MASON SQUARE BRANCH LIBRARY

765 State Street
Springfield, MA 01109

FACILITIES REPORT
12/2/96

BUILT: 1955
SQUARE FOOTAGE: 17,141

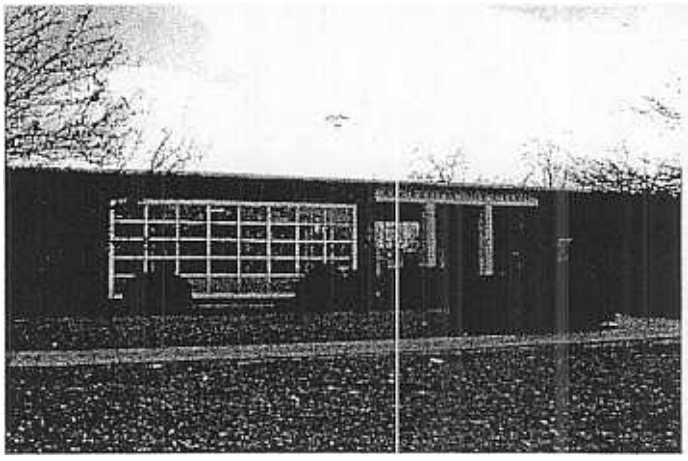

FIG. 1

CAOLO & BIENIEK ASSOCIATES, INC.
435 Cottage Street
Springfield, MA 01104

TOWSLEY ASSOCIATES, INC.
32 Knollwood Drive
East Longmeadow, MA 01028

E. M. SULLIVAN CO., INC.
2 Weston Street
Wilbraham, MA 01095

UNIVERSAL ACCESSIBILITY BARRIERS

(Accessibility requirements are based on the Americans With Disabilities Act & 521 CMR Architectural Access Board)

SITE: ADA 4.1.2 One existing accessible parking space and isle needs to indicated by striping in the front parking lot. The existing sign poles indicating the spaces in the front and rear parking lots need to be straightened. The concrete paving in the front parking lot is in very bad condition. Several cracks and unlevel surfaces make the paving inaccessible and should be replaced. See figure 2.

FIG. 2

MASS 20.9 In the rear parking lot, an accessible route with a sidewalk at a 1:20 slope is needed from the accessible parking spaces to an accessible entrance.

RAMPS: ADA 4.8 Three 6' 0" ± ramps are needed from all the egress doors in library to provide accessible means of egress. A ramp is also located in the

garage are that is not accessible. This ramp would be required to sloped at 1:12 and have hand & guardrails if handicap employees are using the space.

DOORS: ADA 4.13.7 All doorways into toilet rooms, offices & work areas needed to be enlarged to 36" wide.
ADA 4.13.10 The interior and exterior vestibule doors require new door closers/openers to meet the 5 pound push/pull force requirements.
ADA 4.13.9 All doors in the building require accessible hardware including handles, levers, closers and locks.

TOILETS: ADA 4.16 No accessible toilet rooms exist in the building. Two public toilet rooms are located directly off the library space that are very limited in square footage and have no accessible fixtures. A private toilet room exists adjacent to the employee break room that is also too small with no accessible fixtures. Two inaccessible toilet rooms are located in the Activity Room of the Library and two inaccessible rooms are also located in the basement. All of these rooms require additional space and new fixtures. The garage space has a toilet room that is equipped with a shower that is inaccessible. One public men's and women's toilet room is required in the building that is located on an accessible route.

SIGNS: ADA 4.3 No accessible signage exists in the building. Each room requires a sign with a written tactile description, grade 2 Braille description and accessible symbol.

SEATING: ADA 4.32 Computer tables are not the proper height and do not provide the required 27" knee space, however, these tables are adjustable. A minimum of 5% of all seating and tables are required to be accessible. Counters located in the work room are inaccessible because they are under 27" high.

COUNTER: ADA 4.32.4 The existing check-out counter is equipped with a 30" high x 40" wide accessible area that could be used by a handicap person, however, this area is being used as display and storage counter. This area should be cleared to provide accessibility to handicap occupants See figure 3.

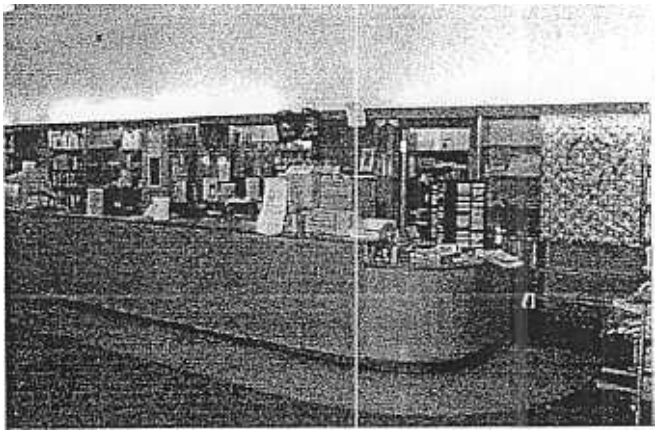

FIG. 3

CONTROLS: ADA 4.27 All controls, switches, dispensers, etc. are required to be no higher than 54" from the highest operable point to the floor. The following items do not comply:

- thermostat
- electrical panel
- fire extinguishers
- dumb waiter

- HVAC controls
- exterior book drop

MAT: MASS 25.4 The existing floor mats in the vestibule and library are required to be anchored to floor. Several floor mats and area rugs are located throughout the library.

STAIRS: MASS 27.1 One stair tower to the basement exists from the library that is not used by the public. This stair tower requires new handrails, guardrails and has unacceptable nosings on each step.

SINKS: MASS 30.9 The existing sink in the work area of the library is not accessible. The counter should be 34" high with a 30" wide open space under the sink that is 29" high. New fixtures are required that can be operated with a closed fist.

KITCHEN: MASS 32.3 Wall cabinets in the work room and break room need to be lowered to 51" from the bottom of the cabinets to the finish floor,

MASS 45.1 A kitchenette unit is located in the employee break room requires new accessible handles on the faucet. Existing wall mounted cup and paper towel dispensers also needed to be lowers to 54" above the finish floor. No accessible lockers exist in the bank of wall lockers in the kitchen area. A side approach accessible kitchenette unit is installed in the children's area of the library. An another kitchen is located in the garage area of the library. This kitchen requires new accessible fixtures, lower base cabinets access spaces under the sink and cooking units.

CLOSET: MASS 34.2 The existing closet in the employee work room is not accessible. The hanger pole should be a maximum of 54" above the finish floor.

PHONE: MASS 37.1 A wall mounted phone enclosure (the phone has been removed) is located in the vestibule that is too high. The highest operable point on the phone should be at 48" above the finish floor. See figure 4.

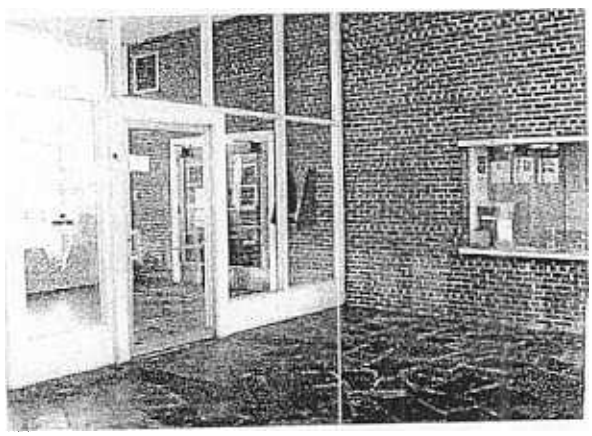

FIG. 4

HAZARDS: MASS 37.4 The display cases located at the main entrance of the library project more than the maximum code allowance of 4" into the paved area of entry. Existing mechanical equipment in the basement of the building is located in the open floor space. If the basement is public space or to be used by a handicap employee, than this equipment would be required to be protected or shielded. See figure 4.

ACCESSIBILITY COST ESTIMATE

SITE:	Accessible parking:	$10,000.00
RAMPS:	New ramps from side egresses:	$5,000.00
DOORS:	Widen doorways:	$5,000.00
	Hardware:	$7,500.00
TOILETS:	Two accessible toilet rooms:	$7,500.00
SIGNS:	New signage throughout building:	$500.00
SEATING:	New accessible tables & chairs:	$500.00
CONTROLS:	Relocate existing controls:	$1,000.00
MATS:	New anchored mats:	$500.00
STAIRS:	New accessible rails and nosings:	$2,500.00
SINKS:	New accessible sink in workroom:	$350.00
KITCHEN:	New Accessible fixtures in all kitchens:	$5,500.00
CLOSETS:	Lower existing closets:	$250.00
PHONE:	Lower existing public phone:	$300.00
HAZARDS:	Correct installation of display cases:	$1,000.00
	Total:	$47,400.00

Note: An elevator to the basement would be required for accessible access if the basement was to be used by the public or a handicap employee was hired.

MAINTENANCE ITEMS

EXTERIOR: The existing soffit and wood trim should be cleaned and repainted or covered with metal trim.

WINDOWS: The existing windows are wood framed with single pane glazing. The exterior wood framing needs to be cleaned and painted on the entire building. Interior framing is damaged in the vestibule and should be replaced. All of the window frames need to caulked at the window frame and masonry wall joints. See figure 5.

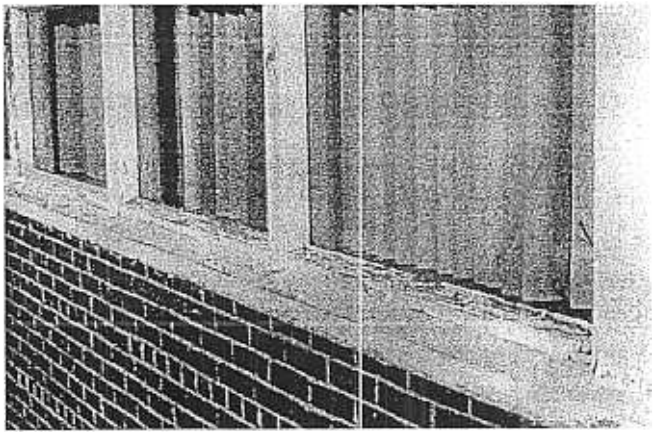

FIG. 5

SIDEWALK: The existing concrete sidewalk at the main entrance of the building is cracked in several places and should be replaced.

MASONRY: The existing flagstone paving outside the library entrance has a small amount of cracks and should be repaired to prevent further deterioration.

MAINTENANCE COST ESTIMATE

EXTERIOR:	Repaired & paint:	$2,500.00
WINDOWS:	Clean, repaint & recaulked:	$7,500.00
SIDEWALK:	Replace front sidewalk:	$1,000.00
MASONRY:	Repair flagstone paving:	$500.00
	Total:	$11,500.00

BUILDING CODE

(Building Code requirements are based on the Fifth Edition of the Massachusetts State Building Code 780 CMR)

ASBESTOS: The existing 8"x8" floor tile in the library may be asbestos tile and should be tested.

LADDER: The ladder and egress well from the basement is not a legal means of egress in it present condition. The ladder is very steep and is rusted beyond safe usage. A fence and gate has been installed directly at the top of ladder at the well that is lock which does not allow occupants to move to a safe location away from the building. This the ladder should be replaced and the fence and interior illuminated exist sign should be removed. See figure 6.

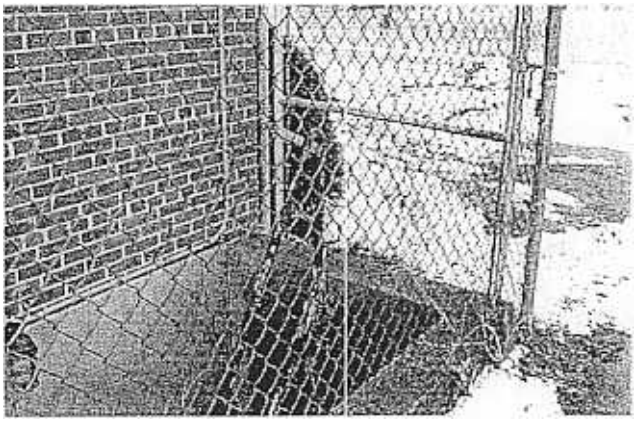

FIG. 6

EGRESS: There are two existing exits from the basement. One is the ladder in the concrete well described in the maintenance section of this report and the other is a stair tower located in the rear of the library space. Both of these exits are not legal mean of egress. The problems with the ladder is as described earlier. With the addition of the garage space, the stair tower no longer empties to the exterior of the building. Occupants must leave the rated stair tower into an unrated library space leading to an exit. This is not acceptable by the Mass. Building Code.

BUILDING CODE CORRECTION COST ESTIMATE

LADDER:	Replace ladder and well with accessible stairs:	$10,000.00
EGRESS:	Provide a rated means of egress from the basement:	$15,000.00
	Total:	$25,000.00

MECHANICAL ITEMS

HVAC SYSTEM

A The building is heated by a cast iron oil-fired hot water boiler. Two (2) air handling units provide the heating, air conditioning, and ventilating requirements for the building. The building is zoned by three (3) pumps in the basement and several zone valves in the system. The terminal units consist of double manifold radiators and baseboard radiation. The temperature controls for both the boiler and air handling units are obsolete and should be replaced. An outdoor boiler water reset control should be installed to control the boiler temperature in relation to outside temperature. The controls for both air handling units should be updated and the units air balanced to provide adequate outside air for ventilation. All uninsulated heating piping should be insulated. The buried oil tank should be removed and replaced with three (3) tanks in the basement with a containment enclosure. Consideration should be given to a combination gas/oil fired burner to replace the present oil-fired burner.

PLUMBING SYSTEM

A. A backflow preventer has to be installed in the cold water make up to the boiler (code violation).

ENGINEER'S CONSTRUCTION COST ESTIMATE

A.	Upgrade temperature control system:	$7,000.00
B.	Fuel oil tank removal and installation of three (3) oil tanks in basement:	9,000.00
C.	Install backflow preventer in the cold water make up to the boiler:	1,500.00
D.	Insulate heating piping:	2,500.00
E.	Balance HVAC system:	3,500.00
F.	Installation of combination gas/oil burner and controls:	4,000.00
	TOTAL:	$27,500.00

ELECTRICAL ITEMS

ELECTRICAL EQUIPMENT EVALUATION/CODE COMPLIANCE

A. The electrical service equipment should be replaced because it is in questionable condition. This building has more than one electrical service which is a violation of the Massachusetts Electrical Code.

GENERAL ILLUMINATION

A. The existing lighting in the stacks area are recessed circular fixtures which contain fluorescent lamps. These fixtures are difficult to retrofit and should be replaced with energy efficient T-8 fluorescent fixtures and stack lights.

B. In the main stack area perimeter wall mounted fluorescent fixtures are used. These fixtures are not energy efficient, and should be replaced with T-8 lamps and electronic ballasts.

C. Exterior lighting consists waterproof and recessed incandescent lighting. These lighting should be replaced with HID fixtures for better lighting and energy efficiency.

D. Wall mounted occupancy sensors are currently in use in the rest rooms. These should be replaced with ceiling mounted units to eliminate problems with obstructions.

E. Storage and garage areas utilize incandescent fixtures which can be replaced with energy saving fluorescent fixtures and occupancy sensors.

F. Lighting should be switched from light switches, not from the electrical panel.

FIRE ALARM SYSTEM

A We recommend a complete fire alarm system installation with pull stations at every exit. Smoke and heat detectors shall be installed for sensing. Strobe lights and speakers for a taped message shall be installed for fire alarms as required by the building code. ADA requirements should be met for this equipment.

EMERGENCY LIGHTING

A Egress lighting is provided by emergency and down lights on the exit signs at exits.

B We recommend that the new fixtures described in item 2 should have emergency ballasts to provide proper emergency lighting levels. The exit signs should be replaced with LED type fixtures with battery backup and down light.

TELEPHONE SYSTEM

A. The existing telephone system should be modernized. Additional outlets are required in the office areas and circulation desk area.

ENGINEERING ESTIMATE

A.	Service Equipment, Feeders and Panels	$ 50,395.00
B.	Lighting, Emergency Lights and Exit Signs	$ 76,790.00
C.	Fire Alarm System	$ 38,395.00
D.	Telephone System	$ 28,797.00
E.	Branch Circuit Wiring	$ 45,575.00
	Total	$239,972.00

TOTAL COST FOR BUILDING IMPROVEMENTS

ACCESSIBLE RENOVATION COST	$47,400.00
BUILDING CODE RENOVATION COST	$11,500.00
MAINTENANCE RENOVATION COST	$25,000.00
MECHANICAL RENOVATION COST	$27,500.00
ELECTRICAL RENOVATION COST	$239,972.00
TOTAL	$351,372.00