
Areaways	Brick/CMU w/ metal grate	Good/original	NO	NO	NO	NO	1	
Exterior steps/ramps	Concrete steps, stoops, ramps with metal pipe handrails/guardrails	Fair/original, rusting at rails	NO	YES	NO	NO	3	
Canopies	Metal-edged, flat roofed w/ brick piers and metal panel soffits	Good/original, metal is worn/faded	NO	NO	NO	NO	2	
Structural concerns	None.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed CMU @ corridors; painted plaster walls, typical; 1x1 ACT at upper walls; painted gypsum wall board	Good/original. Door surrounds are non accessible	NO	YES	NO	NO	3	Modify openings to comply with accessibility codes. No acoustic privacy between two sensitive spaces.
Floors	VAT, VCT, carpet, terrazzo	Fair/ages unknown; Good/newer VCT	NO	NO	NO	NO	3	Replace carpet and VAT w/ VCT
Ceilings	1x1 ACT, painted plaster, typical; 2x4 ACT and 2x2 ACT	Good	NO	NO	NO	NO	1	Replace damaged tiles.
Doors/borrowed lights	Wood solid core doors, some painted, w/ metal and wood frames	Fair/original	NO	NO	NO	NO	3	See "Partitions" for accessibility issue.
Hardware		Fair/original	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Wood, metal, laminate	Fair to poor/original. 2 classrooms without sinks.	NO	YES	NO	NO	3	Replace casework, provide accessible hardware/sinks/fixtures.
Lockers/cubbies	Metal, single-tier, 15" x 60" for 2 students; wood cubbies	Poor/original--rusting. Sized too small for shared use, non accessible hardware	NO	YES	NO	NO	3	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Rolling shades, typical	Good/age unknown	NO	NO	NO	NO	2	Replace as needed
Toilet rooms	Adult: CMU, ceramic tile, VCT; wood/metal partitions	Poor/original. Non accessible	NO	YES	NO	YES	4	Replace/upgrade toilet rooms. Too few toilet rooms and poorly distributed.
	Student: glazed CMU full height, 2x2 terrazzo tile, painted plaster ceiling; painted steel partitions	Poor/original. Non accessible	NO	YES	NO	YES	4	Replace/upgrade toilet rooms. Too few toilet rooms and poorly distributed.
Stairs	Painted concrete w/ steel nosing; wood/metal hand & guardrails	Good/original. Railings and stair nosing are non accessible.	NO	YES	NO	NO	2	Replace railings & stair nosing.
Elevator	None		NO	YES	NO	NO	4	Install elevator
Signage	None		NO	YES	NO	NO	4	Install signage to include braille

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Gymnasium equipment	Wood athletic floor and backstops	Good/original	NO	NO	NO	NO	2	
	Glazed CMU, full height; 2x2 ACT	Fair/ original-CMU, major vertical crack; Fair/age unknown-ACT, sagging/stained	NO	NO	NO	NO	3	Investigate/repair crack; replace ACT ceiling
Auditorium	VAT and poured concrete floor; painted plaster w/acoustic treatment at ceiling	Good/original.	NO	NO	NO	NO	2	
	Wood paneling at platform surround and wainscot; painted plaster w/acoustic treatment at walls	Good/original.	NO	NO	NO	NO	2	
	Wood platform; fabric curtains; painted plaster ceiling	Poor/original. Platform is not accessible from auditorium. Good/newer-curtains	NO	YES	NO	NO	4	Refinish/replace flooring. Provide accessible route from auditorium. Note: used for Music
	Wood seats, 432 seats	Good/original. No accessible seats	NO	YES	NO	NO	2	Provide accessible seating.
Kitchen	Warming kitchen	Good/functional	NO	NO	NO	NO	1	
Code concerns	<ul style="list-style-type: none"> 1. Use of Auditorium lobby for program space interferes with the path of egress. 2. No elevator. 3. Site grading at building perimeter causes extreme "ponding" at main entry and creates a safety risk. 4. Flooding at the basement level storage areas may cause a health risk. 5. Quantity and distribution of toilet facilities do not meet code. 6. Open cubbies create a flammability risk. 							
Modulars (4 classrooms plus 2 support spaces)	Wood vertical siding; carpet, VCT, 2x4 ACT	Fair/1991 and 1999						Note: too close to wetlands. No nearby toilet facilities.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by oil, classroom unit ventilators without supplemental radiation.	Poor/original, 54 years	Boiler inefficient, unit ventilators run 24/7	NO	NO	Ventilation is suspect in some areas	4	Only one operable boiler. Boilers have been flooded a couple of times, ATC compressor "blows off".
Plumbing	Piping original, unknown	Unknown/ original, fair to poor	NO	Marginal accessibility	NO	Domestic hot water not available at all sinks.	4	Domestic water circulator looks inoperable. Ground water flooding in Basement from slightest rain.
Fire Protection	None						-	--
Electrical Service Equipment	400A. 3 phase, 4 wire, 120/208V	Fair - + 50 years	NO	NO	NO	insufficient working clearances	3	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair - + 50 years	NO	NO	NO	NO	3	Should be upgraded.
Emergency System	150kW diesel exterior generator serves corridor and stair lighting and boilers. (Possibly entire facility.)	Good - 5 to 10 years	NO	NO	NO	No 2-hour fire rated room for life safety system equipment.	2	
Fire Alarm System	Multi-zone: ADA compliant; auditorium and corridor smoke detectors and door holders; heat detectors in basement; master box.	Good - 5 years	NO	NO	NO	Mounting height and locations of some pull stations.	2	Some pull stations should be relocated.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Telephone System	Multiple outside lines.	Good - 10 years	NO	NO	NO	NO	2	Phone lines should be extended to classrooms.
Lighting System	Generally 2x2 and 2x4 recessed fluorescent; surface wrap around in classrooms and some corridors.	Good - + 15 years	NO	NO	NO	NO	2	Energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Fair - + 50 years	NO	NO	NO	NO	3-4	Additional receptacles/circuits needed throughout facility.
Security System	Keypads at specific doors; Motion detectors in corridors and stairs; Notifies UL Central Station.	Fair - Mixed - + 30 years	NO	NO	NO	NO	3	System will need upgrading.
Door Bell System	Push button at front door. Buzzer in office area.	Fair	NO	NO	NO	NO	3-4	
Sound/Intercom System	Privacy switches and surface speakers in classrooms; corridor speakers; exterior speakers.	Fair - + 30 years	NO	NO	NO	NO	3-4	
Clock/Program Bell System	Classroom and Office battery clocks. Corridor speakers with bell tone.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas. Some wireless.	Good - 10 years	NO	NO	NO	NO	2	Additional data outlets needed in classrooms and some offices.
Cablevision System	None						-	Service should be provided.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete at side of school	Fair	NO	YES	NO	NO	3	Settlement @ curbramp is access issue, resurface
Sidewalks/ramps	Concrete sidewalks - sides of drive	Poor	NO	YES	NO	NO	4	Poor surface condition/replace
	Bituminous concrete @ front	Fair	NO	NO	NO	NO	3	
	Bituminous concrete courtyard	Fair	NO	NO	NO	NO	3	Resurface
Fields	Turf and skinned baseline - baseball, soccer	Fair/poor	NO	YES	NO	NO	3	No access path to field
Plantings	Mature plantings at school front, turf, garden @ courtyard	Plantings - fair/good, turf - fair/poor	NO	NO	NO	NO	2 and 3	Turf restoration
Play structures	(2) 5-12 timber/steel and K-2 timber/steel, swings	Good	NO	YES	NO	NO	2	Wood fibre surfacing, no accessible path to area
Courts	Bituminous concrete paved play area, basketball	Play area - fair, basketball - good	NO	YES	NO	NO	2	No marked crosswalk across drive, access path onto court has settled
Benches/bike racks	Wood/steel benches at front & fields	Good	NO	YES	NO	NO	2	Placement in fields - not accessible
Fencing	Perimeter CLF, vinyl coated CLF at front	Fair/poor	NO	NO	NO	NO	3	Repair framework/replace
Lighting	Parking area lighting	None						
	Building flood lights	Good/newer; Poor/older	NO	NO	NO	NO	3	Replace lighting.
	Exterior door lights	Poor/original. Rusted, most likely do not work.	NO	NO	NO	NO	4	Replace lighting.



Newton Schools Study - Facility Assessment							
FRANKLIN SCHOOL							
125 DERBY STREET							
BUILDING DATA:							
	site area:	5.45 Acres					
	zoning district:	PUB					
	building area:	56,764 gross square feet					
	number of floors:	3					
	historical status:	None					
	year built:	1939					
	additions/renovations/upgrades:	1950, 1953					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Slate pitched roof w/ wood cupola; painted wood soffit	Good/original; peeling wood soffit	YES	NO	NO	NO	2	Scrape, paint wood soffit. The original roofing does not meet current energy codes.
	Flat roof	No active leaks reported/ 20 years	YES	NO	NO	NO	2	Roofing >20 years old may not meet current codes.
Exterior walls	Brick veneer / load bearing masonry/concrete sills/stone detailing.	Good/original	NO	NO	NO	NO	1	
Windows/louvers	Aluminum w/ thermal break and thermal glazing, fixed & single-hung operable; metal louvers	Good/~2000 replacement; Fair/original louvers--rusting, peeling, damaged	NO	NO	NO	NO	2	Repair/replace damaged or missing screens. Replace louvers. Note: difficult to operate, questionable quality. Poor style selection.
	Glass Block at Gym	Poor/original. Damaged block, poorly infilled; metal mesh installed over block is rusted and has stained concrete window surround.	YES	NO	NO	NO	3	Replace with translucent insulated panels.
Doors/hardware	50% aluminum w/ pebble fiberglass panels; 50% metal; painted wood trim and detailing	Good/newer doors; Fair/original, hardware is non accessible. Wood trim is peeling	YES	YES	NO	NO	2	Replace doors. Replace with accessible hardware & auto-open device. Scrape, paint wood trim.
Areaways	Concrete retaining walls with painted steel grates, open steel pipe guardrails.	Fair/original. Deteriorating concrete, minor cracks at foundation, grates are rusted but appear structurally sound.	NO	NO	NO	NO	3	Repair/patch concrete, scrape and paint grates. Replace or modify guardrails. Remove flimsy fiberglass awning and steel framework over basement stairway-- provide more permanent solution.
Exterior steps/ramps	Concrete ramp w/ stone face; granite steps. With painted steel pipe guardrails	Good/age unknown at main entry; poor/original all other locations, concrete is deteriorating and railing supports are rusting and not secure	NO	NO	YES	NO	3	Repair or replace ramps and railings as needed.
Structural concerns	None.							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed CMU w/ painted plaster above @ corridors; painted plaster walls, typical	Good/original	NO	NO	NO	NO	2	
Floors	VAT, Carpet, VCT, Sheet Vinyl	Fair/original	NO	NO	NO	NO	3	Replace VAT, carpet and sheet vinyl w/ VCT.
Ceilings	Painted plaster, typical, 2x4 ACT and 2x2 ACT	Good/original; some stained/damaged areas	NO	NO	NO	NO	2	Replace damaged tiles. Repaint painted clgs.
Doors/borrowed lights	Painted wood solid core doors w/ wire glass in metal frames	Fair/original	NO	NO	NO	NO	2	
Hardware		Fair/original	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Wood, metal, laminate. Wood pivot doors for storage in classroom.	Poor/original. Inadequate student individual storage.	NO	YES	NO	NO	2	Replace casework to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Various types. Metal, single-tier, 15" x 60" for 2 students and wood closets in classrooms	Poor/age unknown--rusting. Sized too small for shared use, non accessible hardware. Poor/original wood closets.	NO	YES	NO	NO	3	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Rolling shades, typical. Vertical blinds at Auditorium/Cafeteria	Good/age unknown	NO	NO	NO	NO	1	
Toilet rooms	Adult: CMU, ceramic tile, VCT; wood/metal partitions	Poor/original. Non accessible	NO	YES	NO	NO	4	Replace/upgrade toilet rooms
	Student: glazed CMU & ceramic tile; metal partitions; painted plaster at upper walls and ceilings	Fair/original, age of metal partitions unknown. Peeling plaster at walls/ceiling	NO	YES	NO	NO	3	Replace/upgrade toilet rooms
Stairs	Painted concrete w/ steel nosing; wood/metal hand & guardrails	Good/original. Railings and stair nosing are non accessible.	NO	YES	NO	NO	2	Replace railings & stair nosing.
Elevator		Good/recent, age unknown	NO	NO	NO	NO	1	
Signage	Plastic plaques	Poor, non accessible	NO	YES	NO	NO	4	Replace signage to include braille



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Gymnasium equipment	Wood athletic floor and backstops	Good/original	NO	NO	NO	NO	2	
	Glazed CMU walls, 1x1 acoustic tile ceiling	Good/original--walls; Fair/original--ceiling	NO	NO	NO	NO	2	Replace ceiling
Auditorium/Cafeteria/Music	VCT floor, glazed CMU w/ regular CMU above, 2x4 ACT	Good/original-walls; Good/age unknown flooring; Good/original ceiling--some stains	NO	NO	NO	NO	2	Replace damage ceiling tiles. (Note: 3 lunches)
	Wood platform	Good/original. Platform is non accessible.	NO	YES	NO	NO	3	Provide accessible route to platform.
Kitchen	Warming kitchen	Good/functional	NO	NO	NO	NO	1	
	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Code concerns	<ul style="list-style-type: none"> 1. Not all areas are accessible. 2. Quantity and distribution of toilet facilities does not meet code. 3. All door hardware is non accessible. 4. No visual of front entrance creates a security risk. 							
"Permanent" modulars (4 classrooms)	Wood vertical siding and brick; single-pane glazing and pvc replacement casement windows; VCT and 2x4 ACT	Poor/age unknown.						

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by oil, old unit ventilators in classrooms.	Boilers replaced, distribution system original. Fair to poor, 68 years.	Boiler inefficient	NO	NO	Classroom exhaust probably inoperable. Librarian reports musty smells.	4	Distribution system and terminal devices old and antiquated. Heating reported to be "awful"; hot and cold throughout.
Plumbing	Piping original, unknown.	Condition unknown. Fair to poor.	NO	Limited to none	NO	NO	4	Sewer odors in Boy's toilet.
Fire Protection	None						-	
Electrical Service Equipment	Inaccessible	--	-	-	-	-	-	--
Distribution System	Circuit breaker panelboards with conduits and wire feeders.	Fair to Good - 39 years and much newer.	NO	NO	NO	NO	3	
Emergency System	Exterior generator.	Good - 5 years	NO	NO	Possibly no separation of life safety, lighting system.	NO	2	New in ± 2002 possibly serves entire building.
Fire Alarm System	Multi-zone; not ADA compliant; Library and corridor smoke detectors and door holders; master box.	Good - 25 years	NO	NO	NO	Mounting height and locations of some pull stations.	2	Signals need to be ADA compliant. Some pull stations should be relocated.
Telephone System	Multiple outside lines.	Good - 10 years.	NO	NO	NO	No	2	Should be upgraded.
Lighting System	2x2 recessed fluorescent in corridors; classroom surface and suspended fluorescent. Auditorium 2x4 recessed fluorescent.	Good - 5 to 10 years	NO	NO	NO	Most classrooms without multiple switches.	2	New energy efficient lamps and electronic ballast by utility company.
Receptacles	Generally standard duplex type	Fair ± 50 years and under	NO	NO	NO	NO	2	Additional receptacles/circuits needed in classrooms and office area.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Security System	Keypads at specific doors; motion detectors in corridors; Notifies UL Central Station	Mixes - 5 to 15 years	NO	NO	NO	NO	3	System will need upgrading.
Door Bell System	Intercom at front door; control station in Admin.	Working	NO	NO	NO	NO	3	
Sound/Intercom System	with private switches in classrooms; ceiling speakers in corridors. Auditorium with independent system.	Fair - + 20 years	NO	NO	NO	NO	3	System needs to be upgraded.
Clock/Program Bell System	Classroom and Office battery clocks; Corridor and classroom speakers with bell tones.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas	Good - 5 to 10 years	NO	NO	NO	NO	2	Additional data outlets needed in classrooms.
Cablevision System	Unknown						-	



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete at back of building, some parent drop-off in parking area	Poor	NO	YES	NO	NO	4	Resurface, conflict between staff parking and parents dropping off at rear, accessible route through parking not marked
Sidewalks/ramps	Concrete ramps	Ramp to accessible building entrance-good, ramp from gym to play spaces	NO	YES	NO	NO	2	Top rail on ramp - obstructed w/ vertical posts, repair crack at entrance ramp
		Side entrances to fields not accessible	NO	YES	NO	NO	3	
		Ramp from gym to recreational facilities failing, rails not compliant	NO	YES	NO	NO	3	
	Bituminous concrete paths	Fair/poor - sinkhole	NO	YES	YES	NO	3	
		Rear building entrances deteriorating	NO	YES	NO	NO	3	
Fields	Turf/skinned base area	Good	NO	YES	NO	NO	1	
Plantings	Mature plantings and planting at front of school/some eroded turf slopes at sidewalk	Good/fair	NO	NO	NO	NO	2	Restoration of eroded slope @ sidewalk
Play structures	2 separate: k-2, and 3,4,5,	3,4,5 - fair/good, surfacing and edging not accessible, k-2 fair/poor	NO	YES	NO	NO	2	Repair/replace surfacing, need to cross drive to access play area
Courts	Bituminous concrete basketball	Good	NO	NO	NO	NO	1	
Benches/bike racks	Benches located at play area, benches located at attractive seating area at front	Some very good (new), some poor	NO	YES	NO	NO	3	Replace old benches, benches located in non-accessible locations
Fencing	Wire mesh, steel fencing at rear and side perimeter separating play areas and at front	Fair/good	NO	NO	NO	NO	2	Repair
Lighting	Parking area lighting	None						
	Building flood lights	Good/newer; Fair/older	NO	NO	NO	NO	3	Replace lighting.
	Exterior door lights	None						



Newton Schools Study - Facility Assessment							
HORACE MANN SCHOOL							
687 WATERTOWN ST							
BUILDING DATA:							
	site area:	1.59 Acres					
	zoning district:	PUB					
	building area:	37,500 gross square feet					
	number of floors:	3					
	historical status:	None					
	year built:	1965					
	additions/renovations/upgrades:	2001-enclosed operable w/ walls					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof	No active leaks reported, metal roof edge in good condition/ 17 years	NO	NO	NO	NO	2	
Exterior walls	Brick veneer w/ concrete window surrounds at upper level; painted CMU at lower level w/murals	Good/original. Minor cracks, spalling and staining at concrete, rusting lintels	NO	NO	NO	NO	1	Patch/repair/clean concrete
Windows/louvers	Steel-frame, single-pane glazing, metal louvers	Poor/original, inadequate amount of operable windows	YES	NO	NO	NO	4	Replace windows.
Doors/hardware	Metal/wire glass doors in metal frames	Good/original w/ glass replacement at necessary; hardware is non accessible.	NO	YES	NO	NO	2	Replace with accessible hardware & auto-open device
Exterior steps/ramps	Concrete landing at main entry; concrete and bituminous at rear entry	Good/age unknown at main entry; Poor, inaccessible at rear entry	NO	YES	NO	NO	3	Upgrade entry path to be accessible
Structural concerns	None.							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Painted CMU, plaster, and gypsum wallboard (enclosing original operables), typical; exposed brick at building perimeter	Good/original. Door surrounds are not accessible.	NO	YES	NO	YES	3	Modify openings to comply with accessibility code. Note: secondary corridors-- too narrow, 3', do not meet code
Floors	VAT at corridors; carpet and VCT at classrooms, typical	Good/original VAT, age unknown for VCT and carpet	NO	NO	NO	NO	2	Replace carpet and VAT w/ VCT.
Ceilings	Tectum acoustic ceilings, typical; some painted plaster	Good/original	NO	NO	NO	NO	2	Replace damaged tiles.
Doors/borrowed lights	Wood solid core doors w/ painted wood frames	Fair/original frames; good/newer doors	NO	NO	NO	NO	2	See "Partitions" for accessibility issue.
Hardware		Good/newer hardware, does not meet accessibility code	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Wood storage closets, custodial sinks some with laminate counter/cabinet; painted wood closets at corridor	Poor/original and poor updates	NO	YES	NO	NO	4	Replace built-ins to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Wood closets in corridor and classrooms; one location w/ coat hooks and one location w/ wood cubbies	Poor/original	NO	YES	NO	NO	3	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Horizontal blinds, typical	Fair/age unknown	NO	NO	NO	NO	3	Replace/upgrade to provide consistent light control.
Toilet rooms	Adult: ceramic tile floor and wainscot tile at walls	Poor/original. Non accessible	NO	YES	NO	NO	3	Replace/upgrade toilet rooms
	Student: epoxy floor, vinyl walls, laminate partitions	Good/2006 upgrade, non accessible	NO	YES	NO	NO	3	Replace/upgrade toilet rooms
Stairs	Concrete w/ steel nosing; wood/metal hand & guardrails	Poor/original. Railings and stair nosing are non accessible.	NO	YES	NO	NO	3	Replace railings & stair nosing.
Elevator	None		NO	YES	NO	NO	4	Install elevator



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Signage	None		NO	YES	NO	NO	4	Install AAB signage.
Gymnasium	Wood athletic floor and backstops	Fair/original	NO	NO	NO	NO	3	
	Wood paneling and painted CMU above	Fair/original	NO	NO	NO	NO	3	
Assembly/Cafeteria/Music	VAT; painted CMU and wood paneling at walls	Fair/original; clerestory light blocked with metal panels	NO	NO	NO	NO	3	Replace VAT w/ VCT
Kitchen	Warming kitchen	Good/functional	NO	NO	NO	NO	1	
Code concerns	<ul style="list-style-type: none"> 1. No elevator. 2. Secondary corridors are too narrow (3') and do not meet code for educational use. 3. All stairs are open from floor-to-floor, therefore no protected egress path. 4. Basement art classroom, book room, and music space with no windows. 5. Quantity and distribution of toilet facilities does not meet code. 6. Open cubbies in corridor create a flammability risk. 							
Modulars (1 classroom, 1 Library)	Wood vertical siding; carpet and 2x4 ACT	Poor/arrived in 2001, were previously at a middle school and Carr, ~10 years old. Poor physical connection to school--leaks.						Due to modular location one room was reduced in size, the windows of a second room look out at the modular 4' away. Additional classroom modular is scheduled for September 2007, which will block all windows to a current classroom.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Hot water by gas, UV's in CR's. AC in Office, mod's and a couple CR's.	Fair - 43 years	One boiler inefficient	NO	NO	Ventilation issues (Art, Music, etc.)	3	AC in mod's & offices. One new boiler in '07.
Plumbing	Piping original, unknown	Fair - 43 years	NO	Yes. Toilets redone in '06, reused fixtures.	NO	Water conservation, not enough fixtures	3	Electric and gas domestic water heater's twinned.
Fire Protection	None						-	
Electrical Service Equipment	800A. 3 phase, 4 wire, 120/208V	Fair - + 43 years	NO	NO	NO	Insufficient working clearances	3-4	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair - + 43 years	NO	NO	NO	NO	3-4	Should be upgraded.
Emergency System	30kW gas indoor generator in boiler room; serves corridor and stair lighting and boilers.	Fair - + 43 years	NO	NO	NO	Insufficient working clearances; Not 2 hour fire rated room.	3-4	
Fire Alarm System	Multi-zone: ADA compliant; corridor smoke detectors and door holders; heat detectors in classrooms; master box.	Good - 3-4 years	NO	NO	NO	Locations of some pull stations.	2	Some pull stations should be relocated.
Telephone System	Multiple outside lines.	Good - 4 years	NO	NO	NO	NO	2	New in 2003.
Lighting System	Generally 2x4 recessed fluorescent	Good - + 20 years	NO	NO	NO	NO	2-3	Additional fixtures needed in some areas. New energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Fair - 43 years	NO	NO	NO	NO	3-4	Additional receptacles/circuits needed throughout facility.
Security System	Keypads at specific doors; Motion detectors in corridors first floor and stairs; Notifies UL Central Station.	Fair - Mixed - 15 years	NO	NO	NO	NO	3	System will need upgrading.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Door Bell System	Push button at Gym entrance.	Fair	NO	NO	NO	NO	3-4	
Sound/Intercom System	Dial phone and speaker in classrooms and offices; ceiling speakers in corridors.	Good - 6 years	NO	NO	NO	NO	2	Sound system - portable
Clock/Program Bell System	Classroom and Office battery clocks. Corridor and classroom speaker with bell tones.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas.	Good - 6 to 12 years	NO	NO	NO	NO	2	Additional data outlets needed in classrooms.
Cablevision System	Outlets in classrooms and Library.	Good - 10 years					-	



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete at side of building, parent drop-off at side as well	Good	NO	YES	NO	NO	1	
Sidewalks/ramps	Bituminous concrete entrance path	Fair, path too narrow and drop off at edge is access problem	NO	YES	NO	NO	3	Width and grading issue to be addressed
	Concrete side terrace - proposed student waiting area	Fair	NO	YES	NO	NO	3	No accessible entrance to proposed student waiting terrace, pavement in disrepair
	Bituminous concrete paths to play areas	Fair, not accessible (grade)	NO	YES	NO	NO	3	
	Concrete sidewalk at rear	Fair, curb ramp in disrepair	NO	YES	NO	NO	3	
Fields	Turf/skinned base area	Fair/poor	NO	YES	NO	NO	3	Turf restoration/replacement
Plantings	Severe erosion of some turf areas	Fair	NO	NO	NO	NO	3	Replace eroded turf areas
Play structures	2 separate: new (steel) and community built (timber)	Steel is very good condition, timber is fair	NO	YES - timber structure only	NO	NO	2	Repair/replace timber structure and surfacing, need to cross parking to access play area
Courts	Bituminous concrete basketball	Good	NO	YES	NO	NO	2	Provide accessible route
Benches/bike racks	Benches located at play area, new benches at proposed student waiting area	Good	NO	YES	NO	NO	1	Benches @ proposed student waiting area are not accessible
Fencing	Wire mesh, steel fencing at side perimeter securing play areas	Good	NO	NO	NO	NO	1	
Lighting	Parking area lighting	N/A						
	Building flood lights	Good/newer	NO	NO	NO	NO	2	
	Exterior door lights	Unknown age or if they work-- downlights in building overhang	NO	NO	NO	NO	4	Replace lighting.



Newton Schools Study - Facility Assessment							
LINCOLN-ELIOT SCHOOL							
191 PEARL STREET							
BUILDING DATA:							
	site area:	4 acres					
	zoning district:	PUB					
	building area:	51,074 Gross Square Feet					
	number of floors:	2/3					
	historical status:	None					
	year built:	1939					
	additions/renovations/upgrades:	1965, 1974					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Slate pitched roof w/ wood cupola	Good/original; gutters newer-good condition	YES	NO	NO	NO	2	Original roofing does not meet current energy codes.
	Flat roof	No active leaks reported, metal roof edge in good condition/ 22 years	YES	NO	NO	NO	2	Roofing >20 years old may not meet current codes.
Exterior walls	Load bearing masonry/concrete sills/stone detailing.	Good. Minor cracks and staining at masonry, rusting lintels/original	NO	NO	NO	NO	1	Repair and clean
	Brick veneer with concrete at floor elevations; slate sills at 1965; painted CMU wall at 1975	Good/1965 and 1975	NO	NO	NO	NO	1	
Windows/louvers	Aluminum w/ thermal break and thermal glazing, fixed & single-hung operable	Good/~1985 replacement at 1939 building; solid panels are rusted	NO	NO	NO	NO	1	Repair/replace damaged or missing screens. Replace rusted panels. Note: difficult to operate, questionable quality. Poor style selection.
	Steel-frame, single-pane glazing, casement windows; metal louvers	Poor/Original windows at 1965 building; Lexan replacement glazing is aged and translucent.	YES	NO	NO	NO	4	Replace steel frame windows w/ alum thermal break and thermal glazing.
	Aluminum w/ thermal break and thermal glazing: fixed, awning & casement operable windows	Good/1975	NO	NO	NO	NO	1	
Doors/hardware	Aluminum w/ pebble fiberglass panels	Good condition, hardware is non accessible	NO	YES	NO	NO	2	Replace with accessible hardware & auto-open device
Exterior steps/ramps	Granite/concrete steps and concrete ramp w/ painted steel pipe guardrails	Fair/original. Concrete w/ minor spalling and concrete that is deteriorating; railing supports are rusted. Guardrails are not code compliant	NO	YES	NO	NO	3	Replace guardrails and handrails.
Structural concerns	None.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed CMU w/ painted plaster above @ corridors; painted plaster walls, typical 1939 building	Good/original. ~30% of door surrounds are non accessible	NO	YES	NO	NO	3	Modify openings to comply with accessibility codes
	Painted CMU, painted gypsum wallboard w/ vinyl base, typical; operable walls at classrooms in 1975 building	Good/1965/75. Door surrounds are non accessible	NO	YES	NO	NO	3	Modify openings to comply with accessibility codes
Floors	Carpet and VAT, typical; VCT	Fair/original;	NO	NO	NO	NO	3	Replace VAT w/ VCT.
Ceilings	2x4 ACT, 2x2 ACT and 1x1 ACT	Good at 2x2 and 2x4 conditions. 1x1 interlocked ACT in poor condition.	NO	NO	NO	NO	3	Replace damaged tiles. Replace 1x1 interlocked ACT.
Doors/borrowed lights	Wood solid core doors w/ wire glass in painted metal frames	Good/original for 1965 and 1975; Fair/original at 1939	NO	NO	NO	NO	2	See "Partitions" for accessibility issue.
Hardware		Good/original for 1965 and 1975; Fair/original at 1939	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Wood, metal, plastic laminate	Good/1975; Fair/1939; Poor/1965 - rusted metal cabinets; wood closets are fair.	NO	YES	NO	NO	2	Replace/repair as required, replacement to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Wood, open cubbies in corridors; and coat hooks. Student storage closet in classrooms at 1939 building.	Good/age unknown; Fair/original in 1939 building--some unoperable or doors removed	NO	YES	NO	NO	3	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Rolling shades, typ.; curtains at clerestory windows in 1975 building	Good, typ. Fair, curtains.	NO	NO	NO	NO	2	
Toilet rooms	Adult: glazed CMU, painted CMU, ceramic tile, VCT; wood/metal partitions	Poor/original 1939. Non accessible. Fair/1965 and 1975	NO	YES	NO	NO	3	Replace/upgrade toilet rooms
	Student: glazed CMU, painted CMU & ceramic tile; metal partitions	Poor/original 1939. Non accessible. Fair/1965 and 1975	NO	YES	NO	NO	3	Replace/upgrade toilet rooms
Stairs	Terrazzo w/ steel nosing; wood/metal hand & guardrails	Good/original (1939). Railings and stair nosing are non accessible.	NO	YES	NO	NO	2	Replace railings & stair nosing.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
	Concrete/metal pan construction; rubber treads, VCT landings; painted metal hand & guardrails	Good/1965 and 1975. Handrails does not meet code requirements.	NO	YES	NO	NO	2	Replace handrails. Note: door swings into the path of travel at 1965 stair.
Elevator		Fair/1939 building; sized too small, worn. Good/1975 building; renovated in 2000	NO	YES	NO	NO	1/4	Elevator at 1939 building does not meet code
Lifts	Two 1/2 flight lifts	Good/age unknown	NO	NO	NO	NO	1	
Signage	Paper or none	Poor	NO	YES	NO	NO	4	Install signage to meet AAB standards.
Gymnasium equipment	Wood athletic floor and wood backstops; painted CMU walls; 2x2 ceiling	Good/original 1975	NO	NO	NO	NO	1	
Cafeteria	Wood floor w/ rubber tiles on top; painted CMU and painted wood boards at walls	Good/functional; minimal natural lighting.	NO	NO	NO	NO	1	
Kitchen	Warming kitchen	Good/functional	NO	NO	NO	NO	1	
Code concerns	1. Main entrance is not accessible. 2. Elevator is too small to meet AAB standards. 3. Door swings into the path of travel at 1965 stair. 4. No visual of front entry creates a security risk. 5. Open cubbies in corridor create a flammability risk.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by oil, original boilers, one new burner.	Fair to poor/original, 68 years. Unit ventilator noise is a problem.	Boiler inefficient	NO	NO	Units aren't run due to noise. Some classroom exhaust blocked.	4	System is past its useful life. Heat varies around the building and is unreliable. Boiler feed unit leaking badly. Needs more service, constant breakdowns and repairs. Constant thermostat recalibration.
Plumbing	Piping original, unknown, kitchen on ejector.	Original, fair to poor.	NO	No accessible fixtures noted.	NO	No domestic hot water through building. Point of use electric heaters at some lavs. A lot of DF's inoperable.	4	Nurse sink unusable, no hot water.
Fire Protection	None						-	
Electrical Service Equipment	800A. 3 phase, 4 wire, 120/208V	Fair - + 45 years	NO	NO	NO	NO	3-4	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair - 45 years and newer	NO	NO	NO	NO	3-4	Should be upgraded.
Emergency System	Gas indoor generator in boiler room; serves corridor and stair lighting.	Fair - 45 years	NO	NO	NO	Insufficient working clearances; Not 2-hour fire rated room.	3-4	Generator should be replaced with Code compliant unit in 2-hour rated room.
Fire Alarm System	Multi-zone: not ADA compliant; classroom, Library, and corridor smoke detectors and door holders; master box.	Good - + 25 years.	NO	NO	NO	Mounting height and locations of some pull stations.	2	Signal needs to be ADA compliant; some pull stations should be relocated.
Telephone System	Multiple outside lines.	Being upgraded at this time.	NO	NO	NO	NO		



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Lighting System	Generally 2x2 and 2x4 recessed fluorescent and surface wrap arounds.	Good - + 20 years	NO	NO	NO	NO	2-3	New energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Fair to Good - 45 years and newer.	NO	NO	NO	NO	3	Additional receptacles/circuits should be added throughout.
Security System	Keypads at specific doors; Motion detectors in corridors and stairs; Monitor switches on most exterior doors; interior alarm; Notifies UL Central Station.	Fair - Mixed - 10 years	NO	NO	NO	NO	3	System will need upgrading.
Door Bell System	Push button at front entrance with buzzer in Admin.	Fair	NO	NO	NO	NO	3-4	
Sound/Intercom System	Being upgraded.	Being upgraded.	NO	NO	NO	NO	1	
Clock/Program Bell System	Classroom and Office battery clocks. Corridor and classroom speaker with bell tones.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas; Minimal wireless system.	Good - 5 years	NO	NO	NO	NO	2	
Cablevision System	Outlets in Admin Office, Library and most classrooms	Good - + 10 years	NO	NO	NO	NO	-	



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete, granite & concrete curbs	Fair/poor	NO	NO	NO	NO	3	Replace/resurface - repair potholes
Sidewalks/ramps	Concrete perimeter walks	Good	NO	NO	NO	NO	2	
	Concrete/bituminous concrete front walks	Fair	NO	YES	NO	NO	3	Surface condition, some sections need to be replaced
	Concrete walk at granite stair to main entrance	Concrete at stair is in poor condition	NO	YES	NO	NO	3	Main entrance is not accessible
	Path to play area from building	Fair/good	NO	YES	NO	NO	2	Not accessible from building
Fields	Turf - skinned base area, baseball & soccer	Fair	NO	NO	NO	NO	3	Turf restoration is needed
Plantings	Mature trees @ front & on slope by play area, turf	Plantings are in good or fair condition/turf on slope is in poor condition	NO	NO	NO	NO	2	Check trees on slope/ turf restoration on slope
Play structures	(2) steel - younger children's, steel swings	structures are in good condition, swings are in fair condition	NO	YES	NO	NO	1 and 2	Play structure is accessible, swings are not
Courts	Bituminous concrete paved area by play area, basketball	Paved play area is in fair condition, basketball is in good condition	NO	NO	NO	NO	2 and 1	
Benches/bike racks	Recycled composite benches by play area	Good	NO	YES	NO	NO	1	Not in accessible locations
Fencing	CLF @ perimeter, basketball and between play area and parking	Perimeter and play area - fair, basketball is good	NO	NO	NO	NO	3 and 1	Replace/repair framework and fabric
Lighting	Parking area lighting	Flood light on utility poles - good	NO	NO	NO	NO	1	
	Building flood lights	Good/newer	NO	NO	NO	NO	2	
	Exterior door lights	Poor/age unknown	NO	NO	NO	NO	4	Replace lighting.



Newton Schools Study - Facility Assessment							
MASON-RICE SCHOOL							
149 PLEASANT STREET							
BUILDING DATA:							
	site area:	3.99 acres					
	zoning district:	PUB					
	building area:	39,000 gross square feet					
	number of floors:	2					
	historical status:	None					
	year built:	1959					
	additions/renovations/upgrades:						
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof	No active leaks reported, metal roof edge in good condition/ 17 years	NO	NO	NO	NO	2	
	Octagon shaped pitched roof	No active leaks reported, no snow guards, no gutters/ 17 years	NO	NO	NO	NO	2	
Exterior walls	Load bearing masonry/concrete sills; concrete exposed foundation.	Good/original-masonry. Minor cracks in masonry; cracks and staining at sills. Fair/original-foundation. Rebar exposed, spalling and cracking.	NO	NO	NO	NO	3	Repair/patch and clean masonry and concrete.
Windows/louvers	Steel-frame, single-pane glazing storefront system with metal panels and casement operables; glazed block above wood-framed, single-pane glazing; metal louvers	Poor/original	YES	NO	NO	NO	4	Replace windows and louvers.
Doors/hardware	Metal, wood, aluminum, aluminum w/ pebble fiberglass panels; metal and wood frames	Good/newer; Poor/original and age unknown. Hardware is non accessible.	YES	YES	NO	NO	3	Replace doors, provide accessible hardware & auto-open device
Areaways	Concrete retaining walls with steel grates.	Good/original, minor rusting	NO	NO	NO	NO	2	
Exterior steps/ramps	Concrete stoops, steps and ramps w/ painted steel pipe guardrails	Fair/ages unknown, railing supports are rusting.	NO	NO	NO	NO	3	Replace railings.
Structural concerns	None.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed CMU w/ painted CMU above @ corridors; painted plaster walls, typical; painted CMU; wood paneling; exposed brick	Good/original.	NO	NO	NO	NO	2	Refinish wood paneling or replace.
Floors	Carpet, VCT, VAT, and Rubber	Good/age unknown-VCT; Fair/ages unknown-other	NO	NO	NO	NO	3	Replace carpet and VAT w/ VCT.
Ceilings	2x4 ACT, 2x2 ACT, 1x1 ACT, painted plaster, acoustic panels.	Good/newer; Fair/original	NO	NO	NO	NO	3	Replace damaged tiles.
Doors/borrowed lights	Wood solid core doors w/ metal and wood frames	Poor/original	NO	NO	NO	NO	4	Replace doors/frames
Hardware		Fair/original	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Wood, metal, laminate	Poor/original	NO	YES	NO	NO	4	Replace casework to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Open, wood cubbies	Good/original	NO	NO	NO	NO	2	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Horizontal blinds	Fair/age unknown	NO	NO	NO	NO	3	Replace/upgrade to provide consistent light control.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Toilet rooms	Adult: CMU, ceramic tile, VCT; wood/metal partitions	Poor/original. Non accessible	NO	YES	NO	NO	4	Replace/upgrade toilet rooms
	Student: glazed CMU & ceramic tile; steel partitions	Poor/original. Fair/newer. Not fully accessible	NO	YES	NO	NO	4	Replace/upgrade toilet rooms
Stairs	Concrete w/ steel and rubber nosing; wood/metal hand & guardrails	Good/original. Railings and stair nosing are non accessible.	NO	YES	NO	NO	2	Upgrade railings and add guard rails, infill to reduce size of large openings.
Lift		Good/2006	NO	YES	NO	NO	1	Not all areas are accessible (library plus other support spaces)
Signage	Various	Poor/ages unknown	NO	YES	NO	NO	4	Install signage and include braille
Gymnasium equipment	Wood athletic floor and backstops	Fair/original	NO	NO	NO	NO	3	Refinish/upgrade
	Wood paneling, painted CMU, tectum panel ceiling	Good/original; Fair/original-wood paneling	NO	NO	NO	NO	3	Refinish/replace paneling
Auditorium	Painted concrete floor	Poor/original. Slope of floor is not accessible	NO	YES	NO	NO	4	
	Painted CMU walls; exposed deck w/ floating ceiling of 1x1 ACT	Fair/original-walls, large crack at back wall; Good/age unknown-ceiling	NO	NO	NO	NO	3	
	Wood platform/steps	Poor/original. Platform is not accessible from the auditorium.	NO	YES	NO	NO	4	Provide accessible route from auditorium.
	Wood/metal seats, 285 seats; fabric curtains	Good/original-seating; Good/new-curtain	NO	YES	NO	NO	2	Provide accessible seating.
	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Kitchen	Warming kitchen	Good/functional	NO	NO	NO	NO	2	Abate deteriorating VAT, replace VAT with VCT
Code concerns	1. Library and other support spaces are not accesible. 2. All door hardware is non accessible. 3. Open cubbies in corridor create a flammability risk.							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Hot water by oil, UV's in CR's. AC Offices and Library.	Poor - 48 years	Boiler inefficient	NO	NO	NO	3	Heat variations around building.
Plumbing	Piping original, unknown - old valves don't hold.	Poor - 48 years	NO	Marginal accessibility	NO	Fixtures not water conserving	3	Some pipe system leaks.
Fire Protection	None						-	--
Electrical Service Equipment	Utility company transformer vault within building; 800A. 3 phase, 4 wire, 120/208V	Fair to Poor - 46 years	NO	NO	NO	Insufficient working clearances	3-4	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair to Poor - 46 years	NO	NO	NO	NO	3-4	Should be upgraded.
Emergency System	50kW gas indoor generator in boiler room; serves corridor and stair lighting and boilers.	Fair to Poor - 46 years; operation questionable	NO	NO	NO	Insufficient working clearances; Not 2 hour fire rated room.	3-4	Generator should be replaced with Code compliant unit in 2-hour rated room.
Fire Alarm System	Multi-zone: not ADA compliant; Library, Gym, and corridor smoke detectors and door holders; exterior pedestal master box.	Good - + 25 years	NO	NO	NO	Mounting height and locations of some pull stations.	2	All signals need to be ADA; Some pull stations should be relocated.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Telephone System	Multiple outside lines.	Good - 6 years	NO	NO	NO	NO	2	New in 2001. Add Dial phone to all classrooms.
Lighting System	Generally 2x4 recessed fluorescent	Good - + 20 years	NO	NO	NO	NO	2-3	Additional fixtures needed in some areas. New energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Fair to Good - 48 years and much newer; recently upgraded with Plugmold.	NO	NO	NO	NO	3-4	Additional receptacles/circuits shall be added throughout.
Security System	Keypads at specific doors; Motion detectors in corridors; Monitor switches on exterior doors; Notifies UL Central Station.	Fair - Mixed - 10 years	NO	NO	NO	NO	3	System will need upgrading.
Door Bell System	Push button at rear and front entrance; Bell in Admin.	Fair	NO	NO	NO	NO	3-4	
Sound/Intercom System	classrooms and offices; ceiling speakers in corridors; Independent system in Auditorium.	Good - 6 years	NO	NO	NO	NO	2	
Clock/Program Bell System	Classroom and Office battery clocks. Corridor and classroom speaker with bell tones.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in most classrooms and office areas; Minimal wireless system.	Good - 6 years	NO	NO	NO	NO	2	Additional data outlets needed in all classrooms.
Cablevision System	Outlets in classroom #10, Library, Main Office and Principle's Office.	Good - 10 years					-	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete and concrete curbs - side of building	Poor	NO	NO	NO	NO	4	Significant cracking - resurface or replace
Sidewalks/ramps	Concrete walk from parking to main entrance	Fair	NO	YES	NO	NO	3	Path is too steep for accessibility
	Concrete walks in front	New areas - good, others - fair	NO	NO	NO	NO	1 and 2	
	Walk from blue curb to front - concrete	Fair	NO	YES	NO	NO	3	No crosswalk marked, indirect crossing to other side
	Bituminous concrete walks around building	Fair	NO	YES	NO	NO	3	Some crosspitches on walks are too steep
Fields	Turf - soccer	Fair/poor	NO	NO	NO	NO	3	Turf eroded on hillside - turf restoration needed
Plantings	Mature plantings and turf, garden at side of school	Turf between parking and front - poor, plantings - fair/good, garden - good	NO	YES	NO	NO	2 and 3	Garden not accessible, turf restoration
Play structures	K-2 and swings - steel/plastic with polyurethane tile surfacing, 5-12 timber, wood fibre surfacing	Fair	NO	YES	NO	NO	3	Tile surfacing is accessible, structure is accessible by ramp but no loop
Courts	Bituminous concrete basketball, sand volleyball	Fair	NO	YES	NO	NO	3	No accessible path connection
Benches/bike racks	Recycled slats and steel benches, bike racks by courts, steel picnic table	Benches/picnic - good, bike rack fair/poor	NO	NO	NO	NO	1 and 3	Replace bike rack
Fencing	CLF at perimeter by play area -fair	Fair	NO	NO	NO	NO	3	Repair/replace
Lighting	Parking area lighting	None						
	Building flood lights	Good/newer	NO	NO	NO	NO	2	
	Exterior door lights	Poor/original. Rusted, most likely do not work. Good/newer at main entry	NO	NO	NO	NO	4	Replace lighting.

Newton Schools Study - Facility Assessment									
MEMORIAL-SPAULDING SCHOOL									
250 BROOKLINE STREET									
BUILDING DATA:									
	site area:	5.59 acres							
	zoning district:	PUB							
	building area:	68,775 gross square feet							
	number of floors:	2							
	historical status:	None							
	year built:	1954							
	additions/renovations/upgrades:	1959, 2002							
	assessment value:	n/a							
Key to Rating:									
1 = New or in good condition with ordinary maintenance required									
2 = Good condition with minor repairs required									
3 = Fair condition with repairs or replacement required									
4 = Poor condition with replacement required									



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments	
BUILDING EXTERIOR									
Roof systems	Flat roof; overhang w/ painted metal soffit	No active leaks reported, metal roof edge in good condition/ 25 years	YES	NO	NO	NO	2	Roofing >20 years old may not meet current codes.	
Exterior walls	Brick veneer	Good/original	NO	NO	NO	NO	1		
	Brick veneer/metal panel at upper walls/exposed concrete foundation	Good/2002-brick; dinged metal panels; spalling concrete; poor connection from brick to concrete	NO	NO	NO	NO	2		
Windows/louvers	Aluminum w/ thermal break and thermal glazing, fixed & awning. Metal, single-pane storefront	Good/2002; Poor/original storefront	YES	NO	NO	NO	2	Replace storefront location.	
Doors/hardware	Metal, aluminum, aluminum w/ pebble fiberglass panels, steel frames	Good/~2002, Fair/original. Older frames are rusting. 25% hardware is non accessible.	YES	YES	NO	NO	3		
Areaway	At grade with metal grate	Fair/original. Grate is rusted but appears structurally sound	NO	NO	NO	NO	3	Replace grate.	
Exterior steps/ramps	Granite and concrete stoops/steps; concrete ramp with painted metal pipe guardrail	Good/original and ages unknown	NO	NO	NO	NO	1		
Canopies	Metal edge, flat roof, painted metal soffit	Good/original with updates, damaged metal edge at side entry	NO	NO	NO	NO	2	Repair metal edge.	
Structural concerns	1. Floor/slab settlement in Music Room, ~4" drop at the new addition.								

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed CMU w/ painted plaster above @ corridors; painted plaster walls, typical; 1x1 ACT at upper walls; painted brick	Good/original. Door surrounds are non accessible	NO	YES	NO	NO	3	Modify openings to comply with accessibility codes
	Painted gypsum wallboard w/ vinyl base, wood chair rail @corridors, typical	Good/2002.	NO	NO	NO	NO	1	
Floors	Carpet, VAT, VCT, terrazzo	Poor/original; Good/2002	NO	NO	NO	NO	4	Replace carpet and VAT w/ VCT.
Ceilings	Painted plaster, 1x1 ACT, 2x4 ACT and 2x2 ACT	Fair/original; Good/2002	NO	NO	NO	NO	2	Replace damaged tiles.
Doors/borrowed lights	Wood doors w/ painted metal frames	Good/2002 and painted original frames	NO	NO	NO	NO	2	See "Partitions" for accessibility issue.
Hardware		Good/2002; Fair/original	NO	YES	NO	NO	2	Provide upgraded hardware for all doors
Interior built-in furnishings	Wood, metal, laminate, ceramic tile	Fair/original; Good/2002-minimal quantity	NO	NO	NO	NO	2	Replace as required, replacement to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Metal, single-tier, 15" x 60" for 2 students	Good/2002; Fair/original--rusting. Sized too small for shared use, non accessible hardware	NO	YES	NO	NO	3	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Rolling shades, typical	Good/2002	NO	NO	NO	NO	1	
Toilet rooms	Glazed CMU, ceramic tile/VCT; wood/metal partitions; painted plaster ceiling	Poor/original. Non accessible	NO	YES	NO	NO	4	Replace/upgrade toilet rooms
	Ceramic tile floor and walls; coffered concrete structure ceiling/ACT; metal partitions	Good/2002	NO	NO	NO	NO	1	
Stairs	Painted concrete w/ steel nosing; wood/metal hand & guardrails; painted metal pipe hand & guardrails	Good/original. Railings and stair nosing are non accessible.	NO	YES	NO	NO	2	Replace railings & stair nosing.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
	Painted concrete/metal pan construction; painted metal hand & guardrails	Good/2001	NO	NO	NO	NO	1	
Elevator		Good/2001	NO	NO	NO	NO	1	
Signage	Plastic plaques	Good/2001; Fair/all other, non accessible	NO	YES	NO	NO	2	Provide signage for all rooms to meet code..
Gymnasium equipment	Wood athletic floor and backstops	Good/original	NO	NO	NO	NO	2	
	Painted CMU walls; 1x1 ACT	Good/original	NO	NO	NO	NO	2	
Auditorium	Painted concrete/carpet at the aisles	Good/original.	NO	YES	NO	NO	2	
	Painted plaster walls with wood paneling wainscot; 1x1 ACT	Good/original.	NO	NO	NO	NO	2	
	Wood platform and steps; painted brick walls; fabric curtains; lift	Poor/original. Lift provides accessibility to platform from auditorium	NO	NO	NO	NO	3	
	Wood seats, 210 seats	Good/original	NO	YES	NO	NO	2	Provide accessible seating.
Kitchen	Warming kitchen	Good/functional	NO	NO	NO	NO	1	
Code concerns	1. Floor/slab settlement in Music Room, ~4" drop at the new addition. 2. Basement programmed spaces with no windows. 3. Flooding at basement level creates a health risk.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by oil, hot water for '02 and addition. AC for main office and Teacher's Room.	Fair/original, 53 years.	Boiler inefficient	NO	NO	NO	3	One new boiler being installed. Heating inconsistent through building, hot/cold. Thermostat recalibration helped.
Plumbing	Piping original, unknown	Fair/original	NO	Marginal accessibility, no Faculty handicap.	NO	Some fixtures don't get hot water.	3	Storm water issue in elevator pit.
Fire Protection	Sprinkler system	Good/2002	NO	NO	NO	NO	1	Dry systems assumed to serve crawl spaces. No standpipes. A&E Uses not separated.
Electrical Service Equipment	600A. 3 phase, 4 wire, 120/208V	Fair - + 50 years	NO	NO	NO	Insufficient working clearances	3	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair - + 50 years	NO	NO	NO	NO	3	Should be upgraded.
Emergency System	100kW diesel exterior generator serves corridor and stair lighting and boilers. (Probably most of facility.)	Good - 5 to 10 years	NO	NO	NO	No 2-hour fire rated room for life safety system equipment.	2-3	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Fire Alarm System	Multi-zone: ADA compliant; Library and corridor smoke detectors and door holders; exterior master box.	Good - 5 years	NO	NO	NO	Mounting height and locations of some pull stations.	2	Some pull stations should be relocated.
Telephone System	Multiple outside lines.	Good - 5 years	NO	NO	NO	NO	2	
Lighting System	Generally 2x2 and 2x4 recessed fluorescent; surface wrap around in corridors.	Good - + 5 years	NO	NO	NO	NO	3	Energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Fair - + 50 years in existing Wing. Good - + 5 years in Addition.	NO	NO	NO	NO	3-4	Additional receptacles/circuits needed throughout existing wing.
Security System	Keypads at specific doors; Motion detectors in corridors and stairs; Notifies UL Central Station.	Fair - Mixed - + 5 to 20 years	NO	NO	NO	NO	3	System will need upgrading.
Door Bell System	Push button at front door. Buzzer in Lobby.	Fair	NO	NO	NO	NO	3-4	
Sound/Intercom System	Surface speakers and dial phones in classrooms; Not heard well in corridors, toilets, and exterior.	Good - + 5 years	NO	NO	NO	NO	2-3	Need corridor, toilet and exterior speakers.
Clock/Program Bell System	Classroom and Office battery clocks. No bell tones in corridors or exterior.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	Need bell tones in corridors and exterior.
Information Technology System	Data in classrooms and office areas. Wireless in Library and Principle Office.	Good - 10 years	NO	NO	NO	NO	2	Additional data outlets needed in classrooms .
Cablevision System	Possible service. No system outlets.						-	Service should be provided.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete at side of school	Fair	NO	YES	NO	NO	3	Settlement @ curbramp is access issue, resurface
Sidewalks/ramps	Concrete sidewalks - sides of drive	Poor	NO	YES	NO	NO	4	Poor surface condition/replace
	Bituminous concrete @ front	Fair	NO	NO	NO	NO	3	
	Bituminous concrete courtyard	Fair	NO	NO	NO	NO	3	Resurface
Fields	Turf and skinned baseline - baseball, soccer	Fair/poor	NO	YES	NO	NO	3	No access path to field
Plantings	Mature plantings at school front, turf, garden @ courtyard	Plantings - fair/good, turf - fair/poor	NO	NO	NO	NO	2 and 3	Turf restoration
Play structures	(2) 5-12 timber/steel and K-2 timber/steel, swings	Good	NO	YES	NO	NO	2	Wood fibre surfacing, no accessible path to area
Courts	Bituminous concrete paved play area	Good	NO	YES	NO	NO	2	No accessible route
Benches/bike racks	Wood/steel benches at front, wood picnic table	Good	NO	YES	NO	NO	2	Picnic table not accessible
Fencing	Wood rail fence at entrance, CLF at upper level of play area, perimeter	Wood rail fence - good, other fencing varies - fair/poor	NO	NO	NO	NO	3	Repair /replace sections along street
Lighting	Parking area lighting	None						
	Building flood lights	Poor/age unknown	NO	NO	NO	NO	4	Replace lighting.
	Exterior door lights	Fair/unknown- lights at canopies	NO	NO	NO	NO	3	Replace lighting.

Newton Schools Study - Facility Assessment								
PEIRCE SCHOOL								
170 TEMPLE STREET								
BUILDING DATA:								
	site area:	3.68 acres						
	zoning district:	PUB						
	building area:	33,800 gross square feet						
	number of floors:	2						
	historical status:	None						
	year built:	1951						
	additions/renovations/upgrades:	1955						
	assessment value:	n/a						
Key to Rating:								
1 = New or in good condition with ordinary maintenance required								
2 = Good condition with minor repairs required								
3 = Fair condition with repairs or replacement required								
4 = Poor condition with replacement required								



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof	No active roof leaks reported/ 6 years	NO	NO	NO	NO	1	
Exterior walls	Brick veneer/masonry backup, concrete surrounds at windows and limestone sills.	Good/original. Damage at sills/surrounds, broken/crumbling, staining. Rusted lintels. Water damage at high wall of gym reported.	NO	NO	NO	NO	2	Repair/replace sills/surrounds. Clean and repoint. Investigate cause of water damage.
Windows/louvers	Aluminum w/ thermal break and thermal glazing, fixed & hopper operables; metal louvers	Good/2006; Poor/original-louvers	NO	NO	NO	NO	1	
Doors/hardware	Aluminum w/ pebble fiberglass panels; a few metal.	Good/new; Poor/original	YES	YES	NO	NO	1	Replace with accessible hardware & auto-open device.
Areaways	Concrete retaining walls with steel grates,	Fair/original. Grates are rusted and bent.	NO	NO	NO	NO	3	Scrape and paint. Replace damaged/bent steel grate. Clear out areaway.
Exterior steps/ramps	Slate steps/landing at main entry. Concrete steps and ramp w/ painted steel pipe guardrails at rear entry.	Good/original--some slates are cracked. Good/unknown age at ramp.	NO	YES	NO	NO	2	
Structural concerns	None.							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed CMU w/ painted brick above @ corridors; painted plaster walls, typical, with 1x1 peg board at upper walls of classrooms. Painted gypsum walls at addition, typical.	Good/original. Door surrounds are non accessible	NO	YES	NO	NO	2	Enlarge classroom openings to comply with accessibility codes
Floors	VCT, typical. Terrazzo at entry. Carpet and VAT.	Good/on-going installation of VCT	NO	NO	NO	NO	2	Replace carpet and VAT w/ VCT.
Ceilings	1x1 ACT, painted plaster, 2x2 ACT	Fair/original 1x1; Good/at newer 2x2	NO	NO	NO	NO	2	Replace 1x1 ACT
Doors/borrowed lights	Wood solid core doors w/ painted metal frames (wood frames at corridor doors)	Good/original	NO	NO	NO	NO	2	See "Partitions" for accessibility issue.
Hardware		Fair/original	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Wood, metal, laminate	Poor/original	NO	YES	NO	NO	4	Replace to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Metal, single-tier, 15" x 60" for 2 students	Poor/original--rusting. Sized too small for shared use, non accessible hardware	NO	YES	NO	NO	4	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Rolldown shades, typical	Good/age unknown	NO	NO	NO	NO	1	
Toilet rooms	Adult: CMU, plaster walls, ceramic tile, VCT; wood/metal partitions	Poor/original. Non accessible	NO	YES	NO	NO	4	Replace/upgrade toilet rooms
	Student: glazed CMU & ceramic tile; wood/metal partitions	Poor/original. Non accessible	NO	YES	NO	NO	4	Replace partions. Provide accessible fixtures.
Stairs	Concrete/metal pan w/ steel nosing; wood/metal hand & guardrails	Good/original. Railings and stair nosing are non accessible.	NO	YES	NO	NO	2	Replace railings & stair nosing.
Elevator	None		NO	YES	NO	NO	4	Install elevator
Signage	None		NO	YES	NO	NO	4	Install AAB signage.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Gymnasium equipment	Wood athletic floor; and backstops	Good/original	NO	NO	NO	NO	2	
	Glazed brick lower and painted brick upper; exposed acoustic deck	Good/original-walls; Fair/original-acoustic deck, aged, stained	NO	NO	NO	NO	2	
Auditorium/Music	Colored concrete floor; wood paneling; 2x2 ceiling	Good/original. Cracks in concrete. Slope is not accessible.	NO	YES	NO	NO	2	
	Wood platform; fabric curtain	Fair/original. Platform is not accessible from the auditorium. Good/newer curtain	NO	YES	NO	NO	2	Provide ramp for accessibility.
	Wood seats; 200 seats	Good/original. No designated, accessible seating.	NO	YES	NO	NO	2	Provide accessible seating.
Kitchen	Warming kitchen	Good/functional	NO	NO	NO	NO	1	Note: difficult circulation from basement level
Code concerns	1. No elevator. 2. Basement art classroom and general classroom are inaccessible. 3. Quantity and distribution of toilet facilities does not meet code.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by oil, unit ventilators in classrooms with supplemental radiation. Portable AC for two students.	Poor/original/56 years	Boiler inefficient	NO	NO	Ventilation is suspect in some areas. Some classroom exhaust fans not operable.	4	Boilers and heating system are original equipment. CI panel radiation. Heating issues throughout. Traps not serviced. Admin window AC units removed. Pipe leaks.
Plumbing	Piping original, unknown.	Fair to poor/original.	NO	Marginal accessibility	NO	NO	4	
Fire Protection	None						-	--
Electrical Service Equipment	One 400A, 1 phase, 3 wire, 120/240V and one 100A, 1 phase and 120/240V.	Fair to Poor - 56 years and newer	NO	NO	NO	Insufficient working clearances	3-4	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair to Poor - 56 years and newer	NO	NO	NO	NO	3-4	Should be upgraded.
Emergency System	Gas indoor generator in boiler room; unsure of equipment served.	Fair to Poor - 56 years; operation questionable	NO	NO	NO	Insufficient working clearances; Not 2 hour fire rated room.	3-4	Generator should be replaced with Code compliant unit in 2-hour rated room.
Fire Alarm System	Multi-zone: not ADA compliant; Library, Auditorium, Gym, and corridor smoke detectors and door holders; exterior master box.	Good - + 25 years	NO	NO	NO	Mounting height and locations of some pull stations.	2	Signals need to be ADA compliant; Some pull stations should be relocated.
Telephone System	Multiple outside lines.	Good - 10 years	NO	NO	NO	NO	2	Should be upgraded.
Lighting System	Generally 2x2 recessed fluorescent and suspended wrap arounds.	Good - + 5 to 10 years	NO	NO	NO	NO	2-3	Additional fixtures needed in some areas. New energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Fair - 46 years and newer.	NO	NO	NO	NO	3-4	Additional receptacles/circuits needed throughout.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Security System	Keypad at custodian entrance; Motion detectors in corridors; Monitor switches on custodian entrance door; Notifies UL Central Station.	Fair - Mixed - 10 years	NO	NO	NO	NO	3	System will need upgrading.
Door Bell System	Intercom at parking lot door and front entrance; Control station in Admin.	Fair	NO	NO	NO	NO	3-4	
Sound/Intercom System	with private switches in classrooms; ceiling speakers in corridors; Independent system in Auditorium.	Fair - + 20 years	NO	NO	NO	NO	3	System needs to be upgraded.
Clock/Program Bell System	Classroom and Office battery clocks. Corridor and classroom speaker with bell tones.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in some classrooms and office areas.	Good - 10 years	NO	NO	NO	NO	2	Data outlets needed in all classrooms and offices.
Cablevision System	Outlets in Library and Custodian's Office.	Fair - 10 years	NO	NO	NO	NO	3	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete, concrete curb	Fair/good	NO	NO	NO	NO	3	Replace/resurface, replace concrete curb, resurface bit. Conc. Drive
Sidewalks/ramps	Concrete entrance ramp & walk	Fair	NO	YES	NO	NO	3	Surface condition
	Concrete pavers in seating area	Good	NO	NO	NO	NO	1	
	Brick seating area at building front	Good	NO	NO	NO	NO	1	
	Concrete walks	Varies - good by parking, poor at rear building	NO	YES	NO	NO	1 and 4	No accessible route from parking to front door, main building entrance not accessible, paths from drive are greater than 5%
Fields	Turf - skinned base area, baseball & soccer	Fair/good	NO	YES	NO	NO	3	No accessible route to baseball, drainage issues in field
Plantings	Turf/trees/flowers	Good	NO	NO	NO	NO	1	Attractive plantings at both main building entrances
Play structures	5-12 & swings/timber & steel	Fair/good	NO	YES	NO	NO	2	Wood edge and wood fibre surfacing - no accessible passage to play structures
Courts	Paved informal play area							
Benches/bike racks	Metal bike rack by baseball, benches and picnic table by paved play area and play structures	Bike rack - poor, benches & picnic - good	NO	NO	NO	NO	4 and 1	Replace bike rack
Fencing	CLF & vinyl coated CLF	Perimeter @ baseball - fair	NO	NO	NO	NO	3	Exposed footings at drive, replace fabric and some framework
Lighting	Parking area lighting	None						
	Building flood lights	Poor/age unknown	NO	NO	NO	NO	4	Replace lighting.
	Exterior door lights	Fair/age unknown. Downlights at main entry canopy only	NO	NO	NO	NO	3	Replace lighting.



Newton Schools Study - Facility Assessment							
UNDERWOOD SCHOOL							
101 VERNON STREET							
BUILDING DATA:							
	site area:	1 acre					
	zoning district:	PUB					
	building area:	43,300 gross square feet					
	number of floors:	3					
	historical status:	None					
	year built:	1924					
	additions/renovations/upgrades:	1978 (elevator, entry, small rooms)					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof	Problems of on going leaks reported, metal roof edge in good condition/ 20 years	YES	NO	NO	NO	3	Roofing > 20 years old may not meet current codes.
Exterior walls	Load bearing masonry/concrete sills/stone detailing @ at entries	Good/original. Minor cracks and staining at masonry, rusting lintels	NO	NO	NO	NO	2	Repair, repoint and clean
Windows/louvers	Aluminum w/ thermal break and thermal glazing, fixed & single-hung operable	Good/~2001	NO	NO	NO	NO	1	Repair/replace damaged or missing screens. Note: difficult to operate, questionable quality.
Doors/hardware	Aluminum w/ pebble fiberglass panels; metal	Good/newer doors; Fair/original, all hardware is non accessible.	YES	YES	NO	NO	3	Replace with accessible hardware & auto-open device
Exterior steps/ramps	Concrete steps and stoops. Bituminous concrete from parking lot to accessible entry.	Fair/original. Spalling concrete.	NO	YES	NO	NO	3	Note: most entries, including main entry, are inaccessible
Structural concerns	None.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed Brick w/ painted plaster above @ corridors; painted plaster walls, typical. Painted CMU at Basement level.	Fair/original. Cracking, water damaged, stained, peeling. Door surrounds non accessible.	NO	YES	NO	NO	3	Repair and paint. Modify door surrounds for accessibility.
Floors	VCT, Carpet	Fair/ages unknown. Mixed VCT colors, carpet worn in areas.	NO	NO	NO	NO	3	Replace carpet w/ VCT.
Ceilings	2x4 ACT, typical. 2x2 ACT and painted plaster	Good/age unknown. Stained and damaged tiles	NO	NO	NO	NO	2	Replace damaged tiles.
Doors/borrowed lights	Wood solid core doors w/ wire glass in metal frames. Painted metal doors and frames w/ wire glass in corridors.	Good/original	NO	NO	NO	NO	2	See "Partitions" for accessibility issue.
Hardware		Fair/age unknown, "handles"	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets as needed.
Interior built-in furnishings	Wood, metal, laminate	Poor/original; a few locations with newer casework.	NO	YES	NO	NO	4	Replace to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Painted wood cubbies	Poor/age unknown	NO	YES	NO	NO	3	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Rolldown shades, typical	Good/age unknown	NO	NO	NO	NO	1	
Toilet rooms	Adult: CMU, ceramic tile at walls and floors Student: ceramic floor tile, epoxy poured floor, ceramic wall tile; metal partitions	Fair/original, not accessible Good/age unknown. Does not have required floor space for accessibility, incorrect door swing	NO NO	YES YES	NO NO	NO NO	3 2	Modify and update toilet rooms for accessibility. Modify toilet rooms for accessibility.
Stairs	Concrete/metal pan construction w/ VCT and/or rubber treads/landings; wood/metal hand & guardrails; painted metal pipe rail at newer stair	Fair/original Railings and stair nosing are non accessible. Surface material is lifting. Good/newer stair	NO	YES	NO	YES	3	Replace railings & stair nosing. Note: main entry stair is 12' wide without a center handrail.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Elevator		Fair/~1980, sized too small	NO	YES	NO	NO	3	Elevator is too small to meet current accessibility requirements.
Signage	Plastic plaques	Good/age unknown	NO	YES	NO	NO	2	Relocate at accessible height.
Gymnasium	Wood athletic floor and backstops; painted brick w/ plaster above	Fair/original	NO	NO	NO	NO	3	Refinish floor.
Kitchen	Warming kitchen	Good/functional	NO	NO	NO	NO	1	
Code concerns	1. Library is configured on multiple, inaccessible levels. 2. Front entry stair is 12' wide without a center handrail. 3. Open cubbies in corridor create a flammability risk.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by oil, classroom unit ventilators. AC in office.	Fair/poor/original, 83 years.	Boiler inefficient. Classroom exhaust runs 24/7.	NO	NO	Toilet exhaust inoperable. Air quality in Art Room. Unit ventilator noise issues. Some classroom exhaust blocked.	4	One new and one original boiler with new burner. Heating system poor; inconsistent, erratic, hot/cold through school. New boiler has problems and keeps shutting down.
Plumbing	Piping unknown, original	Poor/original	NO	Some accessible fixtures.	NO	Domestic water recirc. Inoperable?	4	--
Fire Protection	None						-	--
Electrical Service Equipment	400A. 3 phase, 4 wire, 120/208V	Fair to Poor - + 50 years	NO	NO	NO	Insufficient working clearances	3-4	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair to Poor - + 50 years	NO	NO	NO	NO	3-4	Should be upgraded.
Emergency System	15kW gas indoor generator in boiler room; serves corridor and stair lighting and boilers.	Fair to Poor - 50 years	NO	NO	NO	Insufficient working clearances; Not 2 hour fire rated room.	3-4	Generator should be replaced with Code compliant unit in 2-hour rated room.
Fire Alarm System	Multi-zone: not ADA compliant; Library, Gym, Multipurpose Room, and corridor smoke detectors and door holders; exterior master box.	Good - + 25 years	NO	NO	NO	Mounting height and locations of some pull stations.	2	All signals need to be ADA; Some pull stations should be relocated.
Telephone System	Multiple outside lines.	Good - 6 years	NO	NO	NO	NO	2	Add Dial phone to all classrooms.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Lighting System	Generally 2x4 recessed; surface/suspended wrap around fluorescents.	Good - + 20 years and newer.	NO	NO	NO	NO	2-3	Additional fixtures needed in some areas. Broken lenses need replacement. New energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Fair to Good - 50 years and newer.	NO	NO	NO	NO	3-4	Additional receptacles/circuits shall be added throughout.
Security System	Keypad at Custodian specific door; Motion detectors in corridor and some high value rooms. Monitor switches on some exterior doors; Notifies UL Central Station.	Fair - Mixed - 10 years	NO	NO	NO	NO	3	System will need upgrading.
Door Bell System	Push button at rear and front entrance; Bell in Admin.	Fair	NO	NO	NO	NO	3-4	
Sound/Intercom System	classrooms and offices; no ceiling speakers in corridors; Not heard throughout.	Good - 6 years	NO	NO	NO	NO	2	System needs to be replaced.
Clock/Program Bell System	Classroom and Office battery clocks. Corridor bells.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas	Good - 5 to 10 years	NO	NO	NO	NO	2	Additional data outlets needed in all classrooms.
Cablevision System	None						-	Service should be provided.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete, concrete hc parking space	Fair/good	NO	NO	NO	NO	3	Replace/resurface, reconstruct building entrance which is flush w/ parking
Sidewalks/ramps	Concrete walk to front door, stairs at d	Fair/good	NO	YES	NO	NO	2	Main entrance is not accessible
	Concrete walk by parking area	Poor	NO	YES	NO	NO	4	Surface condition, replace
	Concrete walk at granite stair to main entrance	Concrete at stair is in poor condition	NO	YES	NO	NO	4	Main entrance is not accessible
	Concrete walk at rear	Poor	NO	YES	NO	NO	4	
	Concrete HC entry at parking	Fair	NO	YES	NO	NO	3	Replace entry, no marked hc route to entrance
Fields	Turf - skinned base area, small baseball	Fair	NO	YES	NO	NO	3	No accessible route, turf restoration is needed
Plantings	Garden area to side of school, mature trees @ play area and around building, turf	Plantings are in good or fair condition/turf is in fair/poor condition	NO	YES	NO	NO	2 and 3	Garden area not accessible, turf restoration
Play structures	5-12 structure - timber, steel swings	Timber structure in fair condition, swings are in good condition	NO	YES	NO	NO	3 and 1	Play structure and swings are not fully accessible, surfacing is not accessible - wood fibre and wood edging
Courts	Bituminous concrete paved play area behind building, basketball area	Paved play area is in fair condition, basketball is in fair/good condition	NO	YES	NO	NO	2	No accessible route to basketball
Benches/bike racks	Wood and steel benches by play area, wood picnic table at garden, granite benches at entrance	Wood/steel benches, picnic table - fair	NO	YES	NO	NO	3	Non-accessible locations, replace wood /steel benches, picnic table
Fencing	CLF @ perimeter, play area and front by garden	Fair	NO	NO	NO	NO	3	
Lighting	Parking area lighting	NO						
	Building flood lights	Poor/age unknown	NO	NO	NO	NO	4	Replace lighting.
	Exterior door lights	Poor/age unknown	NO	NO	NO	NO	4	Replace lighting.



Newton Schools Study - Facility Assessment							
WARD ELEMENTARY SCHOOL							
10 DOLPHIN ROAD							
BUILDING DATA:							
	site area:	3.16 acres					
	zoning district:	PUB					
	building area:	38,000 gross square feet					
	number of floors:	3					
	historical status:	None					
	year built:	1928					
	additions/renovations/upgrades:	1950, 1954					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof	Leaks reported/ 20 years	YES	NO	NO	NO	3	Roofing > 20 years old may not meet current codes.
	Pitched slate shingles	Original	YES	NO	NO	NO	2	Original roofing does not meet current energy codes.
Exterior walls	Load bearing masonry/stone sills and stone detailing; exposed concrete foundation. Wood trim/details.	Fair/original. Spalling, stained, rusting lintels. Poor/original-wood trim.	NO	NO	NO	NO	3	Repair, repoint, and clean masonry and concrete. Repair, scrape and paint wood.
	Brick veneer/concrete sills; exposed concrete foundation	Fair/original. Stained/spalling concrete.	NO	NO	NO	NO	3	Repair and repoint
Windows/louvers	Aluminum w/ thermal break and thermal glazing, single-hung operable; metal louvers; cast iron grills	Good/~1990-windows. Good/original grills high on walls. Poor/original-windows and louvers	YES	NO	NO	NO	3	Repair/replace missing screens. Replace old windows/louvers. Note: difficult to operate, questionable quality.
	Steel frame, single-pane window wall system, hopper operables; metal louvers	Poor/1950s, Lexan infills, peeling/rusting frames	YES	NO	NO	NO	4	Replace window system and louvers
Doors/hardware	Metal, wood, aluminum, aluminum w/ pebble fiberglass panels	Good/newer; Poor/original and ages unknown-including frames. Hardware is non accessible.	YES	YES	NO	NO	3	Replace doors, frames, hardware. Note: main entry is not an accessible route.
Areaways	Concrete retaining walls with painted steel grates.	Poor/original. Deteriorating concrete, minor cracks at foundation, grates are rusted but appear structurally sound	NO	NO	NO	NO	4	Repair/patch concrete, scrape and paint grates.
Exterior steps/ramps	Granite steps; concrete steps, stoops, and ramps w/ painted steel pipe guardrails; wrought iron railings	Fair to poor/original and ages unknown. Rusting railing supports, spalling concrete.	NO	YES	NO	NO	3	Repair or replace railings/concrete. Note: the only accessible entrance door is at the rear of the building and the path to that door is non accessible.
Structural concerns	None.							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Painted plaster/concrete @ corridors; painted plaster walls, typical.	Fair/original-cracking, peeling, stained at corridors; rooms more recently painted.	NO	YES	NO	NO	3	Repair/paint corridor walls.
	Painted gypsum wallboard, typical. With vinyl wall covering @ corridors.	Fair/1954. Door surrounds are non accessible	NO	YES	NO	NO	3	Modify openings to comply with accessibility codes
Floors	Carpet, VCT, vinyl flooring, VAT, terrazzo	Fair/original. Good/newer VCT	NO	NO	NO	NO	2	Replace carpet, VAT and vinyl w/ VCT.
Ceilings	Painted plaster, typical; 2x4 ACT and 2x2 ACT	Good/original and ages unknown.	NO	NO	NO	NO	2	Replace stained tiles.
Doors/borrowed lights	Wood solid core doors w/ wood frames	Fair/original	NO	NO	NO	NO	3	See "Partitions" for accessibility issue.
Hardware		Fair/original	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Wood, painted wood, metal, laminate	Poor/original	NO	YES	NO	NO	4	Replace as required, replacement to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Painted wood cubbies. Metal, single-tier, 15" x 60" for 2 students	Poor/age unknown-metal lockers, rusting. Sized too small for shared use, non accessible hardware. Fair/ages unknown-wood cubbies.	NO	YES	NO	NO	3	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Rolling shades, typical	Good/ages unknown	NO	NO	NO	NO	2	
Toilet rooms	Adult: CMU, ceramic tile, VCT; wood/metal partitions	Poor/original. Non accessible	NO	YES	NO	NO	4	Replace/upgrade toilet rooms
	Student: VAT/VCT/ceramic tile; steel partitions, painted metal/wood partitions; painted plaster ceilings; painted concrete walls/glazed CMU	Poor/original. Non accessible. 1954 addition has some modifications/updates but still not accessible.	NO	YES	NO	NO	4	Replace/upgrade toilet rooms
Stairs	Concrete w/ steel nosing; wood/metal hand & guardrails	Poor/original. Worn. Railings and stair nosing are non accessible.	NO	YES	NO	NO	4	Replace railings & stair nosing.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Elevator	None							
Signage	Plastic plaques	Fair, non accessible	NO	YES	NO	NO	2	Replace signage to include Braille
Gymnasium	Wood athletic floor and backstops	Good/original	NO	NO	NO	NO	2	
	Wood paneling, painted CMU above; exposed acoustic deck; clerestory windows w/ vertical blinds	Good/original. Poor/age unknown-vertical blinds	NO	NO	NO	NO	2	Replace window treatment
	Wood platform; fabric curtains	Poor/original. Platform is not accessible.	NO	YES	NO	NO	3	Refinish floor; provide access
Kitchen	Warming kitchen	Good/functional	NO	NO	NO	NO	2	Kitchen is at furthest point from classrooms; students carry food trays up multiple floor levels.
Code concerns	1. Inaccessible at both the interior and exterior of the building. 2. No elevator. 3. "Dead-end" corridors do not meet code. 4. Open cubbies in corridor create a flammability risk. 5. No visual of front entry creates a security risk. 6. Flooding at basement level creates a health risk.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam, dual fuel burners, AC in office and Comp. Storage.	One original/poor, 79 years.	Boiler inefficient	NO	NO	Some classroom exhaust registers blocked. Oil storage inside exceeds code.	4	One new boiler, one original with newer burner, but in poor condition.
Plumbing	Piping original, unknown	Poor/original	Electric point-of-use domestic water heaters added at toilets.	Limited accessibility.	NO	NO	4	Possible sewage ejectors? Domestic water main service leaks.
Fire Protection	None						-	--
Electrical Service Equipment	400A. 3 phase, 4 wire, 120/208V	Fair - + 60 years. Very serious water penetration.	NO	NO	NO	Insufficient working clearances	3	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair - + 60 years and newer	NO	NO	NO	NO	3	Should be upgraded.
Emergency System	100kW diesel exterior generator serves possibly entire facility.	Good - 5 to 10 years	NO	NO	NO	No 2-hour fire rated room for life safety system equipment.	2-3	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Fire Alarm System	Multi-zone: not ADA compliant; Library and corridor smoke detectors and door holders; exterior master box.	Good - 25 years	NO	NO	NO	Mounting height and locations of some pull stations.	2	Signals should be replaced with ADA compliant type. Some pull stations should be relocated.
Telephone System	Multiple outside lines.	Good - 6 years	NO	NO	NO	NO	2	Phone lines should be extended to classrooms.
Lighting System	Generally 2x2 and 2x4 recessed fluorescent; surface wrap around in classrooms and some corridors.	Good - 2 years and older	NO	NO	NO	NO	2	Energy efficient fixtures, lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Fair - + 50 years. Many plug strips.	NO	NO	NO	NO	3-4	Additional receptacles/circuits needed throughout facility.
Security System	Keypads at specific doors; Motion detectors in corridors and stairs.	Fair - Mixed - + 30 years. Connection to Alarm Company not operating.	NO	NO	NO	NO	3	System needs repair and upgrading.
Door Bell System	Push button at front door. Buzzer in office area.	Fair	NO	NO	NO	NO	3-4	
Sound/Intercom System	Privacy switches and surface speakers in classrooms; corridor speakers; exterior speakers. Independent system in Gym.	Fair to Poor - + 30 years	NO	NO	NO	NO	3-4	System needs to be upgraded.
Clock/Program Bell System	Classroom and Office battery clocks. Corridor speakers with bell tone.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas. Some wireless.	Good - 15 years	NO	NO	NO	NO	2	Additional data outlets needed in classrooms.
Cablevision System	In after school room only.	N/A					-	Service should be provided.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete drive at back w/ parking and back parking	Fair/poor	NO	YES	NO	NO	3	Replace/resurface, route from hc parking space is too steep
Sidewalks/ramps	Concrete walk at left front entrance	Fair/poor	NO	YES	NO	NO	3	Stairs, no ramp provided
	Bituminous concrete walk at right front entrance	Fair	NO	YES	NO	NO	3	Stairs, no ramp provided, no handrails at door
	Concrete perimeter walk	Good w/ some bad sections	NO	YES	NO	NO	1 & 3	Replace bad sections
	Concrete stair at rear	Good w/ some bad sections	NO	YES	NO	NO	1	
	Bituminous concrete path around building	Fair	NO	YES	NO	NO	3	
Fields	Turf - skinned base area - baseball (2), soccer	Fair	NO	YES	NO	NO	3	No accessible route, turf restoration is needed
Plantings	Mature plantings, turf and shrubs in planters at school entrance, school garden at front, eroded turf at back side of play area and side slopes	Plantings are in good or fair condition/turf is in fair/poor condition	NO	NO	NO	NO	3	Garden area not accessible, turf restoration
Play structures	5-12 structure, swings - timber	Fair	NO	YES	NO	NO	3	Accessible ramp onto structure but no accessible loop
Courts	Bituminous concrete paved play area at side, tennis courts	Paved play area is in fair condition/poor, tennis is in good condition	NO	YES	NO	NO	3 and 1	Access through parking lot, no accessible entrance
Benches/bike racks	wood and steel benches by play area, bike racks in field	Fair	NO	YES	NO	NO	3	Non-accessible locations, repair/replace
Fencing	CLF separates drive & fields, and paved play and structures area, CLF at basketball	Fair, basketball CLF - poor	NO	NO	NO	NO	3 and 4	Repair/replace
Lighting	Parking area lighting	NO						
	Building flood lights	Good/newer, Poor/older	NO	NO	NO	NO	3	Replace lighting.
	Exterior door lights	Fair/original pole light at main entry	NO	NO	NO	NO	3	Replace lighting.



Newton Schools Study - Facility Assessment							
WILLIAMS SCHOOL							
141 GROVE STREET							
BUILDING DATA:							
	site area:	2 acres					
	zoning district:	PUB					
	building area:	41,700 gross square feet					
	number of floors:	2					
	historical status:	None					
	year built:	1950					
	additions/renovations/upgrades:	2001					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof	No active leaks reported, metal roof edge in good condition/ 15 years	NO	NO	NO	NO	2	
Exterior walls	Load bearing masonry/concrete sills/stone detailing @ main façade.	Good. Minor cracks and staining at masonry, rusting lintels/original	NO	NO	NO	NO	1	Repair and clean
	Brick veneer	Good/2001	NO	NO	NO	NO	1	
Windows/louvers	Steel-frame, single-pane glazing, metal louvers	Original windows at gym area only. Louvers are rusting/peeling/original	YES	NO	NO	NO	3	Replace gym windows, scrape and paint louvers.
	Aluminum w/ thermal break and thermal glazing, fixed & single-hung operable	Good/2001	NO	NO	NO	NO	1	Repair/replace damaged or missing screens. Note: difficult to operate, questionable quality.
Doors/hardware	Aluminum w/ pebble fiberglass panels	Good condition, hardware is non accessible/~2001	NO	YES	NO	NO	2	Replace with accessible hardware & auto-open device
Areaways	Concrete retaining walls with painted steel grates, open steel pipe guardrail.	Deteriorating concrete, minor cracks at foundation, grates are rusted but appear structurally sound/original	NO	NO	YES	NO	3	Repair/patch concrete, scrape and paint grates. Replace or modify guardrails.
Exterior steps/ramps	Concrete ramps w/ painted steel pipe guardrails	Poor condition, concrete is deteriorating and railing supports are rusting and not secure/2001	NO	NO	YES	NO	3	Replace ramps and railings
Structural concerns	None.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed CMU w/ painted plaster above @ corridors; painted plaster walls, typical	Good/original. Refurbished classroom door surrounds are non accessible	NO	YES	NO	NO	3	Modify openings to comply with accessibility codes
	Gypsum wallboard, painted w/ vinyl base, typical; steel corner guards @corridors	Good/2001. Door surrounds are non accessible	NO	YES	NO	NO	3	Modify openings to comply with accessibility codes
Floors	Carpet, typical	Good/2001	NO	NO	NO	NO	3	Replace carpet w/ VCT.
Ceilings	2x4 ACT and 2x2 ACT	Good/2001. Older ceilings have sagging/stained tiles.	NO	NO	NO	NO	1	Replace damaged tiles.
Doors/borrowed lights	Wood solid core doors w/ metal frames	Good/2001; Fair/original	NO	NO	NO	NO	2	See "Partitions" for accessibility issue.
Hardware		Good for ~75%/2001; Fair/original	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Wood, metal, laminate	Good/2001; Poor/original	NO	YES	NO	NO	2	Replace as required, replacement to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Metal, single-tier, 15" x 60" for 2 students	Good/2001; Fair/original--some rusting. Sized too small for shared use, non accessible hardware	NO	YES	NO	NO	3	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Various: vertical & horizontal blinds, and shades	Good/2001; Fair/older versions.	NO	NO	NO	NO	2	Replace/upgrade to provide consistent light control.
Toilet rooms	Adult: CMU, ceramic tile, VCT; wood/metal partitions	Poor/original. Non accessible	NO	YES	NO	NO	3	Replace/upgrade toilet rooms
	Student: glazed CMU & ceramic tile; stainless steel partitions	Good/2001	NO	NO	NO	NO	1	
Stairs	Concrete w/ steel nosing; wood/metal hand & guardrails	Good/original. Railings and stair nosing are non accessible.	NO	YES	NO	NO	2	Replace railings & stair nosing.
	Concrete/metal pan construction; painted metal hand & guardrails	Good/2001	NO	NO	NO	NO	1	



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Elevator		Good/2001	NO	NO	NO	NO	1	
Signage	Plastic plaques	Good/2001; Fair/all other, non accessible	NO	YES	NO	NO	2	Replace signage to include braille
Gymnasium equipment	Wood athletic floor; wood backstops	Good	NO	NO	NO	NO	1	
Auditorium	Painted concrete floor	Good/original. Slope of floor is not accessible	NO	YES	NO	NO	3	Partial reconstruction required.
	Wood platform	Good/original. Platform is accessible and is used for Music	NO	NO	NO	NO	1	
	Metal/fabric seats	Good/2001. Designated "accessible" seats are not accessible	NO	YES	NO	NO	2	Provide accessible seating.
Kitchen	Warming kitchen	Good/functional	NO	NO	NO	NO	1	
Cafeteria	VCT floor/painted plaster walls	Good/functional	NO	NO	NO	NO	1	Note: cafeteria formerly a classroom. 3 lunches of ~100
Code concerns	1. Main entrance is not clearly indicated and 2 ramps at Grove Street side lead to doors without accessible hardware. 2. Doors swing open into original stairwells, obstructing the path of travel. 3. Elevator access is far from main entry. 4. No visual of front entry creates a security risk.							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by oil w/UV's AC in Office	Poor - 58 years	Boiler inefficient	NO	NO	Mechanical ventilation below standard or missing in areas	3-4	Systems are near the end of their normal useful life
Plumbing	Piping unknown	Poor - 58 years	NO	Not ADA, minimal accessibility	NO	Fixtures not water conserving	3-4	Systems are near the end of their normal useful life
Fire Protection	Wet sprinkler; dry for Gym/Auditorium area	Good - 6 years	NO	Coverage not to code in some areas	NO	Coverage issues; dry serving occupied areas	2	Drawings and hydraulic calculations prob available
Electrical Service Equipment	400A. 3 phase, 4 wire 120/208V	Good - 6 years	NO	NO	NO	NO	2	New in 2001
Distribution System	Circuit breaker panelboards with conduits and wire feeders	Good - 6 years and older	NO	NO	NO	NO	2	Mostly new in 2001
Emergency System	Exterior generator; auto transfer switch in main electrical room.	Good - 6 years	NO	NO	NO	No separation of life safety, lighting system.	2	New in 2001 serves entire building.
Fire Alarm System	Multi-zone; ADA compliant; corridor smoke detectors and door holders; master box.	Good - 6 years	NO	NO	NO	No smoke detectors in Kindergarten Room; no A/V signal in Cafeteria	2	New in 2001
Telephone System	Multiple outside lines.	Good - 6 years	NO	NO	NO	NO	2	New in 2001



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Lighting System	Generally 2x4 recessed fluorescent	Good - 6 years and older	NO	NO	NO	No multiple switching or occupancy sensor in classrooms and offices with natural light.	2	New energy efficient lamps and electronic ballast by utility company.
Receptacles	Generally standard duplex type	Good - 6 years and older	NO	NO	NO	No child safety in kindergarten rooms; no ground fault in kitchen.	2	Additional receptacles needed in classrooms and office areas.
Security System	Control panel in Administration Office; keypads at specific doors; motion detectors in corridors; Notifies UL Central Station.	Mixed	NO	NO	NO	NO	3	System will need upgrading.
Door Bell System	Button at back door; Bell in Admin. Office	Working - 3 years - "residential"	NO	NO	NO	NO	3	
Sound/Intercom System	Dial phone and speaker in classrooms; ceiling speakers in corridors.	Good - 6 years	NO	NO	NO	NO	2	No independent system in Auditorium or Gym.
Clock/Program Bell System	Classroom and Office battery clocks; Corridor and classroom speakers with bell tones.	Good - 6 years	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas	Good - 6 years	NO	NO	NO	NO	2	Additional data outlets needed in classrooms.
Cablevision System	None						-	Service should be provided.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete at rear of building, drop off at building front	Fair. No crosswalk/curb cuts from drop off across street. No visitor parking. Parking area requires tandem parking.	NO	YES	YES	NO	3	Reconstruction
Sidewalks/ramps	Concrete	Fair/Poor. Entrance ramps and railings are deteriorating and not compliant	NO	YES	YES	NO	3	Reconstruction
Fields	Turf/skinned infield	Average. Gym entrance is not accessible, paved accessible route stops at field. Need to walk through parking area to field.	NO	YES	YES	NO	3	Repair. Note: softball used by PE
Plantings	Plantings at buiding edge/mature site trees		NO	NO	NO	NO		
Play structures	One structure/timber	Fair/poor. Surfacing/structure not accessible. Need to walk through parking area.	NO	YES	YES	NO	3	Replace
Courts	Bituminous concrete	Poor.	NO	NO	NO	NO	4	Reconstruction
Outdoor classroom	None							Note: school has plans for outdoor classroom
Benches/bike racks	None							
Fencing	None							
Lighting	Parking area lighting	By building flood lights.	NO	NO	NO	NO	3	Replace lighting.
	Building flood lights	Fair/ages unknown. One missing at rear of building	NO	NO	NO	NO	3	Replace lighting.
	Exterior door lights	Poor/original. Rusted, most likely do not work.	NO	NO	NO	NO	4	Replace lighting.



Newton Schools Study - Facility Assessment							
ZERVAS SCHOOL							
30 BEETHOVEN AVENUE							
BUILDING DATA:							
	site area:	5.28 acres					
	zoning district:	PUB					
	building area:	30,646 gross sq. ft.					
	number of floors:	1					
	historical status:	None					
	year built:	1954					
	additions/renovations/upgrades:	1999 modulars					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof/painted wood soffit at overhang	Skylight leaks reported, peeling paint at soffits/ 12 years	NO	NO	NO	NO	3	
Exterior walls	Brick and field stone; 2x2 tile wall at former auditorium entrance; concrete exposed foundation	Good/original masonry-minor cracks, rusting lintels; Fair/original concrete-cracks, stains	NO	NO	NO	NO	2	Repair and clean
Windows/louvers	Steel-frame, single-pane glazing, fixed and hopper; metal louvers	Poor/original, peeling, deteriorating	YES	NO	NO	NO	4	Replace windows/louvers
Doors/hardware	Painted metal, aluminum and aluminum w/ pebble fiberglass panels	Poor/original, Fair/replacement doors, hardware is non accessible	YES	YES	NO	NO	4	Replace doors and provide accessible hardware & auto-open device
Areaways	Concrete retaining walls with steel grates	Fair/original, concrete spalling, stained; grates are rusted	NO	NO	NO	NO	3	Replace grates, repair concrete
Exterior steps/ramps	Concrete and slate stoops; granite steps; concrete ramps; galvanized steel and painted metal pipe guardrails.	Poor/original or ages unknown, concrete is deteriorating and railing supports are rusting and not secure	NO	YES	NO	NO	4	Rebuild concrete steps and replace older railings.
Structural concerns	None.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed CMU w/ painted plaster above @ corridors; painted plaster walls, typical; wood paneling at entries	Fair/original, door surrounds are non accessible; wood paneling is worn	NO	YES	NO	NO	3	Modify for door surrounds for accessibility
Floors	Carpet, typical; VCT	Fair/ages unknown, VCT of various colors	NO	NO	NO	NO	3	Replace carpet w/ VCT.
Ceilings	Painted plaster and 1x1 ACT, typical; 2x4 ACT and 2x2 ACT	Fair/original--sagging/stained or broken tiles; Good/newer ACT	NO	NO	NO	NO	3	Replace damaged tiles.
Doors/borrowed lights	Wood solid core doors w/ wire glass in metal and wood frames	Fair/original	NO	NO	NO	NO	3	Replace doors. See "Partitions" for accessibility issue.
Hardware		Fair/original, hardware is non accessible	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Wood, metal, laminate	Fair/original	NO	YES	NO	NO	3	Replace/upgrade casework to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Wood cubbies and metal, single-tier lockers of various sizes/configurations.	Poor/original and ages unknown--rusting. Sized too small for shared use, non accessible hardware	NO	YES	NO	NO	4	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Rolling shades, typical	Good/age unknown	NO	NO	NO	NO	2	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Toilet rooms	Adult	Poor/original. Non accessible	NO	YES	NO	NO	4	Replace/upgrade toilet rooms
	Student: glazed CMU & ceramic tile; painted metal/wood partitions	Poor/original. Not fully accessible	NO	YES	NO	NO	4	Upgrade toilet rooms.
Stairs	Not applicable, 1 floor							
Elevator	Not applicable, 1 floor							
Signage	Printed paper	Poor, non accessible	NO	YES	NO	NO	4	Install signage w/ braille.
Gymnasium/assembly	Wood athletic floor and backstops; built-in cafeteria tables	Fair/original, tables not used/not safe	NO	NO	NO	NO	3	Refinish floor
	Glazed CMU, painted brick above; 1x1 ACT	Good/original	NO	NO	NO	NO	2	
Kitchen	Warming kitchen	Good/functional	NO	NO	NO	NO	1	
Code concerns	1. Flooding at crawl space may create health risks. 2. Open cubbies in corridor create a flammability risk. 3. All hardware is non accessible.							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by gas, original classroom unit ventilators. Burners piped for gas and oil. Library with RTU AC	One boiler replaced, original, 53 years.	Boiler inefficient	NO	Cond rec'r vent run through Boiler Room (egress) door.	Ventilation suspect, some areas "stuffy".	4	Only one operable boiler. Problems with heating, not warm enough through building. Steam taps need work. No overhaul of controls.
Plumbing	Piping original, unknown.	Unknown/original, Fair to poor	NO	Marginal accessibility	NO	NO	4	
Fire Protection	None						-	--
Electrical Service Equipment	Utility company transformer vault within building; 400A. 3 phase, 4 wire, 120/208V	Fair to Poor - + 50 years	NO	NO	NO	Insufficient working clearances	3-4	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair to Poor - + 50 years, some newer.	NO	NO	NO	NO	3-4	Should be upgraded.
Emergency System	Exterior diesel generator in boiler room; serves corridor and stair lighting and boilers. (Possibly entire facility.)	Good - 10 years	NO	NO	NO	Not 2-hour fire rated room for life safety equipment.	3-4	Life safety equipment should be placed in Code compliant 2-hour rated room.
Fire Alarm System	Multi-zone: not ADA compliant; Library and corridor smoke detectors and door holders; exterior master box.	Good - + 25 years	NO	YES	NO	Mounting height and locations of some pull stations.	2	All signals need to be ADA; Some pull stations should be relocated.
Telephone System	Multiple outside lines.	Good - 5 to 10 years	NO	NO	NO	NO	2	Add Dial phone to all classrooms.
Lighting System	Generally suspended/surface wrap around fluorescents; Library 2x2 recessed fluorescent.	Good - + 20 years	NO	NO	NO	NO	2-3	Additional fixtures needed in some areas. New energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Fair to Good - + 50 years and newer.	NO	NO	NO	NO	3-4	Additional receptacles/circuits should be added throughout.




	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Security System	Keypad at parking lot door; Motion detectors in corridors; Monitor switches on exterior doors; Notifies UL Central Station.	Fair - Mixed - 10 years	NO	NO	NO	NO	3	System will need upgrading.
Door Bell System	Unknown	-	-	-	-	-	-	
Sound/Intercom System	Dial phones in offices and speakers with private switch in classrooms; speakers in corridors.	Fair - 30 years and newer.	NO	NO	NO	NO	3-4	System should be upgraded.
Clock/Program Bell System	Classroom and Office battery clocks. Corridor and classroom speaker with bell tones.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas.	Good - 6 years	NO	NO	NO	NO	2	Additional data outlets needed in some classrooms.
Cablevision System	None						-	Service should be provided.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete	Fair/poor	NO	YES	NO	NO	3	Resurface, route from hc parking, non-complaint rails
Sidewalks/ramps	Bituminous concrete walk at main entrance	Fair/good	NO	NO	NO	NO	1	
	Route from bus stop		NO	YES	NO	NO		Is either through drive or uses non-complaint walks/ramps
	Concrete paver seating area near front	Good w/ some bad sections	NO	YES	NO	NO	1	
	Back entrance stairs/railing	Poor	NO	YES	NO	NO	4	Repair/replace
	Bituminous concrete/conc ramps	Good/fair	NO	NO	NO	NO	2	
Fields	Turf - soccer	Poor	NO	YES	NO	NO	4	Severe compaction/turf restoration needed, turf in back is eroded
Plantings	Mature plantings and turf, attractive gardens in front	Good/fair	NO	NO	NO	NO	2	Some turf restoration, pruning
Play structures	K-2 by school - steel/plastic, 5-12 steel/plastic, wood fibre surfacing	Good	NO	YES	NO	NO	1	Surfacing is access issue - edging with wood fibre surfacing
Courts	Bituminous concrete paved play area at building, basketball in back	Good	NO	YES	NO	NO	1	Access through parking area
Benches/bike racks	Wood and steel benches and bike racks by play area, wood bench in front, steel picnic table	Bike racks, picnic and wood bench in front - good, wood and steel in play area - fair	NO	NO	NO	NO	1 and 3	Repair/replace wood/steel benches
Fencing	CLF front by soccer, some wood perimeter	Fair	NO	NO	NO	NO	3	repair/replace
Lighting	Parking area lighting	Good	NO	NO	NO	NO	1	Replace lighting.
	Building flood lights	Fair/age unknown	NO	NO	NO	NO	3	Replace lighting.
	Exterior door lights	Poor/age unknown	NO	NO	NO	NO	4	Replace lighting.



Newton Schools Study - Facility Assessment								
BIGELOW MIDDLE SCHOOL								
42 VERNON STREET								
BUILDING DATA:								
	site area:	2.81 Acres						
	zoning district:	PUB						
	building area:	92,500 gross square feet						
	number of floors:	3						
	historical status:	None						
	year built:	1967						
	additions/renovations/upgrades:	1993 (opened as MS)						
	assessment value:	n/a						
Key to Rating:								
1 = New or in good condition with ordinary maintenance required								
2 = Good condition with minor repairs required								
3 = Fair condition with repairs or replacement required								
4 = Poor condition with replacement required								

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof	Active minor leaks reported/ 16 years	NO	NO	NO	NO	2	
Exterior walls	Brick veneer, precast concrete panels/columns and window surrounds	Good/original. Major cracking of veneer noted at corner of Park and Vernon Streets. Spalling, cracking, staining, rebar exposed at concrete. Window sill concrete separating from wall concrete.	NO	NO	NO	NO	2	Repair major crack. Repair concrete.
Windows	Aluminum-frame storefront system with single-pane glazing.	Poor/original	YES	NO	NO	NO	4	Replace with energy code compliant curtainwall system.
	Aluminum w/ thermal glazing, fixed and awning type.	Good/1993	NO	NO	NO	NO	1	
Doors/hardware	Metal, aluminum, aluminum w/ pebble fiberglass panels	Good/recent-aluminum. Poor/original-steel, rusting. Non accessible hardware.	YES	YES	NO	NO	3	Replace doors, provide accessible hardware.
Areaways	Concrete retaining walls with steel grates, open steel pipe guardrail w/ chain link fence.	Fair/orginal. Broken, spalling concrete; rusting at guardrails/grates	NO	NO	NO	NO	3	Patch/repair concrete. Replace rusted railings.
Exterior steps/ramps	Concrete walls, steps, stoops and ramps w/ painted steel pipe guardrails	Poor/original w/updates. Spalling, broken, stained, deteriorating concrete. Ongoing settlement and repairs at main stair. Railings rusted and deteriorated.	NO	YES	NO	NO	4	Repair/replace concrete and replace guardrails.
Structural concerns	1. Review masonry cracks on NorthWest corner							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Painted CMU, typical; painted plaster walls; exposed brick at entry; wood paneling at cafeteria	Good/original. A portion of door surrounds are non accessible.	NO	YES	NO	NO	3	Modify openings to comply with accessibility code.
Floors	Carpet, terrazzo, concrete, VCT, VAT, wood, rubber	Poor/various ages, duct tape used on carpet. Good/newer VCT	NO	NO	NO	NO	3	Replace carpet at classrooms w/ VCT; abate and replace VAT with VCT.
Ceilings	Concrete coffered ceiling, 2x4 ACT, 2x2 ACT, painted plaster, and various acoustic treatments	Good/original and ages unknown	NO	NO	NO	NO	2	Replace damaged tiles.
Doors/borrowed lights	Wood solid core doors w/ metal frames and w/ wood frames	Poor/original	NO	NO	NO	NO	4	Refinish or replace doors. See "Partitions" for accessibility issue.
Hardware		Fair/original, A portion of hardware is non accessible	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Wood built-ins of various configurations	Fair/original	NO	YES	NO	NO	3	Replace with accessible casework.
Lockers/cubbies	Metal lockers-narrow single-tier, some with boxes above	Fair/original, rusting	NO	YES	NO	NO	3	
Window treatments	Rolling shades, typical	Good/ages unknown	NO	NO	NO	NO	2	
Toilet rooms	Painted CMU w/ painted plaster above/ceramic tile walls; ceramic tile floors; metal partitions	Good/1993 updates. Not fully accessible Fair/original-non accessible	NO	YES	NO	NO	3	Update toilet rooms
Stairs	Concrete and steel pan; VCT, rubber; wood/metal hand & guardrails	Good/original. Railings are non accessible.	NO	YES	NO	NO	2	Replace railings.
Elevator		Good/1993	NO	NO	NO	NO	1	Remove furniture to provide a clear accessible route.
Signage	Various types, no standard	Poor/original. Recent signs are of paper.	NO	YES	NO	NO	4	Provide code-compliant signage



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Gymnasium equipment	Wood athletic floor; wood bleachers; divider wall.	Good/original floor. Fair/original bleachers. Poor/age unknown-divider. .	NO	YES	NO	NO	3	Refinish floor, provide new bleachers that are accessible. Replace divider wall.
	Painted CMU w/ tectum panels; exposed concrete deck	Good/original	NO	NO	NO	NO	2	
Locker rooms	Concrete floors and coffered concrete ceilings	Good/original	NO	NO	NO	NO	2	
	Toilet areas updated w/ ceramic tile floors and walls, metal partitions	Good/1993	NO	NO	NO	NO	1	
	Multi-sized metal lockers	Fair/original. Rusting.	NO	YES	NO	NO	3	Replace lockers, provide code-compliant lockers/area.
	Individual showers at girls; shared shower at boys	Good/1993 -unused. Used for storage.	NO	NO	NO	NO	1	
Auditorium	Sealed concrete sloped floor, VAT	Good/original	NO	NO	NO	NO	2	Replace VAT with VCT
	Operable wall, splits auditorium into two lecture halls	Unknown if it works/original	NO	NO	NO	NO	2	
	Wood stage, painted CMU walls, fabric curtains	Poor/original flooring. Good/newer curtains	NO	YES	NO	NO	3	Refinish wood. Design / install accessible route.
	Hard, molded plastic seats, 156 seats plus flat floor area for movable seating	Good/1993	NO	YES	NO	NO	1	Provide accessible seating locations
Lab Equipment	Wood cabinets w/ resin tops	Good/1993	NO	YES	NO	NO	2	Update w/ current technology to meet educational standards, incl. accessible sinks/fixtures
Kitchen	Full kitchen	Good/functional	NO	NO	NO	NO	1	
Code concerns	1. No visual of front entry creates a security risk. 2. Dampness concerns at basement level may create health risks.							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam converted to hot water, by oil.	Original/fair to poor, 37 years	Boilers inefficient, steam to water inefficient	NO	NO	Noisy unit ventilators interfere with teaching.	3	Heating is sporadic, especially bad this winter. Maintenance required weekly. Unit ventilator coil freeze-ups. One thermostat for every two classrooms.
Air conditioning	Classroom chiller inoperable (at least 3 years).	Inoperable / original				Some interior space	4	
Plumbing	Piping original, unknown	Original/poor	NO	Accessible fixtures but outdated	NO	No domestic hot water throughout building. No parts for EWC's.	4	One domestic water heater inoperable? Showers not used.
Fire Protection	Building not sprinklered, 4 inch fire protection water service, destination unknown.							
Electrical Service Equipment	2500A, 3 phase, 4 wire, 120/208V	Good - 37 years and newer	NO	NO	NO	Tight working clearances	2-3	Should be upgraded.
Distribution System	Circuit breaker panelboard with conduit and wire feeders.	Good - 37 years and newer	NO	NO	NO	NO	2-3	Should be upgraded.
Emergency System	45kW gas indoor and ATS in electric room; serves corridor and stair lighting some kitchen refrig and boilers; Battery emergency lighting in corridors.	Good to Fair - 37 years	NO	NO	NO	Insufficient working clearances; Not 2-hour fire rated room.	2-3	Generator should be replaced with Code compliant unit in 2-hour rated room.




	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Fire Alarm System	Multi-zone; mostly ADA compliant; smoke detectors in all rooms; master box.	Good - 3 to 15 years	NO	NO	NO	Mounting height and location of some pull stations	2	All signals should be changed to ADA compliant.
Telephone System	Multiple outside lines.	Good - 20 years	NO	NO	NO	NO	3	System should be upgraded.
Lighting System	Generally: Surface/suspended wrap around fluorescent; 2x4 recessed fluorescent	Good - 10 years and newer; poor Auditorium lighting.	NO	NO	NO	No multiple switches in classrooms. Occupancy sensors in some classrooms, not all working.	2	Older energy efficient lamps and electronic ballasts by utility company. Many ballast failures. Auditorium lighting should be upgraded.
Receptacles	Generally standard duplex type	Good - 37 years and newer	NO	NO	NO	NO	2	Some classrooms need more receptacles / circuits.
Security System	Keypads at specific doors; motion detectors in corridors and high value rooms; exterior doors with monitor switches. Notifies UL Central Station.	Fair - Mixed	NO	NO	NO	NO	2-3	Systems will need upgrading.
Sound/Intercom System	Clock/speaker unit with private switch in classrooms; ceiling speakers in corridors; intercom/telephone in offices.	Good - 37 years and newer	NO	NO	NO	NO	2-3	Independent sound systems in Auditorium and Gymnasium. System should be upgraded.
Clock/Program Bell System	Classroom and office battery clocks; corridor and classroom speakers with bell tones	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas; some wireless	Good - 6 years	NO	NO	NO	NO	2	
Cablevision System	TV outlets in classrooms, large group areas and main lobby; TV station within facility.	Good - 6 years	NO	NO	NO	NO	2	



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete, granite curbs	Pavement - fair/poor, curbs - good/fair	NO	NO	NO	NO	3	Replace/resurface
Sidewalks/ramps	Concrete walk at front	Fair	NO	YES	NO	NO	3	Surface condition, replace
	Concrete walk at lower parking	Fair	NO	NO	NO	NO	3	Needs railing
	Concrete walls/steel rails	Fair	NO	NO	NO	NO	3	Repair
	Concrete walls & stair at front, accessible route from bus	Poor	NO	YES	NO	NO	4	Accessible route from bus is through driveway curb cut, sidewalk is in disrepair
Fields	None							
Plantings	Mature trees, turf at entrance	Fair	NO	NO	NO	NO	3	Turf restoration in some areas
Courts	None							
Courtyard	Concrete sidewalk, wood benches, mature plantings	Good	NO	NO	NO	NO	2	
Benches/bike racks	None							
Fencing	Minimal perimeter - wood	Fair/good	NO	NO	NO	NO	2	
Lighting	Parking area lighting	None						
	Building flood lights	Poor/age unknown	NO	NO	NO	NO	4	Replace lighting.
	Exterior door lights	Poor/age unknown	NO	NO	NO	NO	4	Replace lighting.



Newton Schools Study - Facility Assessment								
BROWN MIDDLE SCHOOL								
125 Meadowbrook Road								
BUILDING DATA:								
site area:		8.27 Acres						
zoning district:		PUB						
building area:		146,000 gross square feet						
number of floors:		2						
historical status:		None						
year built:		1956						
additions/renovations/upgrades:		1962, 1982, 1997						
assessment value:		n/a						
Key to Rating:								
1 = New or in good condition with ordinary maintenance required								
2 = Good condition with minor repairs required								
3 = Fair condition with repairs or replacement required								
4 = Poor condition with replacement required								

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof	No active leaks reported, metal roof edge in good condition/ 20 years	YES	NO	NO	NO	2	Roofing > 20 years old may not meet current codes.
Exterior walls	Brick veneer, steel window storefront system, stone panels at main entry	Masonry in good condition/original. Overall minor cracks and staining. At north side significant settlement cracks.	NO	NO	NO	NO	2	Repair and clean
	Brick veneer	Good/1997	NO	NO	NO	NO	1	
Windows	Steel-frame storefront system with single-pane glazing, opaque blank-off panels and louvers. Fixed, awning and hopper type.	Poor/original	YES	NO	NO	NO	4	Replace with energy code compliant curtainwall system. Possible return to the multi-colored opaque panels.
	Aluminum w/ thermal glazing, fixed and awning type.	Good/1997	NO	NO	NO	NO	1	
Doors/hardware	~50%-aluminum w/ pebble fiberglass panels; 50% steel doors	Aluminum: good/recent, hardware is non accessible. Steel: poor/original, rusting and hardware is non accessible.	YES	YES	NO	NO	3	Replace with accessible hardware & auto-open device. Replace old doors with aluminum doors.
Areaways	Concrete retaining walls with painted steel grates, open steel pipe guardrail w/ chain link.	Minor deterioration of concrete, grates are rusted but appear structurally sound/original. Areaways are full of debris, trees are growing in them and it is unclear if drains work.	NO	NO	NO	NO	1	Clean out areaways, fix any inoperable drains, repaint grates and repair chain link fencing.
Exterior steps/ramps	Concrete ramps w/ painted steel pipe guardrails	Fair/original and 1997 - concrete is spalling and guardrails are rusted.	NO	NO	NO	NO	3	Repair concrete and replace guardrails.
Canopies @ exterior doors	Flat roofed, metal edge, plaster soffit. Main entry w/ brick piers.	Main entry-good/1997; elsewhere canopies have been removed or are damaged.	NO	NO	NO	NO	3	Repair damaged canopy; properly seal where canopies have been removed.
Structural concerns	1. Review foundation/masonry cracks on NorthEast corner at girl's locker room. 2. Replacement of window walls may trigger seismic structural upgrades.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed CMU w/ painted plaster above @ corridors; painted plaster walls, typical; some painted CMU	Good/original. Most classroom entries are non accessible.	NO	YES	NO	NO	3	Modify openings to comply with accessibility code.
	Painted gypsum wallboard w/ vinyl base, typical	Good/1997	NO	NO	NO	NO	1	
Floors	Terrazzo, concrete, VCT, VAT, carpet, wood	Various conditions and ages.	NO	NO	NO	NO	2	Replace carpet at classrooms w/ VCT; abate and replace VAT with VCT.
Ceilings	2x4 ACT, 2x2 ACT, plaster, and various acoustic treatments	Good to fair. Older ceilings have sagging/stained tiles.	NO	NO	NO	NO	2	Replace damage tiles. Provide consist ceiling treatment in classrooms.
Doors/borrowed lights	Wood solid core doors w/ metal frames and w/ wood frames	Poor/original; good/1997	NO	NO	NO	NO	4	Refinish or replace doors. See "Partitions" for accessibility issue.
Hardware		Fair/original	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Wood built-ins of various configurations	Poor/original	NO	YES	NO	NO	4	Replace w/ plastic laminate shelves and counters.
Lockers/cubbies	Steel, 12" x 60" for 1 students	Poor/original. Rusting, damaged, and ~25% inoperable.	NO	YES	NO	NO	4	Replace.
Window treatments	Various: vertical & horizontal blinds, and shades	Fair/older versions	NO	NO	NO	NO	2	Replace/upgrade to provide consistent light control.
Toilet rooms	Glazed CMU walls w/ painted plaster above; ceramic tile floors	Fair/original with some updated fixtures. Staff toilets are non accessible	NO	YES	NO	NO	3	Update fixtures.
Stairs	Steel pan; wood/metal hand & guardrails	Good/original. Railings are non accessible.	NO	YES	NO	NO	2	Replace railings.
Elevator		Fair/original. Undersized and remotely located.	NO	YES	NO	NO	3	Provide new elevator near main lobby.
Signage	Various types, no standard	Poor/original. Recent signs are of paper.	NO	YES	NO	NO	4	Provide code-compliant signage

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Gymnasium equipment	Wood athletic floor; wood bleachers, divider curtains, aluminum bball backstops	Good/original floor. Fair/original bleachers. New divider curtains and recent backstops.	NO	YES	NO	NO	3	Refinish floor, provide new bleachers that are accessible.
Locker rooms	Concrete and ceramic tile floors	Fair/original. Some cracking and curbs are inaccessible.	NO	YES	NO	NO	3	Repair and eliminate curbs to make accessible.
	Metal partitions	Fair/original. Unused/no curtains	NO	NO	NO	NO	1	Unused space, may be reprogrammed.
	Multi-sized metal lockers	Fair/original. Some rusting.	NO	YES	NO	NO	3	Replace lockers, provide code-compliant lockers/area.
	Individual marble showers at girls; shared ceramic tile shower at boys	Fair/original. Unused. Used for storage at girls.	NO	YES	NO	NO	1	Unused space, may be reprogrammed.
Auditorium	Sealed concrete floor	Good/original	NO	NO	NO	NO	1	Repair any minor cracks
	Wood stage/steps; metal pipe painted handrails	Fair/original	NO	YES	NO	NO	3	Refinish wood. Replace railings.
	Wood/fabric auditorium seating, seats 600	Poor/original	NO	YES	NO	NO	4	Replace, provide required accessible seating.
	Lighting by flourescent tubes at perimeter; stage lighting	Poor/original not used; Poor/recent	NO	NO	NO	NO	4	Update lighting; provide current technology for stage lighting
Lab Equipment	Wood cabinets w/ laminate tops, some resin tops	Fair/original	NO	YES	NO	NO	3	Update w/ current technology to meet educational standards, incl. accessible sinks/fixtures
Kitchen	Full kitchen	Good/some recent. New sinks and stove.	NO	NO	NO	NO	1	
Code concerns	1. No visual of front entry creates a security risk.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by oil w/UV's AC in Offices and head end	Very poor - 51 years	Boilers inefficient	NO	NO	Ventilation suspect in some areas	4+	The H&V system is well past its normal useful life and appears to effect the educational process
Plumbing	Assumed copper with lead solder and cast iron	poor - 51 years	NO	A few fixtures marginally accessible	NO	Fixtures not water conserving	4	Systems are at the end of their normal useful life
Fire Protection	None							
Electrical Service Equipment	800A, 3 phase, 4 wire, 120/208V.	Good - 20 years and older	NO	NO	NO	Tight working clearances	2-3	Some new in 1985
Distribution System	Circuit breaker panelboard with conduit and wire feeders.	Good - 20 years and older	NO	NO	NO	NO	2-3	Some new in 1985
Emergency System	Exterior generator; Auto transfer switch in main electric room.	Good - 10 years	NO	NO	NO	No separation of life safety lighting system.	2	New in 1997. Facility used as storm shelter.
Fire Alarm System	Multi-zone; not ADA compliant; smoke detectors in corridors and classrooms of 1985 addition; master box.	Good to fair - 30 years	NO	NO	NO	A/V signals not all ADA; Mounting height and locations of some pull stations.	2-3	All A/V signals need to be ADA; some pull stations should be relocated.
Telephone System	Multiple outside lines.	Good - 5 to 10 years	NO	NO	NO	NO	2	
Lighting System	Generally: 2x4 recessed fluorescent; 2x2 recessed fluorescent; wrap around suspended fluorescent	Good to Fair - 25 years and older	NO	NO	NO	NO	2	Some new energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type	Good - 5-10 years	NO	NO	NO	NO	2	Additional receptacle/circuits needed in classrooms and office areas.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Security System	Control panel in main electrical room; keypads at specific doors; motion detectors in corridors; some exterior doors with monitor switches. Notifies UL Central Station.	Fair - Mixed	NO	NO	NO	NO	3	Systems need upgrading.
Sound/Intercom System	Dial phone and speaker and private switch in classrooms; ceiling speakers in corridors.	Good - 6 years	NO	NO	NO	NO	2	Independent sound system in Auditorium
Clock/Program Bell System	Classroom and office battery clocks; corridor and classroom speakers with bell tones	Good - 6 years	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas	Good - 6 years	NO	NO	NO	NO	2	Additional data outlets needed in classrooms
Cablevision System	TV outlets in classrooms, large group areas and main lobby	Good - 6 years	NO	NO	NO	NO	2	



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete large parking area across street, smaller area at side of school	Average condition, crossing area not marked	NO	YES	YES	NO	3	Repair/reconfiguration
Sidewalks/ramps	Concrete; bituminous concrete at terrace	Fair/poor - settling. Ramp at main entrance: railing and ramp not to code, terrace deteriorating and entrance is not accessible	NO	YES	YES	NO	3	Reconstruction
Fields	Soccer/football/track used by school	Good	NO	YES	NO	NO	2	Provide accessible route
Plantings	Attractive mature plantings, lawns at building		NO	NO	NO	NO		
Courts	None							
Courtyard	Concrete sidewalks, wood trellis, plantings	Good	NO	NO	NO	NO	1	
Benches/bike racks	In front of school and by play area	Good	NO	NO	NO	NO	1	
Fencing	None							
Lighting	Building mounted and pole mounted parking/roadway lighting; Entrance doorway lighting.	Good - 20 years					1	



Newton Schools Study - Facility Assessment							
DAY MIDDLE SCHOOL							
21 MINOT PLACE							
BUILDING DATA:							
	site area:	8.57 Acres					
	zoning district:	PUB					
	building area:	145,600 gross square feet					
	number of floors:	3					
	historical status:	None					
	year built:	1971					
	additions/renovations/upgrades:	1997					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof typical w/ sloping Sarnofil roof at Auditorium	Active leaks reported at skylights; metal roof edge in good condition/ 14 years	NO	NO	NO	NO	3	Repair/reflash at skylights
Exterior walls	Brick veneer	Good. Minor cracks and staining at masonry, rusting lintels/original	NO	NO	NO	NO	1	
Windows	Storefront systems in stairways - steel-frame, single-pane glazing and solid panels	Fair/original; metals panels are dented	YES	NO	NO	NO	3	Replace single glazed storefront.
	Aluminum w/ thermal break and thermal glazing, fixed & operable awnings; aluminum louvers	Good/1997	NO	NO	NO	NO	1	Operable awning windows are very small/insufficient.
Doors/hardware	50% aluminum w/ pebble fiberglass panels; 50% metal doors	Good newer doors, hardware is non accessible. Poor/original	YES	YES	NO	NO	3	Replace doors; provide accessible hardware & auto-open device as required.
Areaways	None							
Exterior steps/stoops	Concrete steps w/ steel pipe guardrails; concrete stoops	Good/original; guardrails rusted and not code compliant	NO	YES	NO	NO	3	Replace guard rail/handrails
Canopies @ exterior doors	Flat roof, metal roof edge and metal panel soffit/surround. Flag entrance w/ brick piers and exposed steel	Good/original. Rusting at exposed steel	NO	NO	NO	NO	1	
Arcade	Concrete slab, brick arched colonade	Good/original	NO	NO	NO	NO	1	Note: not used, does not lead to any entrance
Structural concerns	None.							


	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Painted CMU, pre-fab metal panels at corridors; exposed brick at entry and stairs; painted CMU, pre-fab metal panels, plaster and gypsum walls, typ.	Good/original; ~15% inaccessible door openings	NO	YES	NO	NO	3	Modify openings to comply with accessibility codes
Floors	Carpet, typical; VCT at science; wood at shop/art	Good/1997	NO	NO	NO	NO	3	Replace carpet w/ VCT. Refinish wood floors.
Ceilings	2x4 ACT coffered at lights; 1x1 ACT	Poor/original; sagging, stained, missing tiles; system no longer manufactured.	NO	NO	NO	NO	4	Replace ceiling.
	2x4 ACT, 2x2 ACT	Good/1997	NO	NO	NO	NO	1	
Doors/borrowed lights	Painted wood solid core doors w/ wire glass in painted metal frames	Good/original; some toilet room doors are sized too small	NO	YES	NO	NO	2	Replace/upgrade doors as necessary and to meet code. Also, see "Partitions" for accessibility issue.
Hardware		Good/original; does not meet accessibility code	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Science casework: laminated plywood, painted in most location; resin tops	Poor/original; deteriorating cabinets	NO	YES	NO	NO	4	Replace casework to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Metal, double-tier, typ; "hand-me-down" mix of other metal type lockers	Fair/original--some rusting. Poor/"hand-me-down" lockers	NO	YES	NO	NO	3	Replace with metal double tier 15" x 30" or 12" x 60" if space allows.
Window treatments	Rolling shades, typ.	Good/1997	NO	NO	NO	NO	1	
Toilet rooms	Adult/Student: ceramic tile walls and floors (a few poured epoxy floors); metal partitions	Fair/original. Non accessible	NO	YES	NO	NO	3	Replace/upgrade toilet rooms
Stairs	Terrazzo treads and landings; wood/metal hand & guardrails	Good/original. Railings are non accessible. Stair at "Flag Pole" entry is in fair condition; is worn and cracking; with concrete patches	NO	YES	NO	NO	2	Replace railings.
Elevator		Good/original	NO	NO	NO	NO	1	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Signage	Plastic plaques on doors w/ room numbers only	Fair/original; do not comply with accessibility code	NO	YES	NO	NO	3	Replace signage to include braille
Gymnasium	Wood athletic floor and bleachers	Good/original	NO	YES	NO	NO	2	Provide accessible seating at bleachers
	Wood paneling w/ CMU above	Good/original	NO	NO	NO	NO	1	
	Newer wood backstops and divider curtains	Good	NO	NO	NO	NO	1	
Multi-purpose room	Wood athletic floor; concrete steps and ramp w/ surface treatment	Good/original	NO	NO	NO	NO	1	
Locker rooms	Painted CMU walls	Good/original	NO	NO	NO	NO	2	Paint walls
	Concrete and ceramic tile floors	Fair/original Broken/damaged tiles; missing tile base	NO	NO	NO	NO	3	Patch/repair flooring
	Metal partitions	Fair/original	NO	YES	NO	NO	3	Replace partitions, provide accessible locations.
	Multi-sized metal lockers	Poor/original. Rusted, deteriorating	NO	YES	NO	NO	4	Replace lockers, provide accessible lockers.
Auditorium	Painted concrete floor w/ carpet at aisles	Good/original	NO	NO	NO	NO	1	Note: auditorium is not accessible from corridor
	Wood stage/steps; fabric curtains	Fair/original. Deteriorating curtains	NO	YES	NO	NO	2	Refinish wood floor. Replace curtains. Note: stage is not accessible from auditorium
	Painted plaster walls; operable wall	Good/original. Operable wall is not used--unsure if it works.	NO	NO	NO	NO	1	
	Painted plaster ceiling with hung wood slat ceiling system	Good/original. Water damaged ceiling	NO	NO	NO	NO	1	Repair and paint ceiling
	Metal/fabric seats; seats 295	Good/original; some broken, "lumpy" cushions	NO	YES	NO	NO	2	Provide accessible seating.
Kitchen	Full kitchen	Good/functional	NO	NO	NO	NO	1	
Cafeteria	Linoleum floor; painted plaster walls	Good	NO	NO	NO	NO	1	Note: 5 lunches
Overall concerns	<ol style="list-style-type: none"> 1. Poor site and building entry sequence; main entry is difficult to locate and site circulation is unsafe to navigate. 2. No visual security at main entry--administration is down the corridor. 3. No vestibule at main entry. 4. Classrooms with no windows. 5. Dampness issues may cause health risks. 							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Hot water gas, package rooftop air conditioning/ ventilation. AC CR's and offices only.	Very poor - 36 years	Inefficient reheat system. Poor design.	NO	NO	Ventilation issues in areas. Noise issues	3-4	Attention of Head Custodian keeps school going. Zoned vertically. Constant control of adjustments.
Plumbing	Piping original, unknown	Fair - 36 years	NO	Limited accessibility	NO	Water conservation	3	Replaced all buried piping due to building settling. Hot water unreliable.
Fire Protection	Standpipe system	Fair - 36 years	NO	NO	Remove fire hose.	NO	2	Old unusable first aid type FDV's.
Electrical Service Equipment	2000A, 3 phase, 4 wire, 277/480V.	Good - 36 years and newer	NO	NO	NO	Tight working clearances	2-3	Some new in 1997
Distribution System	Circuit breaker panelboard with conduit and wire feeders.	Good - 36 years and newer	NO	NO	NO	NO	2-3	Some new in 1997
Emergency System	85kW gas indoor and ATS in boiler room.	Good - 36 years	NO	NO	NO	No separation of life safety, lighting system.	2	
Fire Alarm System	Multi-zone; not ADA compliant except new areas; smoke detectors in corridors, stairs and some classrooms; master box.	Good to fair - 36 years	NO	NO	NO	A/V signals not all ADA; Mounting height and locations of some pull stations.	2-3	All A/V signals need to be ADA; some pull stations should be relocated.
Telephone System	Multiple outside lines.	Good - 4 years	NO	NO	NO	NO	2	New in 2003.
Lighting System	Generally: Coffered surface wrap around fluorescent; some 2x2 recessed fluorescent	Fair in original building areas; Good in renovated areas; 36 years and newer	NO	NO	NO	No multiple switches in classrooms.	2	New energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type	Good - 36 years and newer	NO	NO	NO	NO	2	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Security System	Keypads at specific doors; motion detectors in corridors and Computer Room; exterior doors with monitor switches. Notifies UL Central Station.	Fair - Mixed	NO	NO	NO	NO	2-3	Systems will need upgrading.
Door Bell System	Push button at back door; bell in corridor	Good - 36 years	NO	NO	NO	NO	2-3	
Sound/Intercom System	classrooms; ceiling speakers in corridors; exterior flush wall mounted speakers.	Good - 6 years	NO	NO	NO	NO	2	Independent sound system in Auditorium
Clock/Program Bell System	Classroom and office battery clocks; corridor and classroom speakers with bell tones	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas	Good - 6 years	NO	NO	NO	NO	2	Additional data outlets needed in classrooms
Cablevision System	TV outlets in classrooms, large group areas and main lobby; TV station within facility.	Good - 6 years					2	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete drive and parking around building	Good, non compliant curb ramp from parking to building entrance	NO	YES	NO	NO	1 and 2	Reconstruct curb ramp
Sidewalks/ramps	Concrete path to main entrance	Fair/poor	NO	NO	NO	NO	3	Reconstruct, stair rails non-compliant
Fields	Turf fields at adjacent park	Good	NO	YES	NO	NO	1	Curb cut needed on path to fields, access path crosses drive
Courtyard	Bituminous concrete; concrete planter bed curbs; plantings	Good	NO	NO	NO	NO	1	
Plantings	Mature Plantings	Good	NO	NO	NO	NO	1	
Courts	Bituminous concrete adjacent park	Good	NO	YES	NO	NO	2	Curb cut needed on path to recreational facilities
Benches/bike racks	None							
Fencing	Wire mesh, steel fencing perimeter	Poor	NO	NO	NO	NO	4	
Lighting	Parking area lighting	On utility poles	NO	NO	NO	NO	1	
	Building flood lights	Fair/age unknown	NO	NO	NO	NO	3	Replace lighting.
	Exterior door lights	Poor/original. Most do not work.	NO	NO	NO	NO	4	Replace lighting.

Newton Schools Study - Facility Assessment								
OAK HILL MIDDLE SCHOOL								
130 WHEELER ROAD								
BUILDING DATA:								
	site area:	8.04 acres						
	zoning district:	PUB						
	building area:	91,000 gross square feet						
	number of floors:	3						
	historical status:	None						
	year built:	1936						
	additions/renovations/upgrades:	1960, 1997 (opened as MS)						
	assessment value:	n/a						
Key to Rating:								
1 = New or in good condition with ordinary maintenance required								
2 = Good condition with minor repairs required								
3 = Fair condition with repairs or replacement required								
4 = Poor condition with replacement required								

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Pitched roof; wood cupola with weathervane	No active leaks reported/ 10 years; painted wood eaves peeling	NO	NO	NO	NO	1	
	Flat roof	Good/1997	NO	NO	NO	NO	1	
Exterior walls	Load bearing masonry/painted wood sills and detailing/stone detailing.	Good/original; wood trim peeling	NO	NO	NO	NO	2	Scrape, paint wood trim
	Brick veneer with concrete details	Good/1997	NO	NO	NO	NO	1	
Windows	Aluminum replacement windows w/ thermal glazing, single-hung, fixed and awning types; metal louvers	Good/1997; Fair/original-louvers	NO	NO	NO	NO	2	Scrape and repair/paint wood sills and wood frames. Reseal. Replace louvers
Doors/hardware	White aluminum panelled doors w/ glazing in metal frames	Good/1997; Fair/original frames-peeling. Hardware is accessible. Missing thresholds.	YES	NO	NO	NO	2	Repair/replace original frames. Provide thresholds.
Areaways	Concrete retaining walls with galvanized steel grates.	Fair/original-concrete, cracked, deteriorating. Good/newer-grates	NO	NO	NO	NO	2-3	Repair concrete. Install/attach loose grate at left front side of bldg.
Exterior steps/ramps	Concrete slab entries, concrete and granite steps w/ painted steel and steel pipe guardrails	Good/original and 1997. Rusted original metal guardrails	NO	NO	NO	NO	2	
Canopy @ main entry	Pitched roofed, concrete edge, metal panel soffit with brick/concrete piers.	Good/1997; metal soffit is dinged/dented	NO	NO	NO	NO	2	
Structural concerns	None.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed CMU w/ painted plaster above @ corridors; painted plaster walls, typical; painted CMU and concrete	Good/original. Columns at band room damaged. Water damage at nurse's suite.	NO	NO	NO	NO	2	Repair damaged corners/walls. Consider adding corner guards to columns.
	Painted gypsum wallboard w/ vinyl base, typical	Good/1997-heavily marked up in high traffic areas	NO	NO	NO	NO	2	Paint/repair corridor walls. Consider installing tile over gypsum for easier maintenance and improved appearance.
Floors	Carpet, VCT, quarry tile	Good/1997, some carpet worn/frayed at seams, stained; no transition strips between floor materials.	NO	NO	NO	NO	2	Replace carpet w/ VCT; provide transition strips.
Ceilings	2x4 ACT, 2x2 ACT, painted plaster	Good/1997 Stained tiles throughout	NO	NO	NO	NO	2	Replace damage/stained tiles.
Doors/borrowed lights	Wood solid core doors w/ metal frames and w/ wood frames	Good/original-wood; Good/1997	NO	NO	NO	NO	2	
Hardware		Good/1997 hardware is accessible	NO	NO	NO	NO	2	
Interior built-in furnishings	Wood built-ins of various configurations	Good/original and 1997	NO	NO	NO	NO	1	
Lockers/cubbies	Metal, double-tier lockers, 15" and metal, single-tiered lockers, 12"	Good/1997	NO	NO	NO	NO	1	
Window treatments	Rolling shades, typical	Good/1997	NO	NO	NO	NO	1	
Toilet rooms	Ceramic tile wainscot w/ painted plaster above; ceramic tile floors; metal partitions	Good/1997, facilities are accessible; rusting at lower edge of partitions, typical at sink areas; mirrors are deteriorating	NO	NO	NO	NO	2	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Stairs	Poured terrazzo, metal pan stair; metal hand & guardrails w/ original wood cap; glazed CMU w/ painted plaster above, 2x2 tectum ceiling	Good/original w/ 1997 updates	NO	NO	NO	NO	1	
	Concrete metal pan construction with rubber treads/risers; painted metal pipe hand & guardrails	Fair/1997, surfaces are worn at high traffic stairs; rusting rails	NO	NO	NO	NO	3	Resurface treads/risers; paint hand and guardrails
Elevator		Good/1997	NO	NO	NO	NO	1	
Signage	Plastic plaques	Good/1997; directional signage in paper.	NO	NO	NO	NO	2	Provide permanent directional signage.
Gymnasium	Wood athletic floor; wood bleachers, divider curtains, aluminum backstops; painted CMU walls and exposed acoustic deck	Good/1997	NO	NO	NO	NO	1	
Locker rooms	Painted CMU walls, quarry tile floors, 2x2 ACT	Good/1997-entry doors are not code compliant	NO	YES	NO	NO	2	Change door hinge/swing direction.
	Metal partitions	Good/1997	NO	NO	NO	NO	1	
	Multi-sized metal lockers	Good/1997	NO	NO	NO	NO	1	
	Ceramic tile, individual showers, open on two sides, no curtains	Good/1997	NO	NO	NO	NO	1	
Auditorium	Sealed concrete floor with carpet aisles; painted CMU walls; hanging wood-framed acoustic panels	Good/1997	NO	NO	NO	NO	1	
	Wood stage/steps; metal pipe painted handrails; fabric curtains	Fair/1997-wood floor; Good/1997-curtains. Loud lighting equipment panels on stage.	NO	NO	NO	NO	3	Refinish wood floor. Relocate equipment.
	Metal and fabric seating, 315 seats	Good/1997	NO	NO	NO	NO	1	
Lab Equipment	Wood cabinets w/ resin tops	Good/1997	NO	NO	NO	NO	2	Note: no water to shower head, no duct connected to fume hood.
Kitchen	Full kitchen	Good/1997, functional	NO	NO	NO	NO	1	
Code concerns	1. Flooding at occupied basement level may cause potential health risks.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Hot water by oil, Classroom unit ventilators. AC for Library, offices, Health. Computer Room, and Auditorium.	Good - 1997	Boilers inefficient	NO	NO	NO	2	One operable boiler, second boiler installation was halted? Can't fully heat school with only one boiler. DDC controls.
Plumbing	Original piping in original building unknown?	Good - 1997	NO	Some accessibility.	NO	NO	2	Water issues in boiler room.
Fire Protection	Sprinkler and standpipe system.	Good - 1997				Dry system serves occupied	2	
Electrical Service Equipment	2,000A. 3 phase, 4 wire, 277/480V	Good - less than 10 years	NO	NO	NO	Tight working clearances	1	
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Good - less than 10 years	NO	NO	NO	NO	1	
Emergency System	300kW (approximate) exterior diesel generator serves corridor and stair lighting, boilers, air compressors, elevator and kitchen equipment; two automatic transfer switches.	Good - less than 10 years	NO	NO	NO	Very wet 2-hour fire rated room for life safety system equipment.	2	Wet condition in life safety emergency room needs immediate attention.
Fire Alarm System	Multi-zone: ADA compliant; auditorium, gymnasium and corridor smoke detectors and door holders; exterior master box.	Good - less than 10 years	NO	NO	NO	NO	1	
Telephone System	Multiple outside lines.	Good - 2 years	NO	NO	NO	NO	1	
Lighting System	Generally 2x2 and 2x4 recessed prismatic and parabolic fluorescent.	Good - less than 10 years	NO	NO	NO	NO	1	Energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Good less than 10 years	NO	NO	NO	NO	1	Additional receptacles/circuits needed in corridors
Security System	Keypads at specific doors; Motion detectors in corridors and stairs; Interior and exterior signals; Notifies UL Central Station.	Good - less than 10 years	NO	NO	NO	NO	1	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Sound/Intercom System	Dial phones and clock/speaker units in classrooms and offices; corridor speakers and exterior speakers; Independent Gym system. No independent systems in Auditorium and Cafeteria.	Good - less than 10 years	NO	NO	NO	NO	1	
Clock/Program Bell System	Classroom and Office clocks operate on controller in Admin. Office. Corridor speakers with bell tone.	Good - less than 10 years. 95% system clocks, 5% battery clocks.	NO	NO	NO	NO	1	
Information Technology System	Data in classrooms and office areas.	Good - less than 10 years	NO	NO	NO	NO	1	Additional data outlets needed in some classrooms.
Cablevision System	Outlets in classrooms, some offices and corridors.	Good - less than 10 years.	NO	NO	NO	NO	1	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete parking area across street, bit conc drive and parking w/ concrete curb at school	Fair	NO	NO	NO	NO	3	Repair/resurface
Sidewalks/ramps	Concrete and bituminous concrete at main entrance	Bituminous concrete - fair, concrete - poor	NO	YES	NO	NO	3	Cross pitch on concrete is access issue, repair bit conc, repave concrete
	Concrete outside of drive	Good/fair	NO	NO	NO	NO	2	
	Bituminous concrete on side of school	Fair	NO	NO	NO	NO	3	Repair
Fields	Turf and skinned baseline - baseball, soccer	Fair	NO	YES	NO	NO	3	Turf restoration, needs accessible route to field
Plantings	Mature plantings at school front, turf	Plantings - fair/good, turf - fair/poor	NO	NO	NO	NO	2 and 3	Turf is severely compacted - turf restoration/replacement is needed
Courts	None							
Benches/bike racks	Recycleables/steel benches and metal bike rack at front and side	Good/fair	NO	NO	NO	NO	2	
Fencing	CLF at field and entrance, steel swing gate	Fair	NO	NO	NO	NO	2 and 3	Repair /replace sections along street, repair/replace swing gate
Lighting	Parking area lighting	Pole - good	NO	NO	NO	NO	1	
	Building flood lights	Good	NO	NO	NO	NO	1	
	Exterior door lights	Fair/original-1936 - unknown if the work	NO	NO	NO	NO	3	

Newton Schools Study - Facility Assessment							
CARR SCHOOL							
225 NEVADA STREET							
BUILDING DATA:							
	site area:	4.85 acres					
	zoning district:	PUB					
	building area:	49,000 gross square feet					
	number of floors:	2					
	historical status:	None					
	year built:	1936					
	additions/renovations/upgrades:	1960					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Pitched roof with stone/wood cupola	No active leaks reported but water damage was evident, gutters in poor condition/ 25 years	YES	NO	NO	NO	3	Roofing > 20 years old may not meet current codes.
	Flat roof	No active leaks reported/ 25 years	YES	NO	NO	NO	2	Roofing > 20 years old may not meet current codes.
Exterior walls	Load bearing masonry/painted wood sills and detailing/stone detailing.	Good/original. Minor cracks and staining at masonry; rusting lintels; peeling paint	NO	NO	NO	NO	2	Repair and clean masonry; replace lintels when windows are replaced. Scrape and paint wood trim/sills
	Masonry w/ wood corners, trim and cornice pieces	Good/original-masonry, staining from rusting conduits. Poor/original-wood pieces	NO	NO	NO	NO	2-3	Repair/replace wood trim. Clean masonry.
Windows/louvers	Wood frame, 20 over 20 and 16 over 16 divided lights, typical, single-pane glazing; metal louvers/grills	Poor/original w/ aluminum storm windows added.	YES	NO	NO	NO	4	Replace
	Steel frame, single glazing, fixed & single-hung operable	Poor/1960	YES	NO	NO	NO	4	Replace
Doors/hardware	Aluminum w/ pebble fiberglass panels	Good/newer, hardware is non accessible	NO	YES	NO	NO	2	Replace with accessible hardware & auto-open device
Exterior steps/ramps	Granite and concrete steps; wood ramps w/ painted steel pipe guardrails; wrought iron, open-grate stair	Poor/ages unknown, concrete is deteriorating and railing supports are rusting and not secure; rusting stair	NO	YES	NO	NO	3	Replace ramps and railings
Greenhouse	Glassed-in greenhouse upper walls and roof; wood clapboard lower walls	Fair/age unknown; peeling paint at lower; glass structure is newer	NO	YES	NO	NO	2-3	Repair/paint. Note: non accessible from interior or exterior
Structural concerns	None							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed CMU w/ painted plaster above @ corridors; painted plaster walls, typical	Good/original. Cracks, stains, peeling/water damage at plaster	NO	NO	NO	NO	2	Repair/paint.
	Glazed CMU @ corridors; painted CMU, typical; operable walls at classrooms	Fair/original-1960's; glazed CMU chipped, cracked	NO	NO	NO	NO	3	
Floors	VAT, VCT, carpet, vinyl, wood, painted concrete, slate	Fair/ages unknown	NO	NO	NO	NO	3	Replace carpet, vinyl, wood, old VCT, and VAT w/ VCT.
Ceilings	1x1 ACT, painted plaster, 2x4 ACT, and 2x2 ACT,	Fair/ages unknown	NO	NO	NO	NO	3	Install consistent ACT system; repair/paint plaster ceilings
	Tectum panels, exposed open steel joists							
Doors/borrowed lights	Wood solid core doors in wood frames w/ clerestory above	Good/original	NO	NO	NO	NO	2	Repair/refinish as needed
	Wood solid core doors in painted metal frames	Poor/original-1960's	NO	NO	NO	NO	4	Replace doors
Hardware		Fair/original-hardware is non accessible	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Painted wood, metal, laminate	Fair/original	NO	YES	NO	NO	3	Replace as required, replacement to include accessible hardware/sinks/fixtures.
Window treatments	Rolling shades, typical	Fair/age unknown	NO	NO	NO	NO	3	Replace/upgrade to provide consistent light control.
Toilet rooms	Adult: CMU, ceramic tile, VCT; wood/metal partitions	Fair/original. Two updated accessible toilets	NO	YES	NO	NO	3	Replace/upgrade toilet rooms
	Student: glazed CMU; painted concrete & ceramic tile floors; metal partitions	Fair/original. Partial updates.	NO	YES	NO	NO	3	Replace/upgrade toilet rooms



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Stairs	Concrete/metal pan construction w/ steel nosing; wood/metal hand & guardrails	Good/original. Railings and stair nosing are non accessible.	NO	YES	NO	NO	2	Replace railings & stair nosing.
	Concrete w/ integral nosing; wood/metal hand & guardrails	Good/original. Railings are non accessible.	NO	YES	NO	NO	2	Replace railings. Note: exposed pipes.
Elevator	None		NO	YES	NO	NO	4	Elevator required for accessibility
Signage	None		NO	YES	NO	NO	4	Install signage to include braille
Gymnasium	Wood athletic floor and backstops; operable divider wall	Poor/original. Worn floors	NO	NO	NO	NO	3	Refinish/replace floor
	Wood paneling, full height; Tectum ceiling w/ exposed open steel joists							
Assembly room	Wood floor and platform	Fair/original- platform is not accessible	NO	YES	NO	NO	3	Refinish/replace; provide lift for accessibility
	Painted plaster w/ 1x1 ACT at walls; painted plaster ceiling	Good/original.	NO	NO	NO	NO	2	
Code concerns	1. No elevator. 2. All door hardware is non accessible.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by oil, UV's in CR's	Poor - unknown 60 + years	Boiler inefficient	NO	NO	Ventilation	4	One boiler dead. Not used as a school. Visible leaks in Boiler Room.
Plumbing	Plumbing original, unknown	Poor - unknown 60 + years	NO	Fixtures not accessible	NO	Fixtures not water conserving	4	--
Fire Protection	None						-	--
Electrical Service Equipment	800A. 3 phase, 4 wire, 120/208V	Fair - + 30 years	NO	NO	NO	Insufficient working clearances	3	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair - + 30 years	NO	NO	NO	NO	3	Should be upgraded.
Emergency System	20kW gas indoor generator in boiler rooms; serves corridor and stair lighting and boilers.	Good - 5 years	NO	NO	NO	Not 2-hour fire rated room for life safety system.	3-4	Generator should be placed in 2-hour rated room.
Fire Alarm System	Multi-zone: not ADA compliant; auditorium and corridor smoke detectors and door holders; master box.	Good - + 20 years	NO	NO	NO	Mounting height and locations of some pull stations.	2	Some pull stations should be relocated.
Telephone System	Multiple outside lines.	Good - 6 years	NO	NO	NO	NO	2	New in 2001. Phone lines should be extended to classrooms.



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Lighting System	Generally suspended fluorescent	Fair to Poor - + 20 years	NO	NO	NO	No multiple switches in classrooms.	3	Broken and discolored lenses should be replaced. Additional fixtures needed in some rooms. No energy efficient lamps and electronic ballasts by utility company.
Receptacles	Generally standard duplex type.	Fair - + 30 years	NO	NO	NO	NO	3-4	Additional receptacles/circuits needed throughout facility.
Security System	Keypads at specific doors; Motion detectors in corridors and stairs; Notifies UL Central Station.	Fair - Mixed - + 30 years	NO	NO	NO	NO	3	System will need upgrading.
Sound/Intercom System	door notifies Office. Privacy switches and surface speakers in classrooms. No corridor speakers.	Fair to Poor - + 30 years	NO	NO	NO	NO	3-4	No independent sound systems. Building wide system needed.
Clock/Program Bell System	Classroom and Office battery clocks. Corridor bells.	Good - New clocks provided as needed.	NO	NO	NO	NO	2	
Information Technology System	Data in classrooms and office areas.	Good - 10 years	NO	NO	NO	NO	2	Additional data outlets needed in classrooms.
Cablevision System	Outlet in Auditorium	Good - 10 to 15 years					-	



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete parking area at front/side of building	Poor	NO	NO	NO	NO	4	
Sidewalks/ramps	Concrete walk to main entrance	Poor	NO	NO	NO	NO	4	Replace
	Temporary wood ramp at main entrance	Fair/good	NO	YES	NO	NO	3	Replace/railing discontinuous
	Concrete/bituminous concrete paths	Poor	NO	YES	NO	NO	4	Replace, no curb cuts at either side of road crossing
	Concrete side ramp	Fair/good	NO	YES	NO	NO	3	Ramp & railing non compliant
Fields	Turf/skinned base area	Fair	NO	YES	NO	NO	3	Turf restoration, accessible path needed
Plantings	Mature plantings and turf at front of school	Good	NO	NO	NO	NO	1	
Play structures	Swings	Fair	NO	YES	NO	NO	3	No accessible path, surfacing not accessible
Courts	Bituminous concrete basketball	Fair	NO	YES	NO	NO	3	No accessible path from upper level of site & building
Benches/bike racks	Picnic tables at swing play area	Fair	NO	YES	NO	NO	3	
Fencing	CLF at rear and side perimeter separating play areas and at front	Fair/good, on one side - poor	NO	NO	NO	NO	2 and 4	Repair, replace fence on one side
Lighting	Parking area lighting	None						
	Building flood lights	Good/newer	NO	NO	NO	NO	2	Update as needed.
	Exterior door lights	Original, unknown if they work.	NO	NO	NO	NO	4	Replace/repair lighting.



Newton Schools Study - Facility Assessment							
EDUCATION CENTER							
100 WALNUT STREET							
BUILDING DATA:							
	site area:	3.78 acres					
	zoning district:	PUB					
	building area:	70,000 gross square feet					
	number of floors:	3					
	historical status:	None					
	year built:	1928					
	additions/renovations/upgrades:	1934-add, 1966-renov, 1980s-mods					
	assessment value:	n/a					
Key to Rating:							
1 = New or in good condition with ordinary maintenance required							
2 = Good condition with minor repairs required							
3 = Fair condition with repairs or replacement required							
4 = Poor condition with replacement required							



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING EXTERIOR								
Roof systems	Flat roof	No active leaks reported/ 15 years	NO	NO	NO	NO	2	
Exterior walls	Load bearing masonry/concrete sills and exposed foundation/stone detailing.	Fair/original. Cracking/spalling/staining at masonry/stone/concrete; significant masonry deterioration (due to water infiltration) at upper level of rear façade where original cornice was removed and infilled with brick; brick headers replaced at same time as windows	NO	NO	NO	NO	3	Repair, repoint and clean
Windows/louvers	Aluminum w/ thermal break and thermal glazing, fixed & single-hung operable; metal louvers	Good/~1980's-windows; Poor/original-louvers.	NO	NO	NO	NO	2-3	Replace louvers.
Doors/hardware	Wood in wood frames, metal, aluminum w/ pebble fiberglass panels	Good/newer; Poor/original. Hardware is non accessible. Main entry has auto-open device.	YES	YES	NO	NO	3	Replace original doors and frames; provide accessible hardware.
Areaways	Concrete retaining walls, stairs; painted steel pipe guardrails w/ chain link fencing	Fair/original. Staining, spalling	NO	NO	NO	NO	3	Repair and clean
Vent shafts	Masonry enclosed vents w/ metal louvers and concrete caps	Poor/ages unknown. Deteriorating masonry.	NO	NO	NO	NO	4	Repair/masonry. Repair/replace louvers.
Exterior steps/ramps	Granite and concrete stoops and steps w/ painted steel pipe guardrails; one resurfaced with epoxy paint	Poor/original, concrete is deteriorating and railing supports are rusting.	NO	YES	NO	NO	3	Repair/replace steps; replace railings. Note: only one door is accessible in this multi-function building.
Structural concerns	None.							

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING INTERIOR								
Partitions	Glazed brick w/ painted brick above @ corridors; painted plaster walls, typical	Good/original	NO	NO	NO	NO	2	
Floors	Carpet, typical, VCT, vinyl, quarry tile, wood, athletic resilient flooring	Good to fair/ages unknown	NO	NO	NO	NO	2	Replace carpet w/ VCT.
Ceilings	2x4 ACT, 2x2 ACT, 1x1 ACT, and painted plaster	Good/ages unknown	NO	NO	NO	NO	2	Replace damaged tiles.
Doors/borrowed lights	Wood solid core doors w/ wood frames	Good to fair/original	NO	NO	NO	NO	2	
Hardware		Fair/original-non accessible	NO	YES	NO	NO	3	Replace w/ accessible hardware & required locking sets.
Interior built-in furnishings	Various types, wood, metal, laminate	Good to fair/original and ages unknown	NO	YES	NO	NO	2	Replace as required, replacement to include accessible hardware/sinks/fixtures.
Lockers/cubbies	Few open cubbies	Good/ages unknown	NO	YES	NO	NO	2	Install new/replace with metal double tier 15" x 30" or 12" x 60" as educational programs require.
Window treatments	Various: vertical & horizontal blinds, and shades	Good/ages unknown	NO	NO	NO	NO	2	Replace/upgrade to provide consistent light control.
Toilet rooms	Adult: CMU, ceramic tile, VCT; metal partitions	Some non accessible	NO	YES	NO	NO	2	Replace/upgrade toilet rooms
	Student: glazed CMU & ceramic tile, VCT; metal partitions	Fair to Poor/ages unknown. Wood steps added to accommodate children	NO	YES	NO	NO	3	Inappropriate size and quantity for users. Replace/upgrade/add toilet rooms
Stairs	Concrete w/ steel nosing; wood/metal hand & guardrails; rubber risers/treads at internal stair	Fair/original. Railings and stair nosing are non accessible. Concrete deteriorating, subsequent fixes also deteriorating	NO	YES	NO	NO	3	Replace railings & stair nosing. Install rubber surface at all stairs.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Elevator		Good/age unknown	NO	NO	NO	NO	2	
Signage	Plastic plaques	Good/recent; Fair/all other, non accessible.	NO	YES	NO	NO	2	Replace signage to include braille
Former auditorium	Carpet; carpet at platform; ACT ceiling; stone and wood detailing	Good/ages unknown; platform is not accessible-used as book/resource area	NO	YES	NO	NO	2	Replace damaged/missing ACT
Code concerns	1. Corridor too narrow for educational use due to storage closets. Basement classrooms with no windows. 3. Quantity and distribution of toilet rooms does not meet code. 4. Multiple exterior doors and programs make for a potentially unsafe environment and create a security risk. 5. No visual of front entry creates a security risk. 6. Open cubbies in corridor create a flammability risk.						2.	

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
BUILDING SYSTEMS								
Heating/ventilation/air conditioning	Steam by oil, vent through windows with radiation in CR's. Air conditioning in offices.	Poor - 60 + year	Boiler inefficient	NO	NO	Ventilation	4	Only a few UV's (Annexes). Steam leaks. CR exhaust inoperable.
Plumbing	Piping original, unknown	Poor - 60 + year	NO	Plumbing fixtures	Old gas light piping	Not enough fixtures, water conservation	4	
Fire Protection	None						-	--
Electrical Service Equipment	2000A. 3 phase, 4 wire, 120/208V	Fair to poor - + 50 years and older	NO	NO	NO	Insufficient working clearances	3	Should be upgraded.
Distribution System	Circuit breaker panelboards with conduit and wire feeders.	Fair to poor - + 35 years and older	NO	NO	NO	NO	3	Should be upgraded.
Emergency System	600kW indoor generator; serves lighting and possibly IT computers.	Poor - + 50 years. Operation questionable.	NO	NO	NO	Insufficient working clearances; Not 2 hour fire rated room.	3	Should be upgraded.
Fire Alarm System	Multi-zone: not ADA compliant; corridor smoke detectors and door holders; master box.	Fair - 25 years and older	NO	NO	NO	Mounting height and locations of some pull stations.	2	Some stations should be relocated. Signals should be replaced with ADA type.
Telephone System	Multiple outside lines.	Good - 5 years	NO	NO	NO	NO	2	New in 2002. Dial type should be added to classrooms.
Lighting System	Wrap around surface/suspended fluorescent	Good - + 20 years	NO	NO	NO	NO	2	New energy efficient lamps and ballasts by utility company.

	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
Receptacles	Generally standard duplex type.	Fair to Good - + 30 years	NO	NO	NO	NO	3-4	Additional receptacles/circuits needed throughout facility.
Security System	Control panel adjacent FA control panel; keypads at specific doors; Motion detectors in corridors and stairs; some exterior doors with monitor switches. Notifies UL Central Station.	Fair - + 15 years mixed equipment	NO	NO	NO	NO	3-4	Should be replaced.
Sound/Intercom System	No intercom or public address system.		NO	NO	NO	NO	-	Provide system throughout facility.
Clock/Program Bell System	Classroom and Office battery clocks.	Good - Provided as needed.	NO	NO	NO	NO	2	Provide program bell system.
Information Technology System	Data in classrooms and office areas.	Good - 6 years	NO	NO	NO	NO	2	
Cablevision System	Outlet in Town Meeting Room						2	



	Material	Condition/Age	Energy Issues	Accessibility Issues	Life Safety Issues	Other Code Issues	Rating	Comments
SITE FEATURES								
Parking	Bituminous concrete parking area at rear of building	Fair	NO	YES	NO	NO	3	Non-compliant curb ramp to bit conc. walk
Sidewalks/ramps	Concrete walk to main entrance	Good	NO	NO	NO	NO	1	New
	Concrete stair at main entrance	Fair/good	NO	NO	NO	NO	1	Replace/railing discontinuous
	Concrete @ side entrance	Good	NO	YES	NO	NO	1	Not accessible entrance - no curb ramp
	Bituminous concrete walks @ rear and side of building	Fair	NO	NO	NO	NO	3	
	Concrete walks @ rear of building	Varies - fair/poor	NO	YES	NO	NO	3	Surface condition, no curb ramps, replace sections
Fields	None							
Plantings	Mature plantings and turf at front of school	Good	NO	NO	NO	NO	2	Some turf restoration
Play structures	Swings, 1 younger children's @ side - timber	Fair	NO	YES	NO	NO	3	Surfacing not accessible
Courts	1 informal bituminous concrete basketball	Fair	NO	NO	NO	NO	3	
Benches/bike racks	Wood in play area	Fair	NO	YES	NO	NO	3	Non-accessible location
Fencing	CLF vinyl coated fabric @ play area, CLF and wood at perimeter	Fair	NO	NO	NO	NO	3	Repair
Lighting	Parking area lighting	Floodlights on utility poles - fair					3	Replace lighting.
	Building flood lights	Good/newer; Poor/older	NO	NO	NO	NO	3	Replace lighting. Replace rusting conduit.
	Exterior door lights	Poor/age unknown	NO	NO	NO	NO	4	Replace lighting.



Educational Space Assessment Matrix Key

The abbreviated category headings indicate:

Built = year of original constructed

Ren. = year of last addition/renovation/upgrade

Enr. = current year's enrollment

Gross = building's gross square feet

Net = building's net square feet

N-to-G = net to gross ratio

G/P = gross square feet per pupil

N/P = net square feet per pupil

cr = number of inadequately sized classrooms

Mod = number of modular classrooms

CR = number of appropriately sized classrooms (greater than 800 sf)

Lib = library sf (square feet)

Gym = gymnasium sf

Multi = multi-purpose room sf

Kit = kitchen sf

Aud = auditorium sf

Stg = stage sf

Mus = music classroom sf or location

Art = art classroom sf

Aft = after school program sf or location

Adm = administration sf

Nur = nurse's room sf or location

Fac = faculty lunchroom sf

Wrk = faculty workroom sf

LCT = learning center sf

Lit = literacy center sf

ELL = English as a second language sf

OT = occupational therapy sf

S&L = speech and language sf

Psy = psychologist sf

SW = social worker sf

Spec. = specialist sf

Ea/Sn = early intervention/sensory integration sf

Incl = inclusion coordinator sf

The grey boxes indicate that, to the best knowledge of the study team, the school does not have designated space for this program or the program may share with another program within the same space.

G

Elementary Schools Educational Space Assessment Matrix

H

Educational Space Needs Rating



Newton Elementary Schools: Educational Space Needs Rating

Rating	School	Net	N-G	G/P	N/P	cr	Mod	CR	Lib	Gym	Multi/Aud	Total	Special Programs
1	BURR	3	5	3	1	1	1	3	7	2	4	30	
1	WILLIAMS	8	5	6	4	1	1	5	5	5	3	43	
1	MEM-SPAULD	1	10	4	6	1	1	1	4	11	9	48	
1	BOWEN	4	11	4	8	3	1	2	2	7	6	48	
2	MASON-RICE	6	1	11	10	1	1	2	9	11	2	54	
2	COUNTRYSIDE	2	8	7	9	5	4	4	6	11	1	57	ABA-1200
2	HORACE-MANN	7	2	10	7	2	2	4	11	8	5	58	
2	LINCOLN-ELIOT	10	13	1	3	6	1	6	8	3	8	59	Pre-K-6539
3	UNDERWOOD	11	7	5	5	9	1	9	10	1	11	69	
3	FRANKLIN	5	9	8	11	8	5	10	3	6	7	72	Reach-1379
3	WARD	14	8	2	2	7	1	7	15	10	12	78	
4	ANGIER	9	12	9	12	11	1	9	1	4	12	80	
4	PEIRCE	13	4	12	12	4	1	5	14	11	10	86	
4	ZERVAS	15	3	14	13	3	1	5	12	11	12	89	
4	CABOT	12	6	13	14	10	3	8	13	9	12	100	

Note: Comparing the schools within these ten categories provides the rating of the educational space needs of each school. This reflects current educational programs provided.

- Net = building's net square feet
- N-to-G = net to gross ratio
- G/P = gross square feet per pupil
- N/P = net square feet per pupil
- cr = number of inadequately sized classrooms
- Mod = number of modular classrooms
- CR = number of appropriately sized classrooms (greater than 800 sf)
- Lib = library sf (square feet)
- Gym = gymnasium sf
- Multi/Aud = multi-purpose room AND auditorium sf combined



Projected Enrollment Populations Growth Rating

Projected Enrollment Population Growth Rating

Rating		2006-07 ¹	2011-12 ¹	Change	% Change
ELEMENTARY SCHOOLS					
1	Ward	237	223	-14	-6%
1	Horace Mann	350	334	-16	-5%
1	Angier	379	380	1	0%
1	Mason-Rice	372	380	8	2%
1	Williams	295	303	8	3%
1	Peirce	324	343	19	6%
2	Cabot	420	494	74	18%
2	Memorial-Spaulding	443	529	86	19%
2	Franklin	414	507	93	22%
2	Burr	333	409	76	23%
2	Zervas	332	410	78	23%
3	Countryside	437	565	128	29%
3	Underwood	288	391	103	36%
4	Bowen	413	586	173	42%
4	Lincoln-Eliot	281	422	141	50%
	ELEMENTARY TOTALS	5318	6276	958	18%
MIDDLE SCHOOLS					
1	Bigelow	495	527	32	6%
1	Brown	665	721	56	8%
2	Oak Hill	567	672	105	19%
2	Day	747	925	178	24%
	MIDDLE TOTALS	2474	2845	371	15%

¹ Source: Newton School Department





Existing Schools Assessment - Summary Spreadsheet

The Newton schools were assessed in three categories:

- Facility Condition
- Educational Space Needs
- Projected Enrollment Growth

A numerical evaluation was assigned to each category for each property. An evaluation rating of 1, 2, 3 or 4 was used, with a 1 rating for the lowest level of need in that category and a 4 rating for the highest level of need.

Facility Condition is a composite evaluation of the building, the systems, and the site conditions. Within the systems condition are three separate evaluations for mechanical, electrical and plumbing/fire protection systems. In order to give appropriate weight to each separate rating in the composite total, the overall building condition accounts for 3 points while the systems and site each account for 1 point of the overall Facility Condition. So the Facility Condition (FC) is derived by the following formula:

$$FC = \frac{(\text{Building Condition} \times 3) + \text{Mechanical} + \text{Electrical} + \text{Plumbing/Fire Protection} + \text{Site}}{7}$$

For example, for Angier:

Building Condition: 3.5

Systems Condition: mech 4, elec 3, plumb/fp 4

Site Condition: 3

$$\frac{(3.5 \times 3) + 4 + 3 + 4 + 3}{7} = 3.5 \text{ Facility Condition}$$

See Appendix F, Facility Assessments for the detailed information used to assign the ratings to each category of each property.

Educational Space Needs evaluation was determined by creating a matrix of categories (see Appendix G), then sorting and ranking the schools in descending order on the basis of their adequacy in the following 10 categories, with a ranking of 1 being the best and 15 being the worst. The categories are:

- (1) net area
- (2) net-to-gross ratio
- (3) gross area per pupil
- (4) net area per pupil
- (5) number in educationally inadequate classrooms
- (6) number of modular classrooms
- (7) number of educationally acceptable classrooms
- (8) size of library
- (9) size of gymnasium and
- (10) the combined size of the multi-purpose room and/or auditorium.

See Appendix H for a summary of each elementary school's ranking within the ten categories identified.

Projected Enrollment Growth rating compares the current enrollment at each school with its expected enrollment in 5 years. This growth is reflected as a percentage change. Those schools with the highest percentage change are rated 4 and those with the lowest are rated 1. See Appendix I for the complete chart. This rating does not reflect the current overcrowding that exists at 11 of the 15 elementary schools and one middle school. A column titled Current Capacity indicates the overcrowding needs. Current capacity is determined by assuming that the programs taught remain the same, the modular classrooms are not included in the calculation, and a factor of 40 sf per pupil per classroom is used to calculate the number of students that the building is able to accommodate within current space standards.

Newton Existing Schools Assessment

School Name	Year Built/ Additions ¹	Modulars ³		Building Condition Rating*	Gross Sq Ft ¹	+ Systems Condition			+ Site Condition Rating*	Acres ²	Facility Condition = Total		Educational Space Needs HMFH Rating**	Current Capacity ***	Enrollment						
		Existing	Proposed			Mechan- ical Rating*	Electrical Rating*	Plumbing /Fire Rating*			HMFH Rating*	MSBA Rating			2006/07 Enrollment ³	5-yr Projected ³	Projected Growth Rating****				
Elementary:																					
1 Angier	1919/1936	-----		3.5	51,300	4	3	4	3	1.98 A	3.5	3	4	349	379	380	1				
2 Bowen	1952/1989/2000	-----	2007(1)	1.5	63,915	4	3	3	2	11.54 A	2.4	2	1	396	413	586	4				
3 Burr	1967	-----		3	53,000	3	3	3	3	8.65 A	3.0	1	1	352	333	409	2				
4 Cabot	1929/1957	1991(2)	2007(2)	3.5	41,000	4	3	4	3	1 A	3.5	3	4	344	420	494	2				
5 Countryside	1953/1958/1988	1991/1999(4)		3.5	65,000	4	3	4	3	7.39 A	3.5	2	2	388	437	565	3				
6 Franklin	1939/1950/1953	-----		2	56,764	4	3	4	2.5	5.45 A	2.8	2	3	366	414	507	2				
7 Horace Mann	1965	2002(2)	2007(1)	3.5	37,500	3	3	3	2	1.59 A	3.1	2	2	308	350	334	1				
8 Lincoln-Eliot	1939/1965/1974	-----		3	51,074	4	3	4	2	4 A	3.1	1	2	290	281	422	4				
9 Mason-Rice	1959	-----		3	39,000	3	3	3	3	3.99 A	3.0	2	2	396	372	380	1				
10 Memorial-Spaulding	1954/1959/2002	-----		1.5	68,775	3	3	3	3	5.59 A	2.4	2	1	440	443	529	2				
11 Peirce	1951/1955	-----	2007(2)	2	33,800	4	3	4	2	3.68 A	2.7	3	4	286	324	343	1				
12 Underwood	1924	-----		2	43,300	4	3	4	3	1 A	2.9	1	3	278	288	391	3				
13 Ward	1928/1950/1954	-----		3.5	38,000	4	3	4	3	3.16 A	3.5	2	3	316	237	223	1				
14 Williams	1950/2001	-----		1.5	41,700	4	2	4	3	2 A	2.5	1	1	286	295	303	1				
15 Zervas	1954	1999(1)	2007(2)	3.5	30,646	4	3	4	2	5.28 A	3.4	3	4	226	332	410	2				
													Subtotal Elementary		5,021	5,318	6,276				
Middle:																					
1 Bigelow Middle	1967/1993-opened MS	-----		2	92,500	4	2	4	3	2.81 A	2.7	2	1	500	495	527	1				
2 Brown Middle	1956/1962/1982/1997	-----		2	146,000	4	2	4	2	8.27 A	2.6	3	1	850	665	721	1				
3 Day Middle	1971/1997-infill add	-----		2	145,600	4	2	3	2	8.57 A	2.4	2	1	850	747	925	2				
4 Oak Hill Middle	1936/1997-opened MS	-----		1.5	91,000	2	1	2	2	8.04 A	1.6	1	2	550	567	672	2				
													Subtotal Middle		2,750	2,474	2,845				
Other:																					
1 Carr	1936/1960	-----		3	49,000	4	3	4	3	4.85 A	3.3	-	-	-	-	-	-				
2 Education Center	1928/1934	1966		2.5	70,000	4	3	4	3	3.78 A	3.1	3	4	-	-	-	-				
Totals					1,308,874													7,771	7,792	9,121	

¹ Source: Newton Public Buildings Department

² Source: Newton Assessors

³ Source: Newton School Department

*Key to Rating for Condition:

1 = New or in good condition with ordinary maintenance required

2 = Good condition with minor repairs required

3 = Fair condition with repairs or replacement required

4 = Poor condition with replacement required

See Appendix F for detailed Facility Assessments

**See Appendices G and H for further information.

*** Current capacity maintains existing programs, does not include temporary classrooms, and uses a factor of 40 sf per pupil per classroom.

****Key to Rating for Projected Growth:

1 = 5-year projected change percentage <10

2 = 5-year projected change percentage of 11-25

3 = 5-year projected change percentage of 25-40

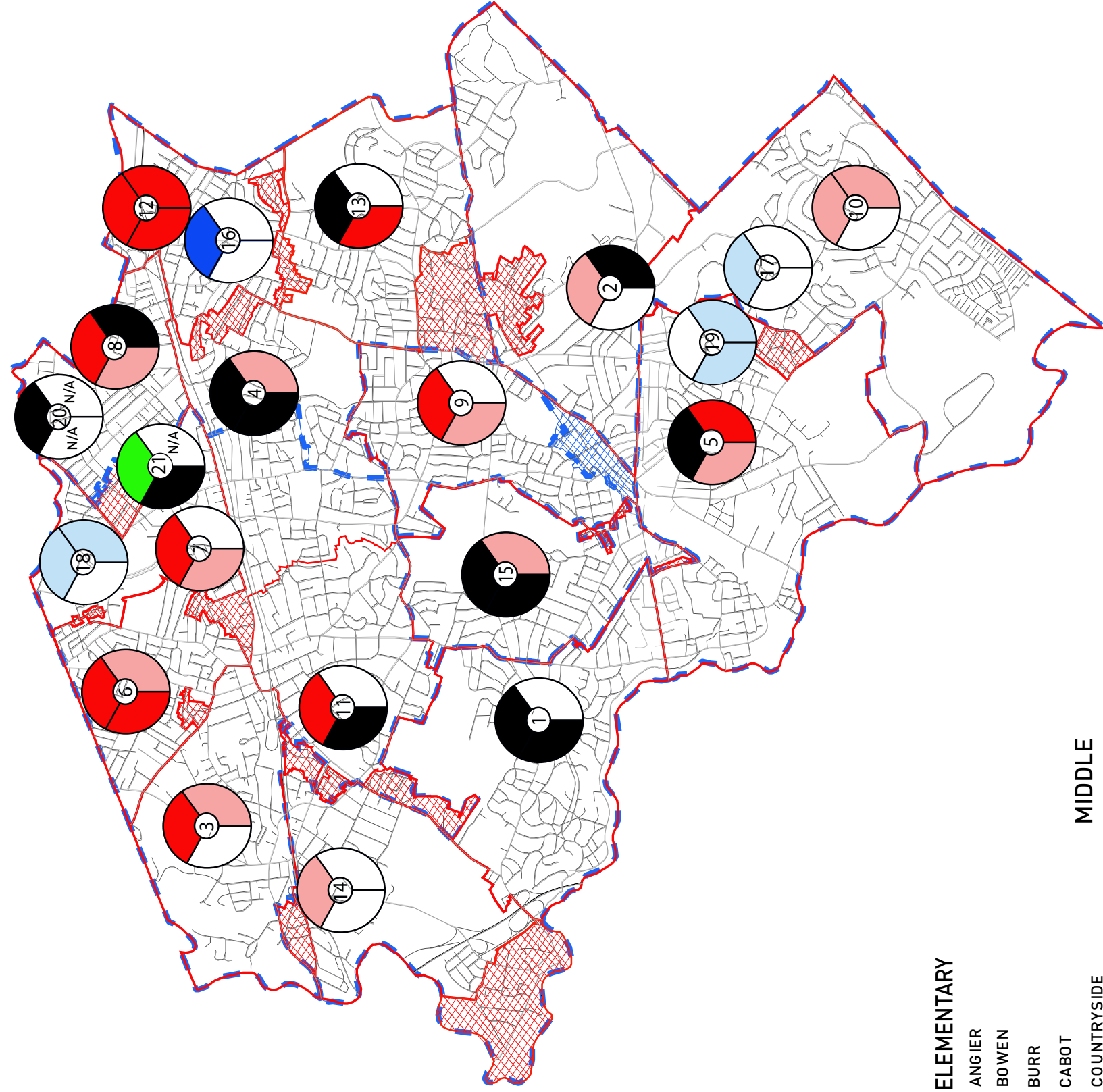
4 = 5-year projected change percentage >41

See Appendix I for further information



K

Existing Schools Assessment - Graphic Representation



ELEMENTARY

- 1 ANGIER
- 2 BOWEN
- 3 BURR
- 4 CABOT
- 5 COUNTRYSIDE
- 6 FRANKLIN
- 7 HORACE MANN
- 8 LINCOLN-ELIOT
- 9 MASON-RICE
- 10 MEMORIAL-SPAULDING
- 11 PEIRCE
- 12 UNDERWOOD
- 13 WARD
- 14 WILLIAMS
- 15 ZERVAS
- CHOICE AREAS

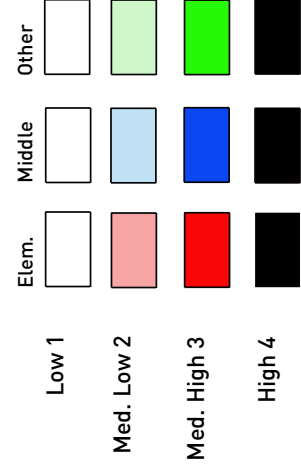
MIDDLE

- 16 BIGELOW
- 17 BROWN
- 18 DAY
- 19 OAK HILL
- CHOICE AREAS

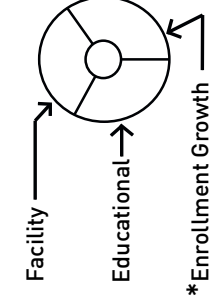
OTHER

- 20 CARR
- 21 EDUCATION CENTER

Level of Need



Category of Assessment



* A percentage change in student population between school years 2006/07 and 2011/12

Newton Schools Study

Existing Schools Assessment

See Appendix J Summary Spreadsheet



Capacity vs. Enrollment

Capacity vs. Enrollment Graphs

