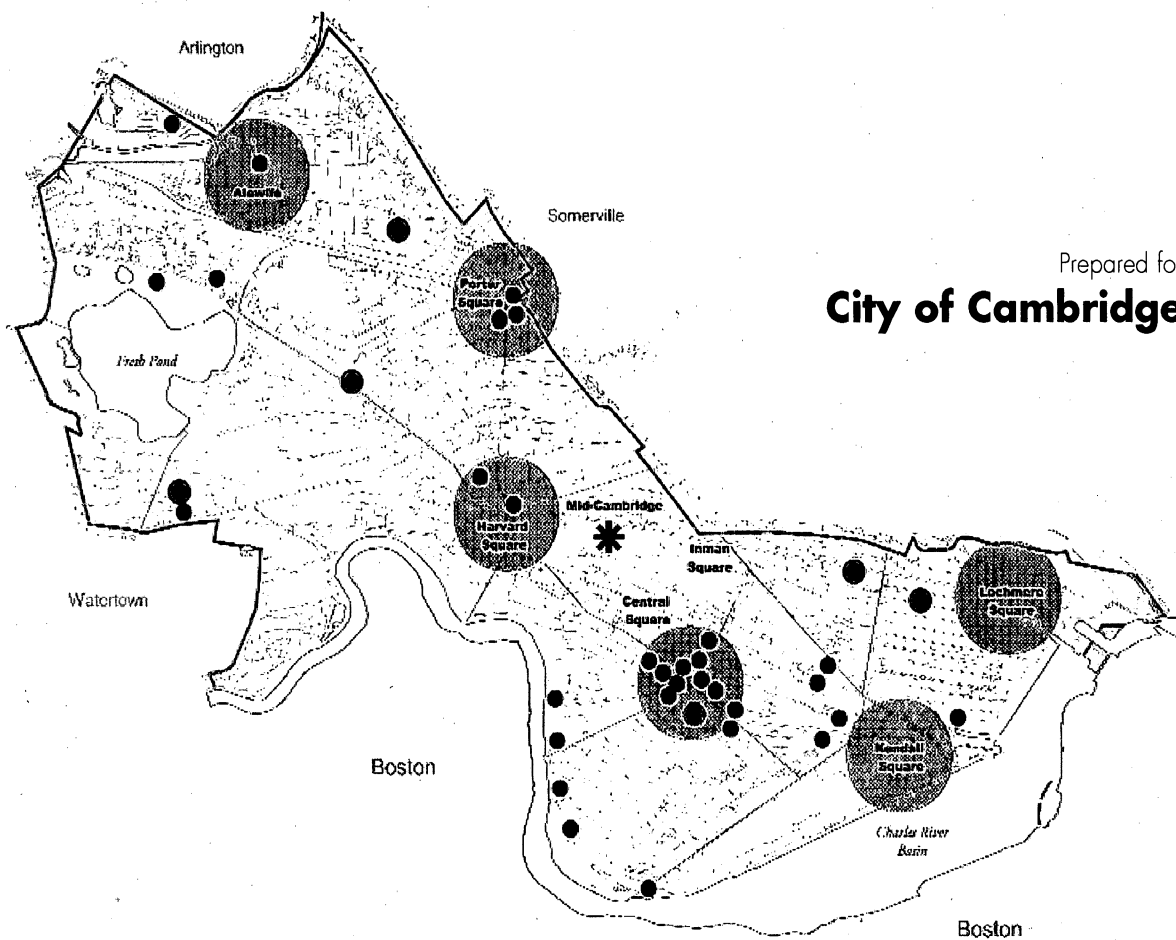


# Cambridge Library Site Selection Study



Prepared for  
**City of Cambridge**

Prepared by  
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64 Pleasant Street  
Watertown, Massachusetts 02172

**June 1998**



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## THE PROJECT TEAM

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## EXECUTIVE SUMMARY

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### Introduction

The following is a report submitted to the City of Cambridge through its City Manager, Robert W. Healy. Note that the report is organized in reverse order of three public meetings. Following the Executive Summary are three sections describing the 6 final sites discussed at the third public meeting. Next is a summary of the 18 sites that were discussed at the second public meeting. The Development Criteria section summarizes issues discussed at the first meeting. The Appendix (under separate cover) includes meeting minutes, correspondence and other materials.

Extensive studies conducted by the Library 21 Committee (1996-1998), Cambridge Public Library and the City of Cambridge have determined the need for significant expansion to the existing main library. The total space requirement is in the 90,000- to 100,000-square-foot range. The site selection study is based upon this space requirement, which is consistent with a widely-accepted standard of one square-foot of library space per population count.

Sasaki Associates was hired by the City of Cambridge to conduct a search for a set of sites suitable for an expanded library. The objective of the assignment is to identify a list of no more than three to five recommended sites, including the existing site, and to prepare an evaluation of the suitability of each site for the Cambridge main library. This will be given to the City Manager for his consideration. Upon review, the City Manager will forward his recommendation to the City Council for consideration.

### Process

Sasaki Associates, working with the Library Selection Oversight Committee, the City Manager's office and

the Community Development Department, designed a public process for consideration of alternative sites. The process was built around a series of three public meetings. At the first public meeting, program and design criteria for a library, urban design goals and characteristics for Cambridge, footprint comparisons and potential districts within the City were discussed. After the first public meeting, a list of 32 potential sites located within seven districts was developed. This list was reduced to 18 based upon a review of six "critical success factors." At a second public meeting, the list of 18 preliminary sites in five districts of the City was discussed, and a short list of 11 sites was established. This short list was reviewed in detail in a series of work sessions with the Library Selection Oversight Committee and the City Manager's Office, and was reduced to 6 final sites. At a third public meeting, the final list of 6 sites was presented. At the next meeting, the 2 recommended sites were presented with plans, elevations, sections and models. The districts and the sites within the districts that were considered and the stepped process of analysis are illustrated on page 2 of this report.

### Goals

Central to the process of selecting sites was the preparation of a set of goals for a new library. These goals gained the consensus of the City, the Library 21 Committee and the public. These so called "critical success factors" included six topics.

#### *Civic Heart*

This is a high-priority factor described by the Library 21 Committee. "Civic heart" refers to a goal that the main library, by virtue of its design quality and location, is perceived as a facility of great civic importance, and is open, welcoming and accessible

**Candidate Sites**

**32 Sites--7 Districts**

***Alewife***

Acorn Park  
Alewife MBTA area  
Fresh Pond Mall  
Neville Manor

***Harvard Square***

Waterhouse Street  
Flagstaff Park  
Star Market/Mt Auburn  
(West Cambridge)

***Porter Square***

Porter Sq MBTA air rights  
Porter Sq parking lots  
Sears Building

**18 Preliminary Sites--5 Districts**

***Porter Square***

Porter Sq MBTA air rights  
Porter Sq parking lots  
Sears Building

**11 Shortlisted Sites--5 Districts**

***Porter Square***

Sears Building

**6 Final Sites--2 Districts**

**2 Recommended Sites--2 Districts**

**Charles River**

Modern Continental  
Polaroid site  
Mahoney's  
Micro Center  
Riverside Press Park

**Kendall Square**

Broadway: Moore  
Broadway: Hampshire  
Osborn Triangle  
Comm. Energy  
Technology Square

**Central Square**

Prospect Street Lot  
Naggar Block  
7-Eleven Block  
TAD-Dangle Properties  
Post Office Block  
YMCA  
Gas + Light  
Salvation Army Site  
Bread & Circus  
Quest Diagnostics  
Police Station Block

**Mid-Cambridge**

Existing Library

**Charles River**

Mahoney's  
Micro Center  
Riverside Press Park

**Kendall Square**

Comm. Energy  
Technology Square

**Central Square**

Prospect Street Lot  
Naggar Block  
7-Eleven Block  
TAD-Dangle Properties  
Post Office Block  
YMCA  
Gas + Light  
Salvation Army Site  
Police Station Block

**Mid-Cambridge**

Existing Library

**Charles River**

Mahoney's

**Kendall Square**

Comm. Energy

**Central Square**

7-Eleven Block  
Gas + Light  
Naggar Block  
Post Office  
Prospect Street Lot  
TAD Block  
YMCA

**Mid-Cambridge**

Existing Library



**Central Square**

7-Eleven Block  
Naggar Block  
Post Office  
Prospect Street Lot  
TAD Block

**Mid-Cambridge**

Existing Library



**Central Square**

7-Eleven Block

**Mid-Cambridge**

Existing Library

to all of Cambridge. As a part of this topic, the identity and civic qualities of the districts within which a main library could be located were also discussed.

### ***Library Program Suitability***

Candidate sites must be dimensioned in a way that permits accommodation of a 90,000- to 100,000-square-foot program in a desirable "configuration." Width, depth, street frontage, service access and availability of natural light were part of this consideration. It is also considered a plus if modest future expansion is possible.

### ***Parcel Size***

Given a strong preference for accommodating the library on no more than three floors, a site of 35,000 square feet or more is preferable.

### ***Accessibility***

Preferred sites should be within five minutes or 1,200 feet of MBTA Red Line stops and/or be served by bus routes.

### ***Centrality***

Preferred library sites should be central to concentrations of population and existing as well as potential card holders. This factor also speaks to a preference for sites with an identifiable "civic address."

### ***Availability***

The goal of the selection process was to identify the best sites for a main library, regardless of current ownership. Although eminent domain can be employed by the City to acquire property for the library, the screening of candidate sites did consider issues such as historic and/or preservation status, nature of current use, expressions of potential desire for redevelopment from civic and business associations, and attitudes expressed by landowners.

## **A Winnowing of Options**

The process of moving from the list of 32 potential sites to a short list of 6, and then to 2 finalists, involved two parallel sets of considerations.

The first set of considerations identified districts of the City of Cambridge that qualified (or potentially qualified) as places with an identity or "civic address" suitable for a main public library. The districts, not to be confused with neighborhoods, were Alewife, Harvard Square, Porter Square, the Charles River, Kendall Square, Central Square, and Mid-Cambridge.

Parallel to considering potential addresses for a new main library, the process identified specific sites that had the potential for passing the "critical success factor" test discussed above.

Thirty-two sites were recommended for initial screening. Sources from which these sites were identified included recommendations from civic and business interest groups, recommendations from private individuals, offers from landowners, suggestions from the real estate community, suggestions made in public meetings, suggestions from Cambridge public officials, and Sasaki's review of options.

A scoring system was prepared for the six "critical success factors." The level of information available at the time of the original scoring was not considered suitable for detailed analysis of relative quality. The intent of the scoring system was to be a screen to create a list of suitable sites. The scoring was a mechanism for identifying a *list* of candidate sites that would be suitable for detailed evaluation.

Screening by Sasaki and the Oversight Committee reduced the list to 18 preliminary sites in five districts. The analysis of these remaining 18 sites was presented at the second public meeting. Based upon the presentation, comments and discussion at the meeting, and a review of the scoring, there was consensus on a short list of 11 sites for further consideration.

## **Moving From 11 Short-listed Sites To a Final List**

The next challenge was to reduce the list of 11 sites to a final list for detailed analysis. While any of the sites could accommodate a library, it was necessary to articulate essential differences in what could be accomplished, and to focus on sites that offered particularly outstanding opportunities and advantages to the City.

An equal challenge was presented by the fact that none of the 11 short-listed sites is perfect. Each site has issues that will require attention if that site is selected. The challenge was to identify relative advantages and to focus attention on those sites offering the greatest potential for meeting the very high standards appropriate to the new main library for Cambridge.

The high standards for the main library are set by the character of the City of Cambridge--a character synonymous with a commitment to community, neighborhood, and education; and by the character of the existing main library building and location. The Richardsonian "library in the park" is distinctive and is emblematic of the American image of a library.

The process of reduction of a list from 11 sites to a final list followed the parallel paths of consideration of the quality of each site and of the districts and their suitability as a home for the main library. This step in the process did not numerically score the options. The following describes the rationale for reduction of the list to 6 final sites.

### **Porter Square**

The best site in Porter Square is the Sears building, known as the Porter Exchange. While the building could accommodate a main library, the architecture of the building (which must be protected) did not project a "distinguished work of architecture" image (a goal identified by the Library 21 Committee) desirable for a main library, and the site is not central to the Cambridge population (it is on the Somerville

line). Therefore, Porter Square and the Porter Exchange Building were eliminated from the final list.

### **Kendall Square**

Kendall Square represented what was characterized as a "pioneer" site. Over the long term, it is anticipated that this area will become significantly more pedestrian friendly and well developed. However, it is likely that given real estate values and existing patterns of development in that area, a well-developed Kendall Square will have a concentration of commercial uses. Residential buildings will be market rate and upscale as opposed to the current image typical of a "Cambridge neighborhood." While landowners in this district have discussed attractive offers for making land available for a new main library, when weighed against more optimal locations, including the existing library site or Central Square, Kendall Square does not make the final list.

### **Charles River**

The best Charles River site discussed was Mahoney's Nursery. Although very prominent and visible along the Charles River, it is 3/5 of a mile from the MBTA, 50% further than the existing library is from Harvard Square. In addition, the site is owned by and associated with Harvard University rather than the Cambridge community. These factors and a relative lack of centrality to neighborhoods eliminated this district and site from the final list.

### **Central Square**

At this point in the process of short-listing sites, the existing Mid-Cambridge Broadway site and Central Square district remained as prime candidates for locating the expanded main library. Among others, the Central Square Business Association strongly advocates the square as a desirable location. Such a project could reinforce Central Square as a center for civic life in the City and add to the mixture of uses attracting citizens and visitors to the square. As in

Boston and other cities, the main library is often a prominent civic building in a very urban setting. Also, Central Square is a transportation hub with the MBTA and multiple bus lines.

Common disadvantages of the Central Square sites are street noise (which inhibits the opening of windows) and the lack of exterior children's play space, as is now available at the Broadway site. In addition, the focus on specific Central Square sites for the library has resulted in strident opposition to the acquisition of individual properties by owners and tenants. It is anticipated that success in locating the library in Central Square will require significant work to address landowner and tenant, varying in nature upon which specific property is selected.

Central Square offers three general types of sites.

### ***1. Reuse of Existing "Monuments"***

#### *YMCA*

While offering an attractive potential for a new main library, the time it would take to find and complete a satisfactory relocation plan for the YMCA, the expense of demolishing everything but the facade (as would likely be necessary for rebuilding a functioning library on the site), and the need to relocate residents of 120 single-room occupancy (SRO) units, led to the conclusion that the YMCA would not be on the final list for the new library.

#### *Post Office*

The Post Office is the best option for the reuse of an existing prominent building because of the relative simplicity of reconstruction and the prominence of its site. Disadvantages to this option are the need to find and acquire a location, and build a new Post Office within the same zip code area (Post Office requirement); the need to demolish the back part of the building to achieve on-site underground parking; the anticipated complexity of a transaction with the feder-

al government; and a resulting main library wrapped in a "Federal Architecture-style" skin, thus depriving the main library from having its own distinguished architecture. The Post Office is on the final list.

### ***2. Open Space***

#### *Prospect Street Lot*

The Prospect Street lot remains an option for construction of the new main library. While its address off Massachusetts Avenue is less attractive as the setting for a major civic building, a well-executed project could bring a distinguished address to this site. Disadvantages to locating the main library on this site are the need to duplicate existing parking, either underground on this site or elsewhere in structure, and the fact that a large-footprint, three-story structure could be out of scale with the abutting residential buildings. The Prospect Street lot is on the final list.

### ***3. Massachusetts Avenue Sites***

#### *Gas + Light Block*

The Gas + Light building site would be complicated to achieve given the need to integrate three parts. The site would require the preservation of an existing building, the incorporation of the YWCA pool land, and the demolition of retail space on Massachusetts Avenue. Although use of this site does not displace existing parking, this complexity also would prevent the construction of any on-site underground parking. The Gas + Light site has been eliminated from the final list of Central Square sites.

#### *Naggar Block*

The site under consideration on the so-called Naggar Block includes two Naggar-owned parcels east of the passageway combined with the City-owned parking lot at the corner of Norfolk Street and Bishop Allen Drive. Given frontage on three streets and the size and configuration of the site, this could provide a satisfactory

location for the new main library. The major negatives to this location are the expenses associated with replication of the existing City-owned parking lot, either underground or in structure (because of its critical role in support of Cambridge Central Square businesses); the fact that, among the Central Square alternatives, this is the least related to the civic center of Central Square; and the strong opposition to acquisition from the landowner. The Naggar Block is on the final list of Central Square sites.

#### *TAD Block*

The TAD site includes the Woolworth building and the CPI building and is bounded by Essex Street between Massachusetts Avenue and Bishop Allen Drive. Its location and size are satisfactory for the library program. Success in the reuse of this site is complicated by the significance of the existing architecture, which is part of the character of the square, and the need to adapt a library to fit within these commercial facades (which could significantly impact the amount of natural light available to library space). Also, among the Central Square sites, these buildings have the largest amount of existing rentable space which affects both the impact on Central Square business space and its value. The TAD Block is on the final list of Central Square sites.

#### *7-Eleven Block*

Among the Central Square sites, the 7-Eleven block, inclusive of the 7-Eleven building, the Fishery building, the Aqua Communications building, and a City-owned parking lot, is the most advantageous and preferred Central Square site for a main library. This location sites the library within a complex of existing civic buildings. The location relative to other distinctive civic structures would reinforce the function of Central Square as a civic center for the City of Cambridge. Further advantages are streets on three sides open the site to light and a square configuration permits an optimal floor plan. Also, parking sufficient for the library could be achieved under the building

without displacing significant public parking. The major disadvantages to this site are street noise, the lack of exterior children's space, opposition from landowners and tenants, and the need to relocate businesses that are part of the existing character of Central Square.

#### **Mid-Cambridge**

##### *Existing Site: 449 Broadway*

Although it is a requirement that the existing library site be a finalist for consideration, the Broadway site qualifies as a finalist in its own right. There are solutions to the organization of the additional building requirements which not only preserve the open space but have the potential to improve it.

The advantages include the tradition and centrality of this site at the geographic center of the City, the character of the existing building and its status as a "distinguished work of architecture," its siting as a "library in a park," its relationship to Cambridge's only high school and the long tradition of that relationship, the existence of the park as an amenity to children and other library users, and the fact that the City owns the land and it is the only site among the finalists that does not require acquisition.

The major disadvantages to this location are the potential complexity of construction and operation of an expanded library in a somewhat idiosyncratic new/old structure; it is more than a 5-minute walk to an MBTA station; a perceived potential for visual alteration of the park edge; the pedestrian routes between the library and school would be altered, created by the building and related parking; and the increased density of the additional 65,000 sf of building. In addition, the zoning of the park requires that the expansion of the library, although it is a permitted use in the zone, be granted a special permit from the Board of Zoning Appeal.

## **Analysis of Six Final Sites**

At this point in the evaluation process, the original six "critical success factors" plus an additional eight evaluation factors were used to compare sites and ensure their suitability for the main library.

Of the six critical success factors, a review of "civic heart," suitability to accommodate the program, size and fit, accessibility, and centrality confirmed the conclusions of the original analysis as outlined above.

The question of availability was considered again. Although all of the final six had been on the list from the beginning, had been discussed in two public meetings, and had been noted in the press, a letter was sent to the owners of each of the final sites. Written responses were requested. Of the five Central Square sites, responses were received from Naggar and 7-Eleven stating opposition. No response was received from the other three sites.

The additional eight criteria applied to the 6 final sites resulted in the following analysis:

### **Utilities**

No significant premiums would favor one site over another.

### **Soils**

No significant premiums would favor one site over another.

### **Environmental**

No significant premiums would favor one site over another.

### **Regulatory**

A library is a permitted use on all of the final sites. The Broadway site is in the Open Space Zone and will require a special permit from the Board of Zoning Appeal. The Prospect Street lot site will

require an increase in permitted FAR, and the other Central Square sites will require review under the provisions of the Central Square Overlay District.

Each of the final sites had been reviewed by the chairperson of the Historic Commission. The proposed solutions are consistent with City goals for the preservation of historic and other structures.

### **Traffic**

Any increase in traffic created by the library will not significantly impact any locations.

### **Parking**

Each of the final sites can accommodate necessary parking with a combination of structures under or next to the building, plus available shared parking within a 5-minute walk.

### **Cost: Acquisition**

The cost of acquisition of the Central Square sites is estimated to range from \$1,000,000 to \$7,000,000. This range is the result of different amounts of land and/or building that must be acquired. The Broadway site is owned by the City.

### **Cost: Construction**

The cost of construction of the library and associated parking is estimated to range from \$21,000,000 to \$24,800,000. This range is the result of different combinations of renovation and new construction as well as different parking solutions, including replacement of existing parking.

## **Conclusions and Recommendations**

Two districts--the existing Broadway site and Central Square--provide advantageous options for the location of the main library. Each offers the potential for an excellent main library.

Analysis has demonstrated that it is possible to accommodate an expanded library on the existing site in a way that would both protect and improve the quality of the open space and park. While detailed designs have not been undertaken, careful analysis of the potential massing for the required program demonstrates that it can be accommodated behind the line of the front facade of the existing historic building.

The recommended first priority site within Central Square is the 7-Eleven Block location. The location next to the City Hall, as part of a complex of important civic buildings, and the ability to replace the existing buildings, combine to create the potential for an outstanding solution to a new main library.

Four other Central Square sites are considered significantly less advantageous or "second tier" to the 7-Eleven Block, and should be considered as a site for the main library only if neither the existing Broadway site nor the 7-Eleven Block is selected.

If the Post Office expresses a desire to work with the City to achieve a relocated Post Office and to transfer ownership of the existing building to the City, the existing Post Office site could achieve the goals for a main library.

The Prospect Street Lot is worthy of further consideration if increased development rights can be achieved, a solution can be found for relocation of the existing parking, and issues of abutter impact are resolvable.

The TAD Block could accommodate the main library (in a less desirable configuration) if agreeable terms of purchase could be achieved and designs that are historically appropriate, as well as functionally satisfactory, can be accomplished.

The Naggar Block is the fourth site that could be considered if neither the Broadway nor the 7-Eleven site is selected. Given the relatively small existing site and building area to be acquired, it is the least expensive of the four "second tier" sites. However, the need to replace existing parking is a premium

and strong opposition to acquisition has been expressed by the owners.



## ANALYSIS OF THE 6 FINAL SITES

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### Comparison of 2 Recommended Sites

Both the Broadway site and the 7-Eleven Block offer the potential for a new main Cambridge library that is worthy of the vision set by the City and the Library

21 Committee. A comparison of the assets offered by these two options provides a highlight of the merits of each, and of the distinct choice that consideration of the two options presents to the City. This comparison was discussed at the June 10, 1998 meeting.

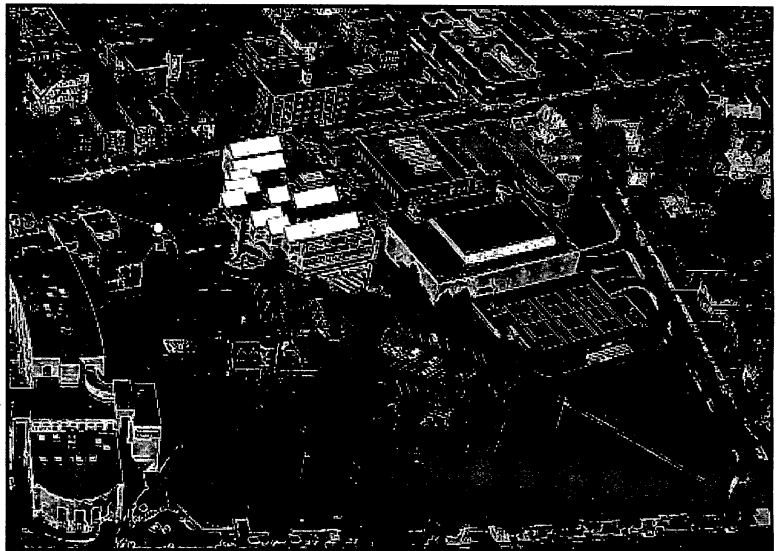
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### Broadway

- Library in the Park: a tradition of American libraries
- The current public image of the library
- Important, historic and distinguished architecture
- Unique relationship to the City's only high school
- Geographic center of the City
- Park provides a unique asset for children, who represent 20 percent of the program for library use and 29 percent of current use

### 7-Eleven

- Library in the Civic Center: another tradition of American libraries
- Reinforces square as center for civic life: City Hall, Post Office, Police Headquarters, YMCA, etc.
- Contributes to mixture of uses in the square
- Demographic center of Cambridge
- Six elementary schools within a 10-minute walking distance
- Transportation hub with MBTA Red Line and numerous buses
- Footprint provides for a simple operating plan which may result in lower operating costs

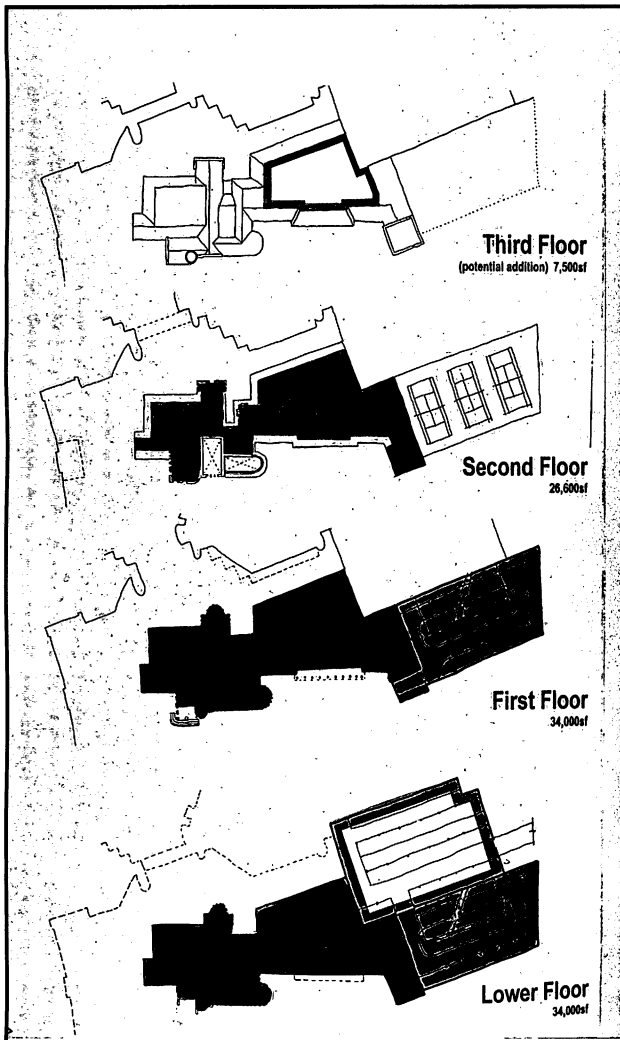


Built in 1889 and expanded in 1899 and again in 1967, the existing Broadway library was designed as an object building in a park setting. Demolition of the Rindge Technical School expanded the park to the east, but the expansion of the high school around the library has compromised the quality of the space on the north and east side of the library.

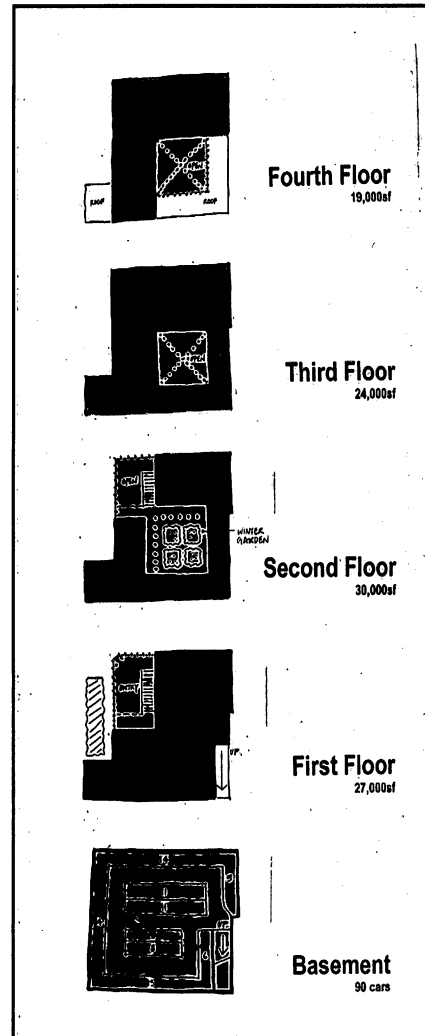


The 7-Eleven site consists of a variety of 1- to 4-story buildings fronting Massachusetts Avenue, Pleasant and Green Streets, none of which has overriding historic value. The Massachusetts Avenue/Green Street corner was the site of the Atheneum Library building, a subscriber library.

The Broadway and 7-Eleven sites would result in distinctly different building plans.



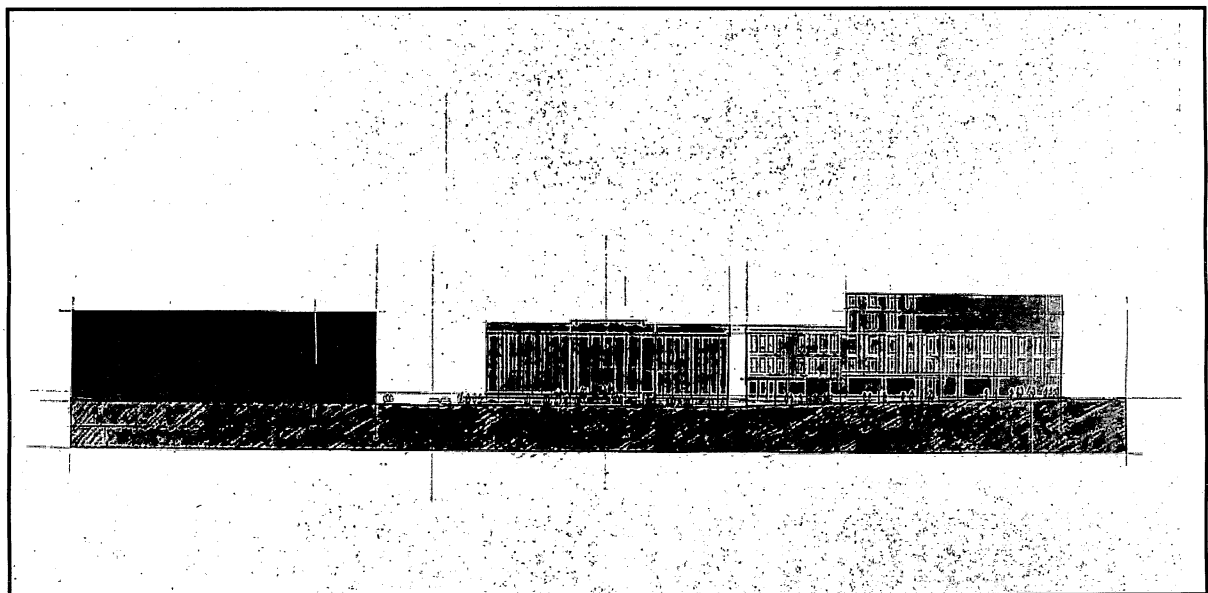
At Broadway, the expansion space is provided in two additions to the east and west which would connect into the existing library. These additions respond to requirements that they not impinge on the park and blend with the historic building exterior. As a result, the building layout would be idiosyncratic. This is considered a positive for the character of the library, but it could result in increased building and operating costs. It is also probable that the building efficiency would be less, requiring more overall area to achieve the program.



At the 7-Eleven site, the library program would be provided in all new construction, allowing greater efficiency than at Broadway. The site configuration is ideal, allowing a square plan and affording many possibilities to create distinctive spaces in plan and in section.



The east and west additions to Broadway, illustrated above, would be compatible in scale and character to the existing building, but would be set back so as to retain the historic structure as the frontispiece library. The top of the parking deck would be the same height as the eave level of the existing library, with a fence extending 10 to 12 feet above that to enclose the tennis courts. The facade of the parking deck would be designed to be compatible with the library. Note also that it could be constructed below grade.

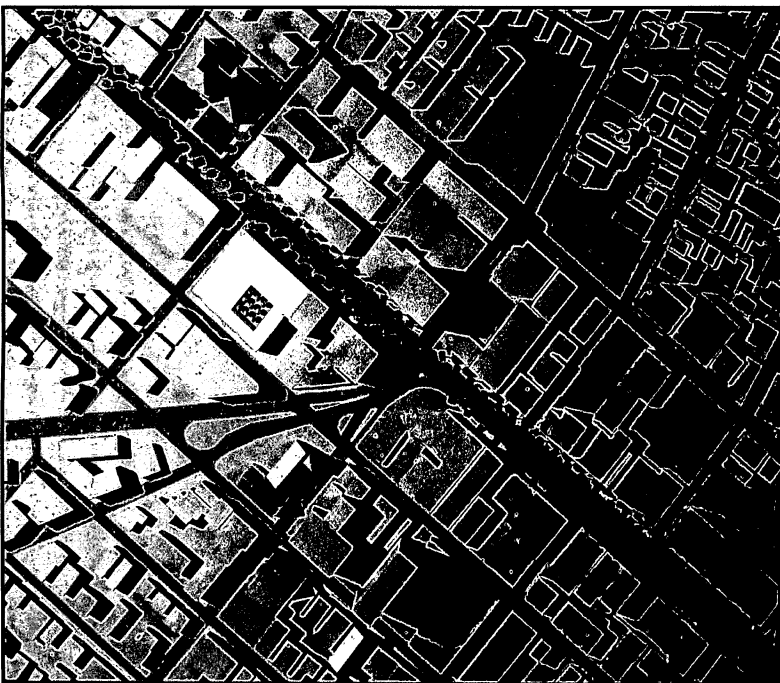


The library on the 7-Eleven site would be 3 to 4 stories or 45-55 feet tall on Massachusetts Avenue, stepping down to 3 stories on Green Street to increase sun access to the building. The building would be complementary in scale and character to the Post Office, Senior Center and YMCA to its right and the Putnam Furniture building to its left, as well as to the Cambridgeport Bank, the Gas + Light buildings across the street, and to City Hall, its kitty-corner neighbor.

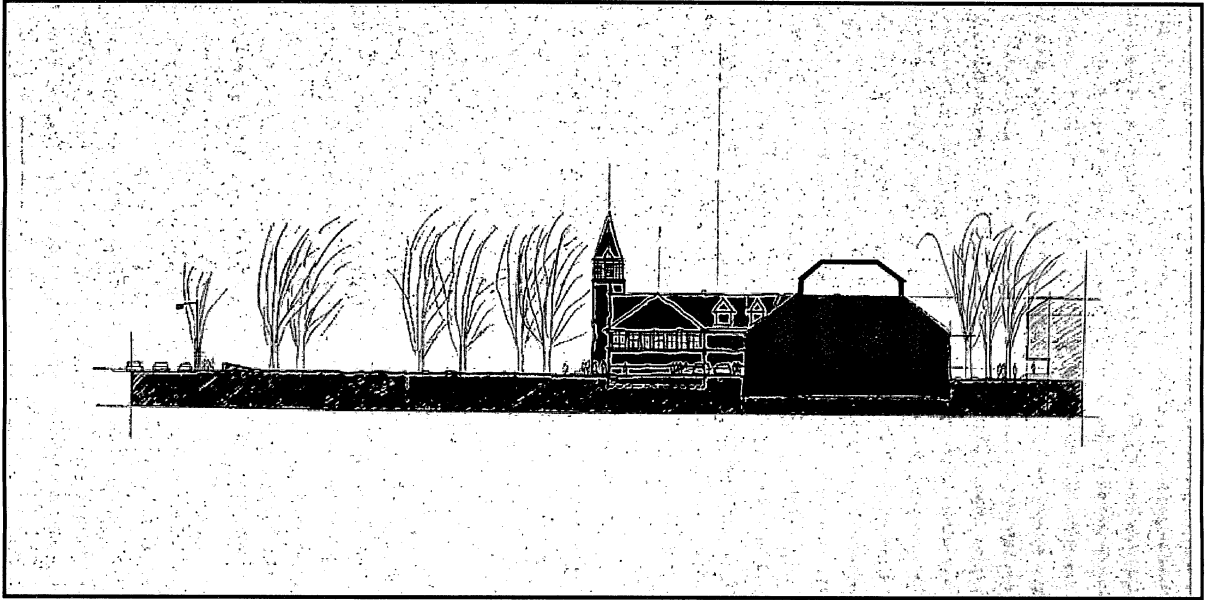
The Broadway and 7-Eleven sites provide contrasting physical settings for the expanded library. At Broadway, the expansion approach would essentially maintain a “building in a park” setting for the expanded library. At 7-Eleven, the library would have a significant urban presence on Massachusetts Avenue, with a diagonal view across to City Hall.



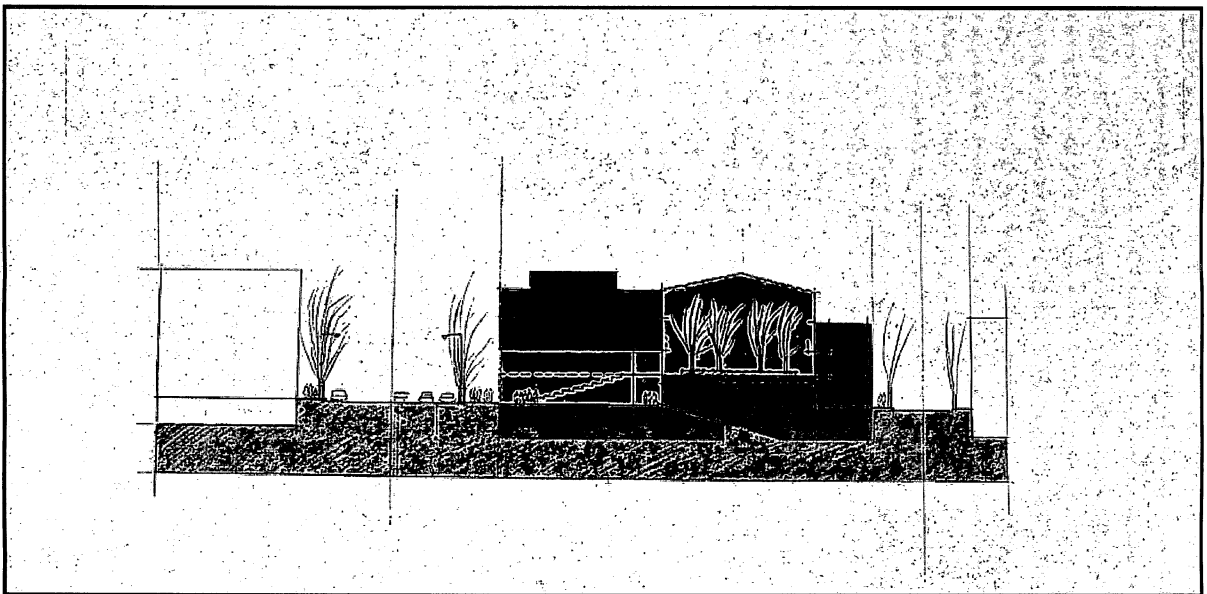
At Broadway, the two library additions are set back, retaining the existing library as the frontispiece, as well as the main entrance, to the expanded building. The east addition would abut the walls of the high school gymnasium and form a garden court south of existing classrooms. The 20-foot-high parking deck to the east of the library does not extend further into the park than the existing structure. The park retains its existing layout: an area with fine, mature trees in front of the existing library and a more open grass space in front of the tennis courts/parking deck. The library could be given more street presence by extending a wide path out to Broadway and the vehicular entry would remain from Broadway through to the parking deck entry on the west end of the parking deck.



At 7-Eleven, the main entry could be on the corner of Massachusetts Avenue and Pleasant Street leading into a glass lobby or interior winter garden. The building would be 3- to 4-stories (45-55 feet) on Massachusetts Avenue, making it roughly the same height as the Putnam Furniture building and the Post Office across the street.



At the Broadway site, two building sections reveal the relationship between the proposed additions and the existing library, high school and park spaces. The upper section, through the east addition, shows the proposed 3-story addition with a potential fourth story dashed. This could enable less space being built at the lower level which is partially below grade. The section also illustrates a 30-foot-wide garden court that would be created between the new library addition and the high school. The lower section is through the proposed parking deck and tennis courts. The deck would have 3 levels, one of which would be below grade and which would connect into the existing high school underground lot beneath the gymnasium. The playing surface of the tennis courts would be 20 feet above grade, or about the same height as the existing eave line of the main library. The courts would require a 10- to 12-foot-high fence. Note that there is the potential for all three levels to be constructed underground.



At the 7-Eleven site, the section is cut along the line a visitor would walk when entering the library: across Massachusetts Avenue, through the entry lobby to the upper courtyard, which could include an exterior rooftop garden or an interior winter garden.

### Descriptions of the 6 Short-listed Sites

The focus of the June 10, 1998 public meeting was the description of 6 final sites and the related analysis of each. The selection of 2 sites for recommendation to the City Manager resulted from a detailed analysis of 6 final sites. Each of the 6 sites was reviewed in terms of the six "critical success factors" that were used to prepare the short list of qualified

sites plus an additional eight factors focusing primarily upon technical, regulatory and cost issues.

The following identifies the composition of each of the sites, provides a description and plan diagram of the accommodation of the main library, a summary of pros and cons for each, and the estimated costs for construction and land acquisition.

### Parcel Descriptions

Lot Number	Parcel Size (sf)	Gross Leasable Area (sf)	Title	Address	Owner	Total Assessed Value
<b>Broadway</b>						
33	180,000	38,000	Main Library	449 Broadway	City of Cambridge	\$6,967,000
<b>7-Eleven Block</b>						
68	11,449	8,967	7-Eleven	744 Mass Ave	Trustee of Barbara Murphy	\$594,400
89	8,615	18,540	Fishery	730 Mass Ave	Trustee of Harry Katis	\$874,000
77	10,000	9,021	Aqua Comm.	359-371 Green St	Central Property Ltd P'ship	\$471,300
67	6,158		Parking Lot	Green St/Pleasant St	City of Cambridge	not assessed
Total	36,222	36,528				\$1,939,700
<b>TAD Block</b>						
170	20,002	60,690	TAD	631-641 Mass Ave	David McGrath	\$2,356,700
169	25,569	41,211	TAD	613-627 Mass Ave	David McGrath	\$2,795,200
Total	45,571	101,901				\$5,151,900
<b>Naggar Block</b>						
66-155	14,381	13,222	Naggar Property	561 Mass Ave	Naggar Realty	\$885,300
184	34,445		Parking Lot	Bishop Allen Dr	City of Cambridge	not assessed
Total	48,826	13,222				\$885,300
<b>Prospect Street Lot</b>						
137	53,300	Vacant	Prospect St Lot	65 Prospect St	East West Enterprises Co Ltd	\$537,700
<b>Post Office Block</b>						
94	39,350	56,000	Post Office	770 Mass Ave	US Government	\$6,427,000

## Broadway

The Broadway site is adjacent to the existing main library and high school and consists of the park, parking lot and tennis courts/parking deck, totaling approximately 4 acres.

The library expansion illustrated proposes a 15,000-sf addition to the west, that expands or replaces the existing 1967 addition, and a 60,000-sf addition to the east, that extends across the existing parking lot and concrete amphitheater. Each of these additions would be 3 stories, one of which would be partially below grade as in the existing library. A partial fourth story in the east addition may be possible, reducing the amount of space below grade or allowing for future expansion. The additions would be compatible in scale and character with the existing library and would not build or cast shadows on the park. The parking expansion illustrated proposes a new three-level parking deck, with one level below grade and tennis courts on top. This approach provides 75 spaces for library use with continued access from Broadway and no change in high school capacity or entry.

### Pros

- Existing icon building
- "Library in a park"
- Open space available for children; "tranquility" for all
- Relationship to HS
- City owns land
- Strong advocacy groups

### Cons

- Complexity of renovation and new construction vs. all-new construction
- Visual alteration of park edge
- Strong opposition
- Some public spaces partially below ground

### Library Building Cost

20,000 sf renovation @ \$150/sf	\$3,000,000
80,000 sf new const @ \$225/sf	\$18,000,000

### Parking for Library

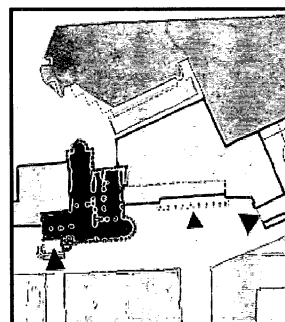
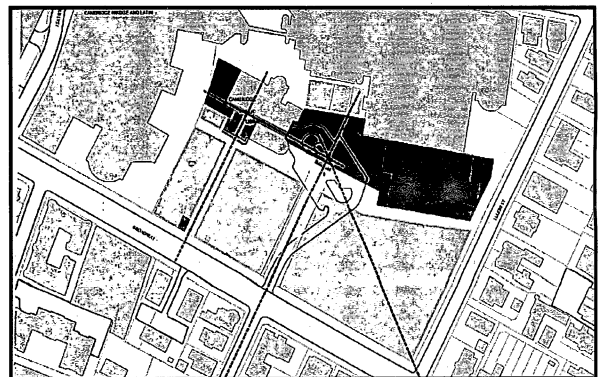
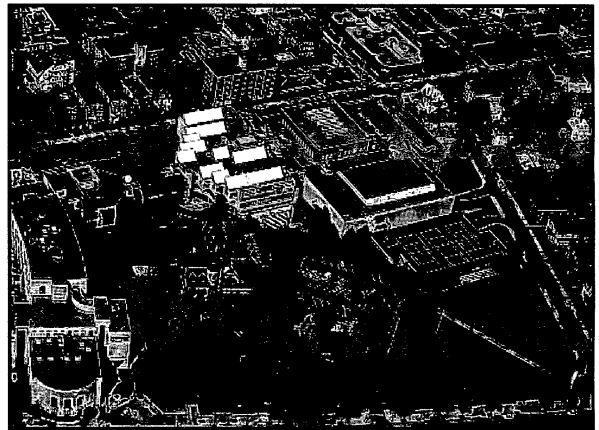
75 cars (underground) @ \$20,000/car	\$1,500,000
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### Replacement for Existing Parking

80 cars (above-ground)	
@ \$12,000/car	\$960,000
Replace tennis courts	\$185,000

Relocation Cost*	\$1,500,000
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<b>Total Cost</b>	<b>\$25,145,000</b>
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## 7-Eleven Block

This site is 36,222 sf and is comprised of a variety of buildings facing Massachusetts Avenue, including the 7-Eleven and Cantab Lounge (both 1-story high) and the Fishery buildings (2- to 4-stories high). On Green Street, the site has the Aqua Communications building and a small City parking lot (14 spaces). The site has three owners in addition to the City. None of the buildings has significant value to the Central Square Historic Preservation District and all are assumed to be demolished to accommodate the library.

The library would be a 3-story building (40-45 feet tall) with a main entrance facing northwest, toward City Hall, on the corner of Massachusetts Avenue and Pleasant. There is potential for a secondary meeting room and vehicular entrances on Pleasant and Green Streets. The library could have the most public, retail-like functions facing Massachusetts Avenue, leading to a more contemplative open garden courtyard or enclosed winter garden on an upper level. The library has the potential for 90 underground parking spaces on one level.

### Pros

- Excellent civic location vis a vis City Hall and Post Office
- Existing building can be removed
- Simple footprint
- Frontage on three streets including Mass Ave
- Little existing parking to be relocated

### Cons

- Strong opposition from owners and tenants
- Required relocation of recognizable tenants

### Library Building Cost

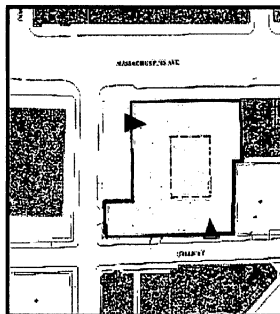
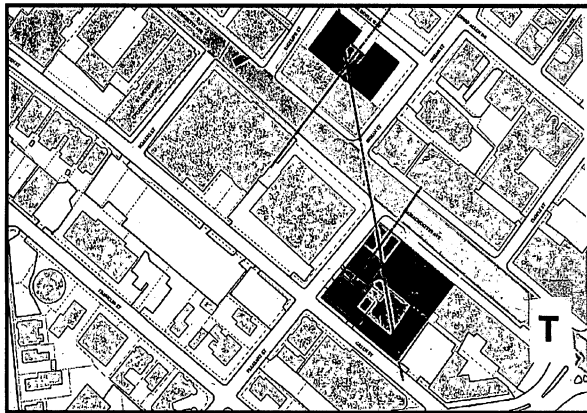
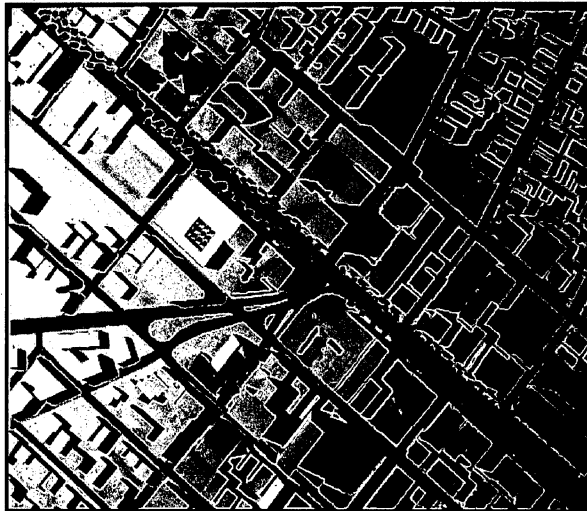
100,000 sf new construction	
@ \$200/sf	\$20,000,000

### Parking for Library

90 cars (underground garage)	
@ \$20,000 per car	\$1,800,000

<b>Land/Property Purchase Cost</b>	\$3-\$5,000,000
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<b>Total Cost</b>	<b>\$24,800,000-\$26,800,000</b>
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## TAD Block

This 45,571-sf site is comprised of two large buildings, both facing Massachusetts Avenue and both under the same ownership: the old 3-story Woolworth Building which extends back to Bishop Allen Drive, and the 2-story CPI Building. The CPI Building is considered a valuable contributing building to the Central Square Historic Preservation District, and it is expected to be retained. The Woolworth Building is considered less valuable and is assumed to be demolished after going through the historic process.

The library would be a 2- to 3-story building (25-40 feet tall) with the main entrance facing south on Massachusetts Avenue and a potential secondary meeting room entrance and vehicular entry on Bishop Allen Drive or Essex Street. The library could have the most public, retail-like functions facing Massachusetts Avenue, leading to a more contemplative open garden courtyard or enclosed winter garden in the center. Assuming much of the site is rebuilt, the library footprint has the potential for 100 underground parking spaces on one level.

### Pros

- Frontage on Massachusetts Avenue

### Cons

- Existing facades probably require retention; not consistent with library image
- 85,000 sf of existing leasable space—likely to be most expensive acquisition
- Preservation, adjacencies and dimensions limit natural light and complicate footprint

### Library Building Cost

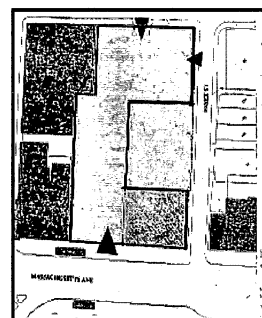
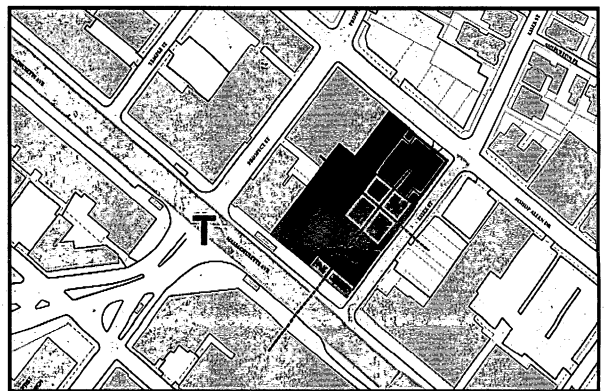
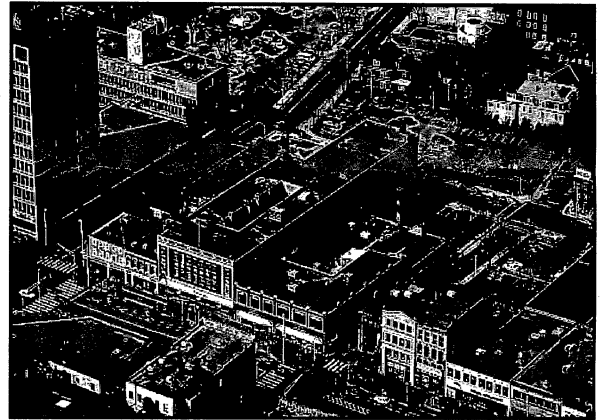
20,000 sf renovation @ \$150/sf	\$3,000,000
80,000 sf new construction @ \$200/sf	\$16,000,000

### Parking for Library

100 cars (underground garage)	
\$20,000 per car	\$2,000,000

**Land/Property Purchase** \$7-\$10,000,000

**Total Cost** \$28-\$31,000,000



## Naggar Block

The 48,826-sf site consists of the existing City parking lot (89 spaces) on Bishop Allen Drive and Norfolk, and two single-story buildings (Blockbuster and Coquette) facing Massachusetts Avenue, under the same ownership. Neither building is considered a valuable contributing building to the Central Square Historic Preservation District; both would need to be demolished to accommodate the library.

The library would be a 3-story building (40-45 feet tall) with a south-facing main entrance on Massachusetts Avenue, opposite the Dance Complex, and a potential secondary meeting room entrance and vehicular entry on Bishop Allen Drive. The library could have the most public, retail-like functions facing Massachusetts Avenue, leading to a more contemplative open garden courtyard or enclosed winder garden in the center. The building footprint would accommodate 90 cars underground and would require 2 levels: one for library use and one to replace existing metered parking.

### Pros

- Frontage on 3 streets, including Massachusetts Avenue
- Relatively small amount of land and buildings (City owns 70% of site)
- Simple footprint

### Cons

- 89 existing City parking spaces must be relocated or rebuilt under building
- Less central than other Central Square options
- Strong opposition from owners

### Library Building Cost

100,000 sf @ \$200/sf                      \$20,000,000

### Parking for Library

90 cars (underground) @\$20,000/car    \$1,800,000

### Replacement for Existing Parking

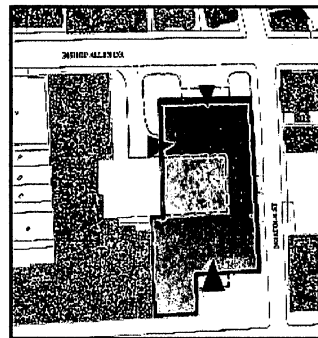
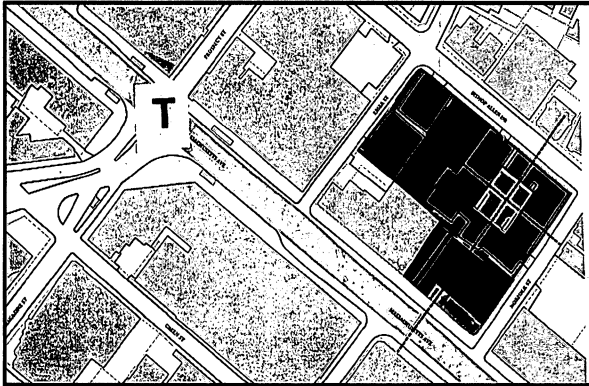
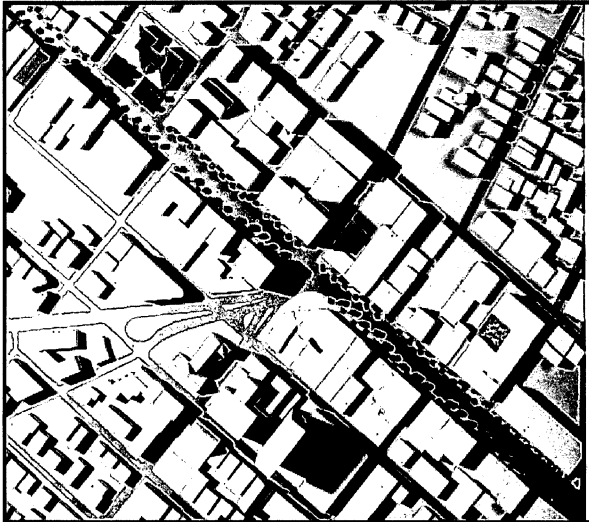
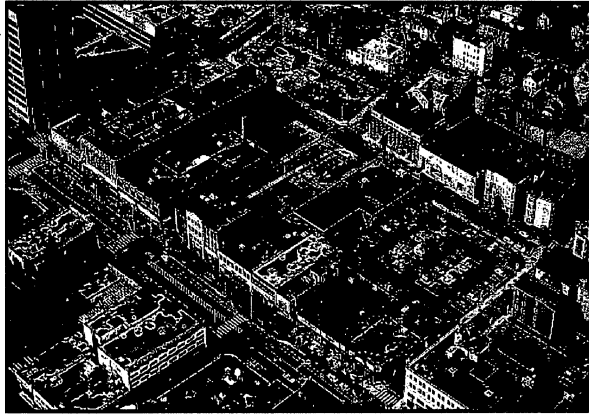
90 cars (underground) @ \$20,000/car    \$1,800,000

### Land/Property Purchase

\$1-\$2,000,000

### Total Cost

\$24,600,000-\$25,600,000



## Prospect Street Lot

This 53,300-sf site is now a 173-car parking lot serving primarily nearby office buildings. The site is one block removed from Massachusetts Avenue at the intersection of Bishop Allen Drive and Prospect Street, and is abutted by residential properties. The site, the parking lot on the opposite corner on Bishop Allen Drive, and the offices themselves have the same owner.

The library would be a 3-story building (40-45 feet tall) with a main entrance facing south on the corner of Prospect and Bishop Allen Drive, and the potential for secondary meeting room and vehicular entrances on Bishop Allen Drive. The building could be stepped down to 2 stories on its west and north sides to be more compatible with residential structures, and could have an interior atrium space or an exterior garden. The building footprint would accommodate 80 cars and would require 3 levels: one for library use and two to replace existing parking on the site.

### Pros

- No demolition or relocation
- Opportunity for free-standing building

### Cons

- "Non-civic" address
- Existing 175 private parking spaces must be relocated or rebuilt underground
- Abutting residences
- Entrance faces north facade of 5-story office building on Bishop Allen Drive, blocking sunlight

### Library Building Cost

100,000 sf new construction  
@ \$200/sf \$20,000,000

### Parking for Library

80 cars (underground) @ \$20,000/car \$1,600,000

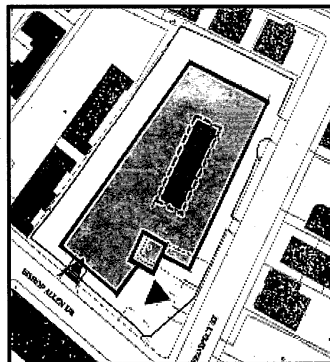
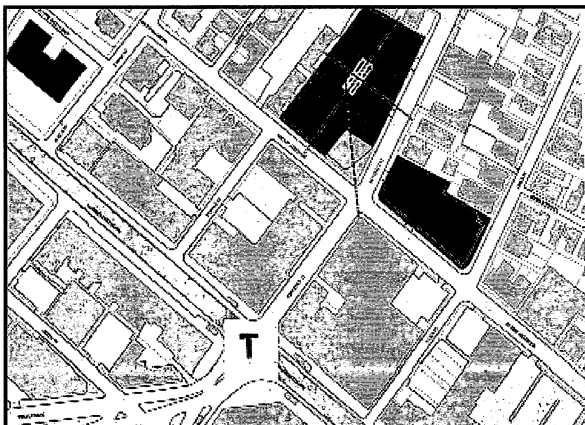
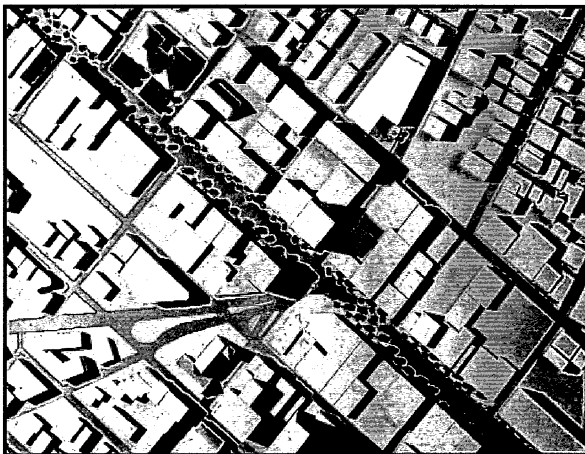
### Replacement for Existing Parking

160 cars (underground) @ \$20,000/car \$3,200,000

**Land/Property Purchase** \*\$750,000-\$2,000,000

**Total Cost** **\$25,550,000-\$26,800,000**

\*Assumes FAR = 1



**Post Office Block**

This 39,350-sf site is occupied by the existing 56,000-sf central Post Office. The existing building has a taller, 3-story public lobby and office component facing Massachusetts Avenue and a lower, 2-story sorting component facing Pleasant and Green Streets. The Post Office is considered a valuable contributing building to the Central Square Historic Preservation District. However, it is assumed that the lower building facing Green Street is of less value and could be demolished.

To utilize the Post Office site for the library program and accommodate some on-site parking, the lower rear portion of the building would be demolished and a 4-story addition added, extending out to Green Street. The main entrance would remain on Massachusetts Avenue, with secondary meeting room and vehicular entrances on Green Street. There is the potential for a roof terrace on top of the existing Massachusetts Avenue building overlooking City Hall. The footprint of the addition would accommodate 50 cars (or 100 cars on 2 levels).

**Pros**

- Prominent location
- Relatively simplicity of renovation

**Cons**

- Siting and building of new facilities required
- Requires demolition to rear to accommodate parking
- Complexity of transaction with federal government
- imposing Federal-style architecture not consistent with library image

**Library Building Cost**

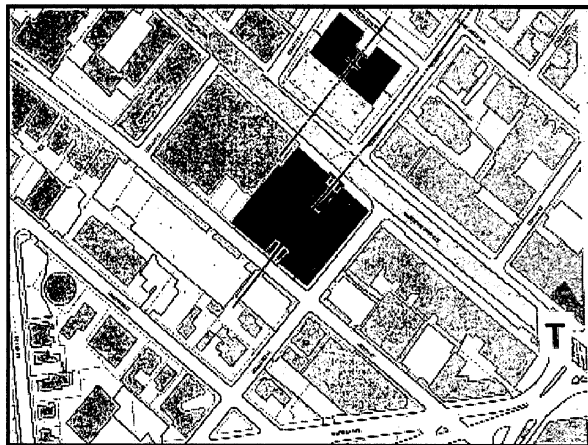
20,000 sf renovation @ \$150/sf	\$3,000,000
80,000 sf new construction @ \$200/sf	\$16,000,000

**Parking for Library**

100 cars (underground) @ \$20,000/car	\$2,000,000
Premium for required demolition	\$500,000

**Land/Property Purchase** \$5-\$7,000,000

**Total Cost** \$26,500,000-\$28,500,000



## Summary of Evaluation Criteria

The process of review of a long list of 18 alternatives, included a scoring of each of the sites, was presented at the April 30 public meeting. Each of the sites on the long list was weighed against a set of six criteria that reflect what are considered "critical success factors." The factors themselves and the rating of each of the 18 sites were reviewed at the meeting. The factors addressed both the physical capacity to accommodate the program as well as factors determined through the public process to be what is most important to the community.

These factors were reviewed again for the 6 final sites. The following summarizes the six criteria and the conclusion for each of the six final sites.

### Civic Heart

The Library 21 program report date October 1, 1997 describes a vision of "the new library as the 'civic heart' of Cambridge, providing equal access to knowledge for every person in the city, and made manifest in a distinguished work of architecture..."

The evaluation factor addressed the potential of each site to achieve this goal for civic importance. It summarized a combination of physical, community and financial factors critical to achieving a solution that will meet the very high standards appropriate to the new main library for Cambridge. Because it is perhaps the most subjective of the factors, it was not assigned a numerical score.

All six of the final sites were judged to have the potential for creation of a very good library. The Broadway site is unique as the only location among the finalists where a "library in the park" can be achieved. The Central Square sites, in contrast, achieved high marks as locations where the main library could be one of a complex of important civic buildings (City Hall, Post Office) in Central Square.

### Program Suitability

In context of the need for a site that can accommodate a 90,000- to 100,000-sf library program, this factor assigned a priority to sites which have optimal dimensions and configuration for a library, and which have a suitable frontage on a major street plus one or more adjoining streets. It was considered to be important that natural light reach different sides of the building as it will increase the potential for light within different zones of the library.

7-Eleven, Naggar, and Prospect were judged to offer the potential for a good fit. All would involve new construction on relatively unconstrained sites. The other three sites were judged to have some constraints. The Broadway site is constrained by the need to protect the park and the high school, and the need to respect the architecture of the existing library building. The Post Office is constrained by the need to preserve the existing building on Massachusetts Avenue, and the TAD Block is constrained by the probable need to preserve the existing Massachusetts Avenue facades, as well as by the relative difficulty in getting natural light into the center of the site.

### Parcel Size

Analysis of the program for the building, the relative size of major components, and issues of staffing determined a strong preference for a site that could accommodate the program in three floors. Inclusive of size of parcel, potential for expansion, configuration and service capacity, this factor "preferred" a site of 35,000 sf or more, but retained sites over 25,000 sf on the long list.

All six final sites have a minimum of 35,000 sf.

### Centrality

Similar to access, there is strong desire that the main library be central to the neighborhoods and to cardholders. This factor was inclusive of both. Neighbor-

## Cambridge Library Site Selection Study: Site Evaluation Matrix

	<b>Broadway</b>	<b>7-Eleven Block</b>	<b>TAD Block</b>
<b>'Civic Heart'</b>	Possesses qualities appropriate to civic heart; only site with significant open space amenity	Potential to be part of civic district; potential for interior open space amenity	Potential to be part of civic district; potential for interior open space amenity
<b>Program Suitability</b>	Existing bldg., proximity to high school & protection of open space complicate bldg configuration	3 exposures are good, undergrd pkg, potential for roof garden, interior open space, flexible floor plan	3 exposures are good, undergrd pkg, interior open space, complicated by facade preservation
<b>Parcel Size</b>	4 acres including building and park	36,222 square feet	45,571 square feet
<b>Centrality</b>	Located in geographic heart of the city	Located in demographic center of the city	Located in demographic center of the city
<b>Accessibility</b>	Within 10 min of Harvard Sq T-stop, accessed by 2 direct bus routes/7 routes from Harvard Sq	Within 5 min from Central Sq T-stop, accessed by 8 bus routes	Within 5 min from Central Sq T-stop, accessed by 8 bus routes
<b>Availability</b>	City-owned	Multiple owners (3): two with written opposition, one open to discussion	No response letter
<b>Utilities</b>	Water, sewer, electric, storm sewers are good	No extraordinary premiums are foreseen	No extraordinary premiums are foreseen
<b>Soils</b>	Existing structure is in sound condition; no extraordinary premiums foreseen	No extraordinary premiums are foreseen	No extraordinary premiums are foreseen
<b>Environmental</b>	No extraordinary premiums are foreseen	No extraordinary premiums are foreseen	No extraordinary premiums are foreseen
<b>Regulatory</b>	Base zoning = C3 Open Space district; special permit required	Central Square Overlay District allowed FAR=3.0, max ht=80', gr flr devoted to public uses	Central Square Overlay District allowed FAR=3.0, max ht=80', gr flr devoted to public uses
<b>Traffic</b>	No additional traffic measures foreseen; access from Broadway	No additional traffic measures foreseen	Prospect & Bishop Allen intersection may require signalization
<b>Parking</b>	75 library spaces; 200 additional spaces in school garage	190 library spaces; 676 public spaces within 1,200 ft	100 library spaces; 676 public spaces within 1,200 ft
<b>Cost of Acquisition</b>	City-owned	\$3-\$5,000,000	\$7-\$10,000,000
<b>Cost of Development</b>	\$23,645,000	\$21,800,000	\$21,000,000

<b>Naggar Block</b>	<b>Prospect Street Lot</b>	<b>Post Office Block</b>	<b>Notes</b>
Potential to be at edge of civic district; potential for interior open space amenity	Potential to be part of civic district; 1 block removed from Mass Ave complicates perception	Possesses qualities appropriate to civic heart: distinctive architecture, proximity to City Hall	Source: Sasaki Associates
3 exposures are good, undergrd pkg, interior open space	4 exposures, undergrd pkg, interior open space	Mass Ave facade must be preserved. Underground parking potential in rear	Source: Sasaki Associates
48,826 square feet	53,300 square feet	39,350 square feet	Assessor's Office
Located in demographic center of the city	Located in demographic center of the city	Located in demographic center of the city	Source: Sasaki Associates
Within 5 min from Central Sq T-stop, accessed by 8 bus routes	Within 5 min from Central Sq T-stop, accessed by 8 bus routes	Within 5 min from Central Sq T-stop, accessed by 8 bus routes	Source: Sasaki Associates
Written opposition from owner	No response letter	Owned by Federal Government; no response letter	Source: Sasaki Associates
No extraordinary premiums are foreseen	No extraordinary premiums are foreseen	No extraordinary premiums are foreseen	Existing Library source is TMP report; other sites per City Engineer
No extraordinary premiums are foreseen	No extraordinary premiums are foreseen	No extraordinary premiums are foreseen	Existing Library source is LeMessurier report; other sites per City Engineer
No extraordinary premiums are foreseen	No extraordinary premiums are foreseen	No extraordinary premiums are foreseen	Per City Engineer
Central Square Overlay District allowed FAR=3.0, max ht=80', gr flr devoted to public uses	2/3 of lot zoned BA, which lies partially in CSOD, base zoning FAR=1.0, max ht=35'	Base zoning FAR=3.0, max ht=120', no ground floor mandate	Open Space District definition being clarified by CDD & Legal Depts.
Prospect & Bishop Allen intersection may require signalization	Prospect & Bishop Allen intersection may require signalization	No additional traffic measures foreseen	Source: City of Cambridge Traffic & Transportation Dept.
90 library spaces; 90 existing spaces replaced; 676 public spaces within 1,200 ft	80 library spaces; 160 existing spaces replaced; 676 public spaces within 1,200 ft	100 library spaces; 676 public spaces within 1,200 ft	Source: GIS data with field verification by Sasaki
\$1-\$2,000,000	\$750,000-\$2,000,000	\$5-\$7,000,000	Source: Sasaki estimate based upon current real estate values
\$23,600,000	\$24,800,000	\$21,500,000	Source: Sasaki Associates

hood population around alternative sites as well as cardholder and library user statistics was reviewed and documented.

All of the six final sites are central to dense population. The primary difference is that the Central Square sites are the most central to population density given a location at the junction of four neighborhoods: Mid-Cambridge, Riverside, Cambridgeport, and Area 4; and the Broadway site is at the geographic center of the City.

### **Accessibility**

The most important accessibility factors were proximity to the MBTA and to bus lines. Only 40% of current library users arrive by automobile, and it is desirable that all locations have the potential of this or even greater amounts of public transit access. The scoring of this factor gave the highest score to MBTA access within a 5-minute walk, and the next level for MBTA access within 10 minutes. Bus-only access was scored lowest.

All five Central Square sites are within 5 minutes of the MBTA plus the various bus lines through the square. The Broadway site is within 10 minutes of the MBTA and Harvard Square bus service, and has direct bus access on Cambridge Street.

As an important part of discussions about the relative accessibility of the 6 finalist sites, the subject of accessibility to schools was addressed. The primary difference is that the Broadway site offers the tradition and benefit of immediate proximity to the City's central high school. The Central Square sites are within a 10-minute walk of six elementary schools, but are over 10 minutes from the high school.

### **Availability**

The process of determining the availability of the potential sites was iterative and became more site-specific as the list of candidate sites was reduced to the final six.

The source of this long list of 32 candidate sites included suggestions received from the Library 21 Committee, the Library Selection Oversight Committee, the initial public meeting, direct expressions of interest from the Cambridge real estate community, and our own review of potentially feasible locations.

After the first public meeting in March, and as announced at the public meeting, a special meeting was held at Sasaki's office, to which a list of 40 property owners, developers, and real estate professionals were invited. The invitation list was prepared with the assistance of the Community Development Department Economic Development Division and sought attendance by all interested and potentially affected parties. The goal of the meeting was to provide information concerning the goals and direction of the study and to seek input. All were asked for written expressions of interest and/or attitude regarding the search for a library site.

Of the 40 invited, 25 expressed a desire to attend, and 12 attended. After the meeting, the 40 invitees were sent a mailing summarizing the meeting and restating the desire to hear comments in writing. Three responded in writing. The address list, letters and responses are included in the appendix.

At the point at which a short list of sites was being formulated, a letter was sent to each of the owners of properties under consideration as a library site. The purpose of the letter was to inform and to seek written response. A sample copy of the letter is included in this report along with copies of each letter received in return. The following summarizes the responses received for the six shortlisted sites.

Three owners of the Gas + Electric site were sent letters. One was returned undelivered, one responded with potential interest, and one had no interest. This site is not included in the final list of six.

The potential owners of the Comm. Energy or Kendall Square site sent an unsolicited letter offering

## Status of Availability

<b>Broadway</b>	Owned by the City. Available.
<b>7-Eleven</b>	Three owners plus City parking lot. <ul style="list-style-type: none"><li>• 7-Eleven: "will pursue all measures necessary to prevent the taking" (written).</li><li>• Fishery: "willing to consider purchase, depending upon the price" (telecon).</li><li>• DES: "no interest in selling" (written).</li></ul>
<b>TAD</b>	One owner; no response to letter.
<b>Naggar</b>	One owner plus City parking lot. "Not interested in selling the property" and "will vigorously oppose any attempt to take" (written and telecon).
<b>Prospect Street Lot</b>	East West Enterprises Co., Ltd. Telecon with owner's legal counsel: "will review with owners." No written response.
<b>Post Office</b>	Letter to Boston Properties, representative for Post Office, regarding reuse of facilities. No response.

land based upon its inclusion on the list of ten sites under consideration. This site is not included in the final list of six.

### Additional Criteria Used for the Evaluation of Final Sites

For each of the six final sites, additional studies were conducted to ensure suitability for the main library, and to refine information relative to cost for construction and land acquisition. Note that the intent of this analysis was to identify potential premiums and/or other factors that would significantly impact the relative advantage of one site over another. Detailed analysis and cost estimates were not prepared as part of this comparative analysis.

The evaluation of the 6 sites and the findings with respect to all fourteen of the evaluation factors were presented at the third public meeting. The following outlines the eight additional factors that were studied for each of the sites.

### Utilities

A review of each site was conducted with the City of Cambridge Engineering Department. First, an estimate of the utility requirements for a library of the proposed size was prepared. This was reviewed within the context of existing utility systems serving each site. It was determined that all of the 6 sites can be served with necessary utilities and there are no significant premiums that would favor one site over another.

### Soils

A review of each of the sites was conducted with the City of Cambridge Engineering Department. Recognizing the location of the MBTA under Central Square, the existence of cavities under the sidewalks in some locations, and the potential that either or both of these factors must be addressed on some sites, it was determined that there are no issues regarding soils and foundation conditions that would favor one site over another.

### Environmental

A review of the potential for site contamination and related cleanup required was conducted with the City of Cambridge Engineering Department. No issues were identified that would affect any of the short-listed sites.

### Regulatory

A review of zoning as it affects each site was prepared as summarized in the following Regulatory Chart.

A library is an allowed use for all of the sites. The primary differences among the final 6 is that a special permit from the Zoning Board of Appeals will be required to complete the addition within the Open Space Zone in place over the Broadway site, the Central Square sites will be subject to review under the provision of the Central Square Overlay district, and the Prospect Street Lot will require a variance to allow building to the necessary FAR of 2 and sufficient height allowance for a three-story building.

### Traffic

Based on discussion with the director and assistant director of the Cambridge Traffic, Parking and Transportation Department, as well as visual inspection of roadways surrounding the alternative sites for the new library, it appears that all sites are feasible from the point of view of traffic impact and operations. All have adequate vehicular access points from minor non-residential streets, and none poses major operational or safety problems. Below is a brief summary of the issues associated with each site.

## Regulatory Chart

	Zone Classification	Central Square Overlay District	Floor Area Requirement		Maximum Height	
			Base Zoning	Central Sq. Overlay District	Base Zoning	Central Sq. Overlay District
<i>Prospect Street</i>	C-1/B-A	Partially	.75/1.0	--	35'	--
<i>Naggar</i>	B-B	Yes	4.0	3.0	None	55'-80'
<i>7-Eleven</i>	B-B	Yes	4.0	3.0	None	55'-80'
<i>TAD</i>	B-B	Yes	4.0	3.0	None	55'-80'
<i>Post Office</i>	O-3	No	3.0	--	None	120'
<i>Existing Library</i>	C-3	No	3.0	--	None	120'

### *Broadway*

Expanding the existing library on-site would have minimal impact on traffic operations. Access is currently excellent, with the library driveway signalized.

### *7-Eleven*

Almost identical to the Post Office site in terms of access, with the exceptions that on-site parking could be incorporated and that there is no Massachusetts Avenue crosswalk directly in front of the site. Transit service is outstanding, with a Central Square Red Line headhouse on the same block. Substituting the library for existing uses would have the benefit of removing the loading activity currently associated with the 7-Eleven. The fourteen metered spaces on Green Street are now used mostly by police officers and do not represent a particularly valuable public parking resource.

### *TAD Block*

Excellent vehicular access with streets on three sides. Any new traffic on Bishop Allen Drive might necessitate the signalization of Bishop Allen/Prospect Street.

### *Naggar*

Excellent vehicular access, with streets on three sides. Any new traffic on Bishop Allen Drive might necessitate the signalization of Bishop Allen/Prospect Street. The major issue is the existing use: municipal lot #5 is the best-used and most visible public parking facility in Central Square, providing an important resource supporting the retail district. Its 84 metered spaces would need to be replaced on-site.

### *Prospect Street*

Use of this site would probably necessitate signalization of Bishop Allen/Prospect Street. The parking currently on the site is private. Bishop Allen Drive is one-way from Prospect to Inman Street (which in turn is one-way toward Massachusetts Avenue), raising

the question of whether site egress should be provided onto Prospect, with left turns permitted. Alternatively, Bishop Allen could be made two-way as far as Temple Street, but this might induce traffic to bypass the Massachusetts Avenue/Prospect intersection. This problem might be averted by making Bishop Allen two-way only between Prospect and the library drive; right turns from Temple would remain illegal.

### *Post Office*

No on-site parking is possible if the existing building is reused. Pedestrian access is excellent, with the recent improvements in crosswalks and signalization at the Inman/Massachusetts Avenue/Pleasant intersection as part of the Massachusetts Avenue redesign. Transit service is excellent, with a Central Square Red Line headhouse one block away. Traffic would use Green Street, Pleasant Street and Massachusetts Avenue. In terms of traffic congestion caused by short-term (mostly illegal) parking on Massachusetts Avenue, the net effect of replacing the Post Office with the library would be positive.

### *Parking*

The analysis of demand for parking for the expanded or new central library is based upon a traffic and parking study prepared by Rizzo Associates dated September 3, 1996. That report has been reviewed and modified within the context of the analysis of alternative sites for the library.

### *Parking Demand*

The estimated demand for parking is based upon a review of a variety of sources.

Cambridge Zoning for all alternative sites requires a minimum of one space for each 800 sf of library space, or 1.25 spaces per 1,000 gsf.

The existing peak parking demand for the library, including off-site parking, corresponds to a parking demand ratio of 1.47 spaces per 1000 gsf. An aver-

age of 40% of the employees and users of the existing library require parking. The balance walk, ride a bike, use public transit, or get a ride from someone not parking at the library.

The Rizzo study provides a range of parking standards for libraries that are accessed entirely by private vehicles. These range from 2.5 to 4.17 cars per 1,000 gsf. The Rizzo study determined that 40% of the Cambridge library employees and users require parking, resulting in their conversion of those general standards to a range of 1 to 1.67 cars per 1,000 gsf as a ratio for parking spaces required for a library in Cambridge.

Although the Rizzo study noted that is not anticipated that staff or users will increase in proportion to space, they recommended the use of the 1.47 ratio for planning purposes, which they see as a conservative balance between actual, zoning requirements, and general survey recommendations. The 87,850-sf facility originally envisioned estimated a need for 126 spaces plus 4 handicapped. For a 100,000-sf facility the estimate would be 147 spaces including 5 handicapped. As a comparison, zoning requires 125 spaces for a library of 100,000 gsf.

Note that the Rizzo estimate for the existing site is based upon a location with relatively limited public transit within a 5-minute walk of the building. It is reasonable to estimate that transit use would increase if a Central Square site is selected. All are within 5 minutes of the Red Line. Assuming a ratio of 1.25 spaces per 1,000 gsf, which is what zoning requires, would result in a peak parking requirement of 110 to 125 spaces.

#### *Opportunity to Share Parking*

Shared parking is a concept that is critical to the determination of the amount of parking required in an urban setting. The idea is based upon the fact that different types of uses have different characteristics for the time at which the demand "peaks." The

simplest example is that offices require parking during office hours, and a theater requires parking during evenings and weekends. To the extent multiple use can be made of a single space, i.e., an office worker parks from 8 AM until 6 PM and a theater patron uses the same space after that, the investments in parking can be minimized.

A range of 125 to 150 spaces for the library is a conservative estimate of peak demand. Peak demand for a library occurs from 4 to 6 PM and 7 to 8 PM weekdays and 3 to 5 PM on weekends. This, coupled with the fact that the peak demand for high school parking (in the case of the Broadway site) and commercial parking (in the case of the Central Square sites) begins to drop after 2 PM, creates the potential for the sharing of spaces. All of the candidate sites are within a 5-minute walk of parking that could potentially be shared after 2 PM when the demand begins to diminish.

Rizzo estimates that the library demand at 2:30 PM, the time at which demand for spaces that could be shared is decreasing, to be 60% of the peak demand. This results in an estimated need for 75 to 90 spaces at 2:30 PM. After 2:30 PM, the demand for library spaces increases until the library peak time at 6:00 PM while the demand for off-site spaces declines at that same time. The consequence of this factor is that, if there are sufficient available off-site spaces to be shared that are within a 5-minute walk of the library, then the library project itself need only construct no more than 75 to 90 new spaces to adequately accommodate the peak demand of 125 to 150 spaces.

#### *Parking Solutions*

*Broadway.* The need for an increase in parking to a total of 75 spaces for the library and 50 to be shared is assumed. It is also assumed that existing surface parking will be eliminated. Additions to the existing high school garage will be constructed to accommodate the 75-car demand for the library. The evening

and weekend peaks of 125 to 150 cars would utilize otherwise empty school spaces. A library user would access parking only from the Broadway entrance.

Existing parking on-site to be relocated: All of the existing 36 (including 2 handicapped) spaces of library parking will be relocated into an expanded parking structure.

On-site library parking: 75 spaces including 4 handicapped are assumed. It is also assumed that access to all library parking will be from Broadway, utilizing the existing intersection and lights. This will avoid any library-induced impact on Ellery Street.

Combinations of card readers and barriers will limit access to the school garage to those with a school permit and limit parking areas within the garage open to library users during periods of school peak demand.

Note that any requirement for additional school-related parking is in addition to the 75 assumed for the library. Rizzo estimated that the total school demand is 240 spaces, including the 211 that currently park in the garage (permitted for 197 spaces), and including 29 occurring on neighborhood streets. These 29 or 43 (depending upon attitude about permitted vs. actual parking) additional spaces would access parking from Ellery Street. Because they should be validated, supported, financed, and permitted by the school, they have not been included in this discussion.

Cost for parking: 75 spaces: assume all underground at \$20,000 per space = \$1,500,000. In addition as a cost to the library, there are 80 spaces in the existing garage that must be reconstructed to accommodate the new garage structure and ramping. The cost of these above ground structured spaces is \$12,000 per space (assumes a high-quality facade consistent with the main library addition) or \$960,000. Finally, the cost of the three tennis courts on the top of the garage is estimated to be \$185,000 including the deck and courts (surface, fencing, nets, lighting). It is assumed that the parking stair and elevator will serve the courts with necessary security for school-only access. The

total construction cost of \$3,645,000 includes the reconstruction of the tennis court and related parking into a 155-car, three-story structure. There also is the potential for constructing all three parking levels below grade.

Note that the addition of another floor of parking could increase the capacity of the garage by approximately 50 cars, which would accommodate the school parking currently using other parking in the area. This additional cost of \$600,000 is assumed to be paid by the school. The visual consequence of this additional parking is not illustrated in the analysis drawings.

*Central Square:* For a Central Square site, an effort has been made to incorporate a minimum of 75 spaces under each building option. Given a 35,000-sf building footprint, and a average of 350 sf per car, this is within the order of magnitude of what is achievable in a single underground level after reduction in parking for ramps, entries, elevators, etc.

For shared parking potential, a survey of spaces available within 5 minutes of the Central Square library sites was conducted. Approximately 200 on-street meters are available. In addition, there are 476 publicly accessible spaces in City-owned lots and structures within this same radius. Assuming that a minimum of 75 cars are accommodated within the footprint of each library option, then the peak library demand of 125 to 150 cars, which occurs in the 4 to 6 PM time frame, can be accommodated within 5 minutes of the library, assuming 10% to 15% of the public spaces are available. Parking accumulation data provided by the Urban Land Institute validates this assumption. This does not include the number of private spaces that are potentially available after regular business hours.

Where existing parking already exists, it is assumed that it must be relocated as part of the library project.

*7-Eleven Block:* Existing parking on-site to be relocated: 14 Cars.

Proposed relocation: According to City traffic and parking officials, the loss of this number of spaces in this location can be absorbed by the existing supply.

On-site library parking: The footprint for the proposed library can accommodate 80 cars underground.

Cost for parking: 90 spaces at \$20,000 per space is \$1,800,000.

*Post Office:* Existing parking on-site to be relocated: No public parking exists on-site.

On-site library parking: The footprint of the proposed addition to the existing building can accommodate 100 cars underground.

Cost for parking: 100 spaces at \$20,000 is \$2,000,000. Because the need for on-site parking makes it mandatory to demolish the existing two-story structure at the rear of the building, a premium could be assigned to parking in the amount of "lost opportunity" for reuse of the existing structure. Given the assumption that there is a \$25 per square-foot premium cost of new construction over the cost of renovation of existing space, there is an estimated additional cost of \$500,000, resulting in a cost of parking of \$2,500,000.

*Prospect Street Lot:* Existing parking on-site to be relocated: 173 private spaces exist, which are required by zoning and by the market for the abutting building under the same ownership. It must be assumed that the cost for duplication of these spaces will be a library project cost, reflected either in the land cost or in library construction cost.

Proposed relocation: While the same owner has land (a current parking lot for 76 cars) on the opposite side of Prospect Street, it is unlikely that its highest and best use will be for a three- or four-story parking structure to accommodate these spaces. For purposes of comparing alternative sites, it is assumed that parking is relocated into two stories under the library.

On-site library parking: The footprint of the proposed library accommodates 80 cars underground.

Cost for parking: 240 spaces (three levels underground) at \$20,000 per space is \$4,800,000. Note there is the potential additional cost premiums for parking three levels down.

*TAD Block:* Existing parking on-site to be relocated: No existing spaces will be lost under this option.

On-site library parking: The footprint of the proposed library can accommodate 100 cars underground.

Cost for parking: 100 spaces at \$20,000 per space is \$2,000,000.

*Naggar Block:* Existing parking on-site to be relocated: The existing on-site City parking accommodates 89 cars.

Proposed relocation: Given the critical nature of this parking in support of area business, it must be replaced within reasonable walking distance. In that there are no City-owned locations upon which this amount of parking can be accommodated, it is assumed that it must be constructed under the proposed library.

On-site library parking: The footprint of the proposed library can accommodate 90 cars underground.

Cost for parking: Two underground levels of parking totaling 180 cars at \$20,000 per space is \$3,600,000.

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**Summary of Spaces and Costs**

<b>Alternative</b>	<b>Library Spaces</b>	<b>Replacement Spaces</b>	<b>Estimated Project Cost</b>
Broadway	75	80	*\$2,645,000
7-Eleven Block	90	-	\$1,800,000
Post Office	100	-	\$2,500,000
Prospect Street Lot	80	160	\$4,800,000
TAD Block	100	-	\$2,000,000
Naggar Block	90	90	\$3,600,000

\*Includes relocated tennis courts.

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**Cost of Acquisition**

The estimates of the potential cost of acquisition for parcels of land that are candidates for the library site are based upon the review of a range of strategies for valuation. First, it is important to note that in the final analysis, the value will be determined as a meeting of the mind of a willing seller and a willing buyer; or, in the instance of an eminent domain taking by the City, the price an owner is willing to take or which the courts determine to be fair compensation.

It is also important to note that the following analysis is not an appraisal of value as would be required if a site not owned by the City is selected. Neither is there a presumption that these amounts will be offered or accepted. The following analysis is for the purpose of estimating an order-of-magnitude of value for purposes of comparison, and to inform decision makers when considering alternatives.

**Current Assessment**

The current assessed value of the real estate is listed as provided by the City Assessors Office. The number is

the combined building and land assessment and is based upon a capitalized income approach to valuation. It reflects 1994 rent levels and the 1996 assessments. The City is currently reassessing values to reflect current rent levels and values, but those new numbers are not available at this time. Comparison of 1994 rent levels used in the current assessment with 1998 market rates for space in Central Square suggests that current market rates justify values that exceed current assessments. Current estimates are a Sasaki extrapolation of rent levels and do not reflect anticipated new assessments.

**Value of Existing Buildings**

Commercial buildings in Cambridge that are in good condition and are leasable currently trade in the \$125 per square-foot range. For purposes of comparison, \$125 per square-foot of value is comparable to rent levels of \$21 to \$22 per square-foot (one would be willing to pay \$125 for a square foot of space that can be rented for \$22 per foot per year). While some properties are trading at higher values, \$125 has been applied to building square footages to provide a "mark" on the spectrum of potential values for a property.

**Value of Land**

Another value test assumes existing uses are of limited or low value because of building condition and/or size. This test also applies for vacant land. Here the question is how many square feet could be built on the land if it is vacant and what is that value. While a detailed study is required to definitively answer this question, the general answer relates to allowable FAR, or the allowable floor area as a ratio of land area. Sites on Massachusetts Avenue have a FAR limit of 3.0. Sites on Bishop Allen have an allowable FAR of 1.0. In other words, for every square foot of land, one could potentially build three (or one) square feet.

Because the value of commercial property is a function of how much income and profit it can produce, land is priced as a ratio of dollars per square foot of potential development right. In Cambridge today, land is selling at rates in the range of \$40 per square-foot of development right. For those properties with an allowable FAR of three, \$120 per square foot of land has been calculated as another "mark" on the spectrum of potential value for the property. Forty dollars is used where the allowable FAR is 1.0.

### ***Summary of Potential Costs of Acquisition***

Rather than predict the conditions of each transaction, and recognizing that a variety of strategies could be employed to achieve a successful acquisition of a library site, the potential costs of acquisition summarized on pages 26 and 27 represent a range resulting from the above analysis.

### **Cost of Relocation**

There is a potential cost to the City for relocation of tenants should a Central Square site be selected. The following is a summary of Sasaki's understanding of this issue as it impacts the relative costs of the alternative sites. Note that this summary does not attempt to describe the consequence of any particular taking and/or relocation. Legal counsel is required to interpret any particular situation. Rather, it is a characterization of the order-of-magnitude of impact that could be anticipated. It is based upon information provided by the City's legal counsel for relocation costs.

For any taking by eminent domain, it will be necessary for the City to pay relocation costs. Relocated businesses may be entitled to the following payments.

- Actual reasonable moving expenses: packing, crating, reassembling, equipment and personal property.
- Searching costs for a replacement site: time and expense for searching (limited).

- Actual direct loss of personal property: for tangible personal property.
- Business relocation benefit payment: covering rent differentials and/or expenses caused by need to relocate.

On the other hand, there are costs that are not reimbursable.

- Cost of moving structures or real property improvements
- Interest on a loan to cover moving expense
- Loss of good will
- Loss of profits
- Loss of trained employees
- Personal injury
- Legal fees or other costs incurred in preparing a claim for relocation payments
- Physical change to real property at replacement location other than reinstallation costs of relocated personal property

Under a standard lease, upon a taking by eminent domain, leases are terminated on notice. The tenant cedes rights and claims to the landlord except for relocation costs.

Under some leases that are not clear as to rights under a taking, tenants have been found to be entitled to the lost economic benefit of a lease, in particular when current and future lease rates are greater than those in the lease. However, this benefit is typically settled between the tenant and the landlord, the latter of whom presumably receives compensation under the taking at highest-and-best-use values.

### ***Conclusion***

Under a taking by eminent domain, the City's costs for relocation businesses and other tenants are

expected to be limited to relocation costs plus whatever administrative and legal costs are incurred in the process of assisting tenants with finding other locations in Cambridge. Relocation costs are anticipated to be relatively small as a portion of total land acquisition and project costs. It is estimated that the cost for relocation of a small business would be in the \$10,000 range. It is unlikely that relocation costs for any of the businesses in buildings under consideration would exceed \$100,000, which is less than 5% of the anticipated acquisition costs and less than one-half of one percent of the anticipated project cost for the new library. Costs of this amount are within the order-of-magnitude of the overall estimates, and are not, therefore, estimated in detail.

### **Cost of Construction**

For a determination of estimated construction costs, the costs estimated for the previous proposal were reviewed, and a cost estimator was consulted. In the absence of any design for any of the sites, the intent was to identify order-of-magnitude costs that recognized any fundamental differences between building types or conditions. All alternatives total 100,000 square foot. The costs per square foot used in the estimation were:

- New construction where all existing buildings have been demolished = \$200 per square foot.
- New construction at the Broadway site where building configuration and relationship to existing building could create cost premiums = \$225 per square foot.
- Renovation of existing buildings where existing structure remains essentially intact = \$150 per square foot.

In addition to building cost, the cost of parking was estimated for each alternative. Costs were applied to parking associated with the library as well as any required replacement parking. Parking spaces were

estimated to cost \$20,000 each under a building or below grade, and \$12,000 each in above-grade structure. No surface parking is assumed in any scheme. The derivation of costs for each alternative is discussed under *Parking* above.



## PRELIMINARY SITE EVALUATION PHASE

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Analysis of this phase of work was presented at the April 30th public meeting. This phase contained the following sections:

- Interrelationship between the high school and the library
- Status of urban ring planning
- Demographic distribution relative to library card-holders
- Analysis of 18 candidate sites including the 6 final sites

### ***A Main Library and Cambridge Rindge & Latin High School***

Sasaki staff solicited the comments of Assistant Superintendent Nordmoe regarding the relationship between the high school and the main library. Dr. Nordmoe submitted the School Department's response in writing and a staff member further explained their position. The School Department was asked three primary questions:

*What is the existing situation today?* The response was that no high school courses are conducted in the library; students use the library on an individual basis for resources related to assignments. The high school does use the main library for expensive resource materials, e.g., the *New York Times* on-line. The high school collection is geared towards the school curriculum, recommends the main library, on-line catalogue use, and that students reserve books. On average, the Cambridge Rindge & Latin Library serves 200-300 students per day, increasing to 400 per day during exams. Daily use of the main library is difficult to quantify because many high school students do not take out books, but come to the library to use the reference facilities. Daily activity is tracked by the number of persons borrowing books. Librarians estimate

that 50 students per day use the main library; the number varies by day, season, term, etc.

*What would happen if the library expanded on the existing site?* The school envisages more organized use of the library, possibly using some of the community meeting space as a wired classroom or conference room. The school anticipates enhanced collaboration in collection development and programming for the school-age group.

*What would happen if the library moved to another site?* Curriculum would not be affected; access would simply be more difficult. The school library would have to provide a wider range of resources to students. Spontaneous use of the library, including encouraging students to register for library cards, would be affected.

### **Urban Ring Status**

Sasaki staff contacted Community Development staff to obtain information on the current status of planning for the Urban Ring, a circumferential intermodal transit network. The MBTA has hired a consultant to conduct a major investment study process which has yielded seven alternatives which are currently being reviewed. The alignment incorporates light rail, bus travel, and rapid transit in separate corridors beginning at the JFK/U Mass MBTA stop, connecting through Ruggles, crossing the Charles River to Kendall/MIT, traveling to Lechmere, Sullivan Station, and Chelsea, and terminating at Wood Island near Logan Airport. The City of Cambridge favors those alignments which make direct connections to Kendall and the Lechmere MBTA stations. Likely Cambridge stops include those in the vicinity of Fort Washington Park and one near the corner of Massachusetts Avenue and Vassar Street. An optional location, depending on alignment, includes the corner of First and Binney Streets.

## Demographic Distribution and Library Cardholders

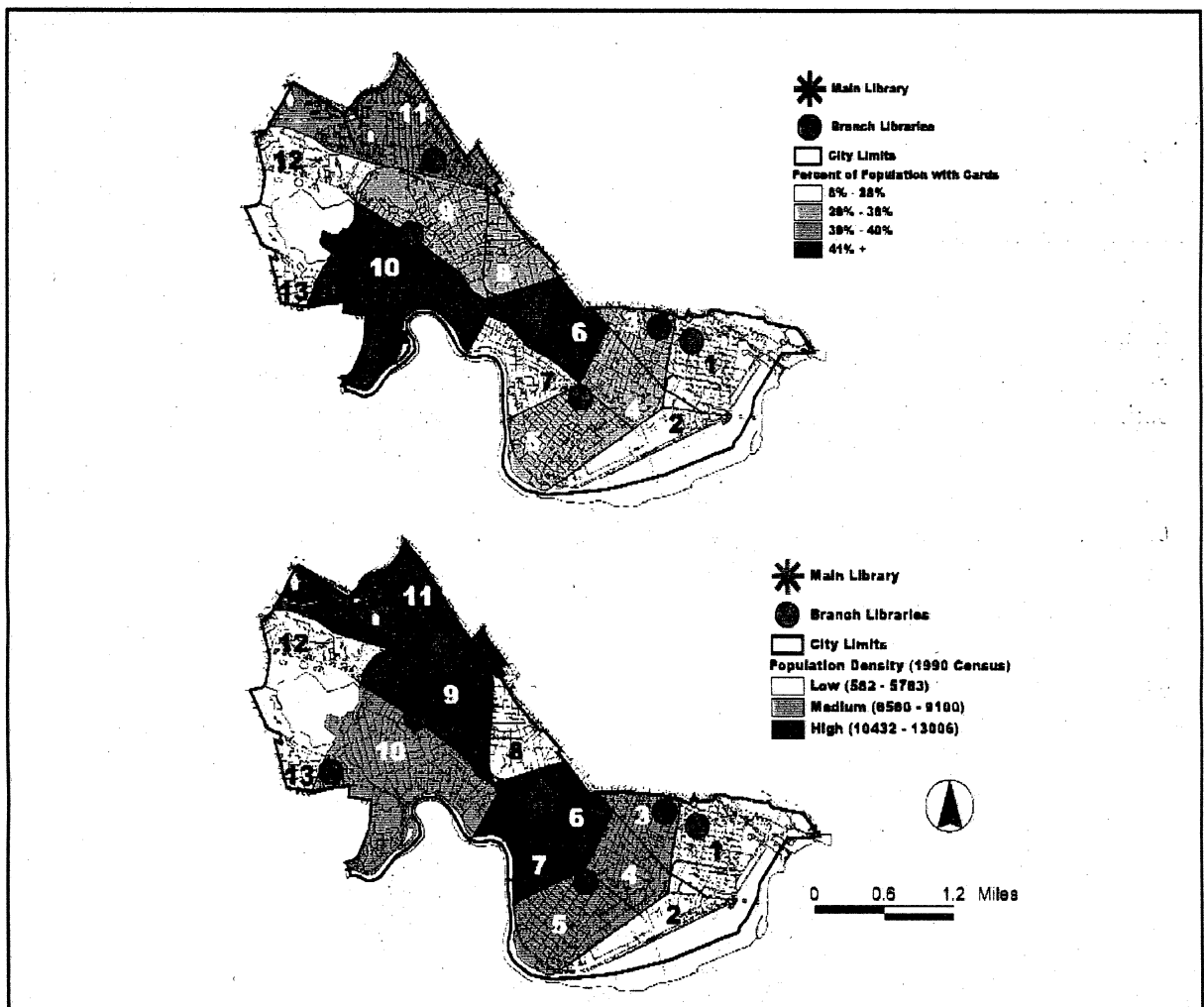
The purpose of the mapping was to compare residential density to cardholder population and library use.

The neighborhoods with high residential density are Mid-Cambridge, Riverside, Neighborhood Nine, and North Cambridge. Those with moderate density are Neighborhood Ten, Wellington/Harrington, Area 4, and Cambridgeport. The density was compared to neighborhoods in which library cardholders live.

The neighborhoods with the highest percentage of cardholders relative to population are Mid-Cambridge and Area Ten (42%), followed by North Cambridge (40%), Cambridgeport (38%), and Area

Nine (37%). Agassiz and Area 4 (34%) have the second highest range of cardholders, followed by Riverside (27%), Wellington/Harrington (29%), and East Cambridge (28%). Cambridge Highlands (27%) and Strawberry Hill (26%) have the least number of cardholders relative to their population, which is not very dense.

When cardholder population is compared to where people actually borrow books, interesting results can be found. For example, in three neighborhoods abutting Mid-Cambridge in which branches are located (Cambridgeport, Area Nine, and Area Ten), a significantly higher percentage of users (roughly a 2:1 ratio) use the main library as compared to their branch.



## Preliminary Evaluation Criteria

The March 24th public meeting organized and discussed the proposed selection criteria from four lists: Physical, Community, and Financial Factors, plus a category called "Civic Success." Recognizing that the three to five (including the existing) sites that will be selected for analysis and presentation to the city manager will be studied in greater detail, it was necessary to conduct an initial screening of a "long list" of 30 candidate sites.

The source of this long list of candidate sites included suggestions received from the Library 21 Committee, the Library Selection Task Force, the initial public meeting, direct expressions of interest from the Cambridge real estate community, and a review of potentially feasible locations.

Each of the sites on the long list was weighed against a set of six criteria that were considered to be "critical success factors." The 18 best of these were documented for review at the meeting. The factors used to review the long list of sites synthesize the factors most important to the community.

- *Library Program Suitability:* Assuming the need for a 90,000- to 100,000-sf library program, this scoring assigns a priority to sites which have an optimum configuration and which have a maximum amount of frontage on a major street and one or more adjoining streets. It is considered to be beneficial for natural light to reach different sides of the building as it would increase the potential for different zones within the library. An assumption is made, where appropriate, when gut rehabilitation is envisioned.
- *Parcel Size:* This scoring "prefers" a site of 35,000 sf or more in order to accommodate a three-story building, but retains sites over 20,000 sf on the list.
- *Accessibility:* Inclusive of distance to the MBTA as well as access to bus and parking. The scoring

for this factor puts high priority on MBTA access.

- *Centrality:* Inclusive statistically of demographics (concentration of residents) as well as cardholders. Scoring for this factor is a reflection of density of population and cardholders.
- *Availability:* Reflecting primarily on ownership of the land/building and if it is potentially available. Scoring ranges from the City as owner and/or availability (on the market) to locations where current information suggests it is likely to be unavailable.
- *Civic Heart:* This factor summarizes a combination of physical, community and finance factors. Because it is perhaps the most subjective of the factors, it is not scored. The judgment is based upon a site-specific analysis of the potential for achieving a solution that will meet the very high standards appropriate to the new library, and that will enable the investment in a new central library to make the greatest contribution to the overall quality of the city.

## Site Analysis: Eighteen Sites

The five districts were presented in alphabetical order as follows: Central Square, Charles River, Kendall Square, mid-Cambridge, and Porter Square. The sites within the district were presented in the order in which they were ranked; that is, those scoring highest to lowest, according to the criteria outlined above.

## Preliminary Site Evaluation

Site Description				
District	Location	Parcel Size (square feet)	Existing Building Size (square feet)	Program Suitability 1=good fit 0.5=fair fit 0=poor fit
<b>Central Square</b>	Prospect Street parking lot	53,300	N/A	1
	Naggar block	56,000	27,900	1
	7-Eleven block	36,230	30,000	1
	TAD-Dangle properties	46,190	90,000	0.5
	Post Office (gut rehab)	39,350	55,750	0.5
	YMCA (retain facade)	30,241	180,000	0.5
	Police Station block	36,035	51,000	0.5
	Cambridge Gas + Light	28,000	43,000	0.5
	Salvation Army site	28,000	27,000	0
<b>Charles River</b>	Mahoney's site	48,800	N/A	1
	Micro Center	70,545	43,600	1
	Riverside Press Park	131,000	N/A	1
<b>Kendall Square</b>	Comm. Energy site(s)	400,000	N/A	1
	Technology Square (Polaroid)	N/A	40,000	0.5
<b>Mid-Cambridge</b>	Existing Library	N/A	38,000	0.5
<b>Porter Square</b>	Sears Building-Porter Exchange	108,000	236,000	1
	Porter Square parking lots	25,065	N/A	0
	Porter Square MBTA Station	N/A	N/A	0

### 14 Second-tier Sites (in alphabetical order)

The subsequent twelve sites were considered and discarded because they would not rank sufficiently to make a viable site:

Acorn Park  
Alewife MBTA area  
Bread & Circus  
Broadway: Moore  
Broadway: Hampshire

Preliminary Criteria				Preliminary Tally	Civic Heart
Parcel Size 1= >35,000 sf 0.5= 25-35,000 sf 0= <25,000 sf	Accessibility 1=MBTA within 5-min walk, bus, auto 0.5=MBTA within 10-min walk, bus 0=bus only	Centrality 1=high residential density 0.5=moderate residential density 0=low residential density	Availability 1=City-owned and/or available 0.5=privately owned 0=unlikely		
1	1	1	1	5	Potential
1	1	1	1	5	Yes
1	1	1	1	5	Yes
1	1	1	1	4.5	Yes
1	1	1	1	4.5	Yes
0.5	1	1	1	4	Yes
1	1	1	0.5	4	Potential
0.5	1	1	0.5	3.5	Yes
0.5	0.5	1	0	2	No
1	0	0.5	0.5	3	Potential
1	0	0.5	0.5	3	No
1	0	0.5	0	2.5	No
1	1	0	1	4	Potential
1	0.5	0.5	0.5	3	Potential
1	0.5	1	1	4	Yes
1	1	1	0	4	Potential
0.5	1	1	1	3.5	Potential
0.5	1	1	0	2.5	Potential

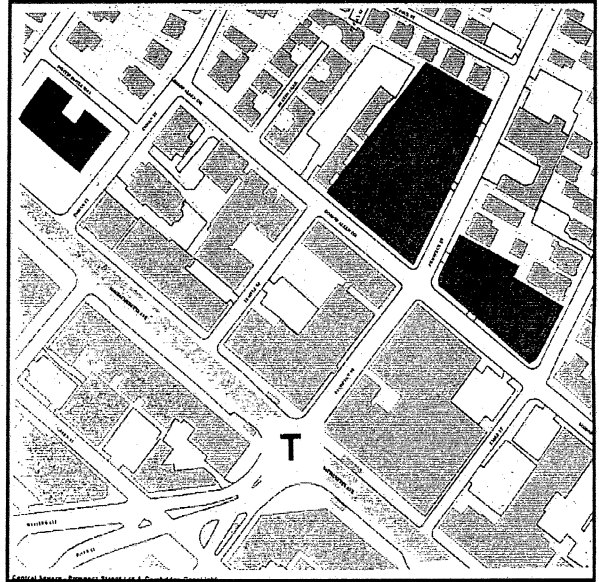
Cambridge Common  
Flagstaff Park  
Fresh Pond Mall  
Modern Continental  
Neville Manor

Osborn Triangle  
Quest Diagnostics  
Polaroid site/Charles River  
Star Market site/Mount Auburn

## *Central Square*

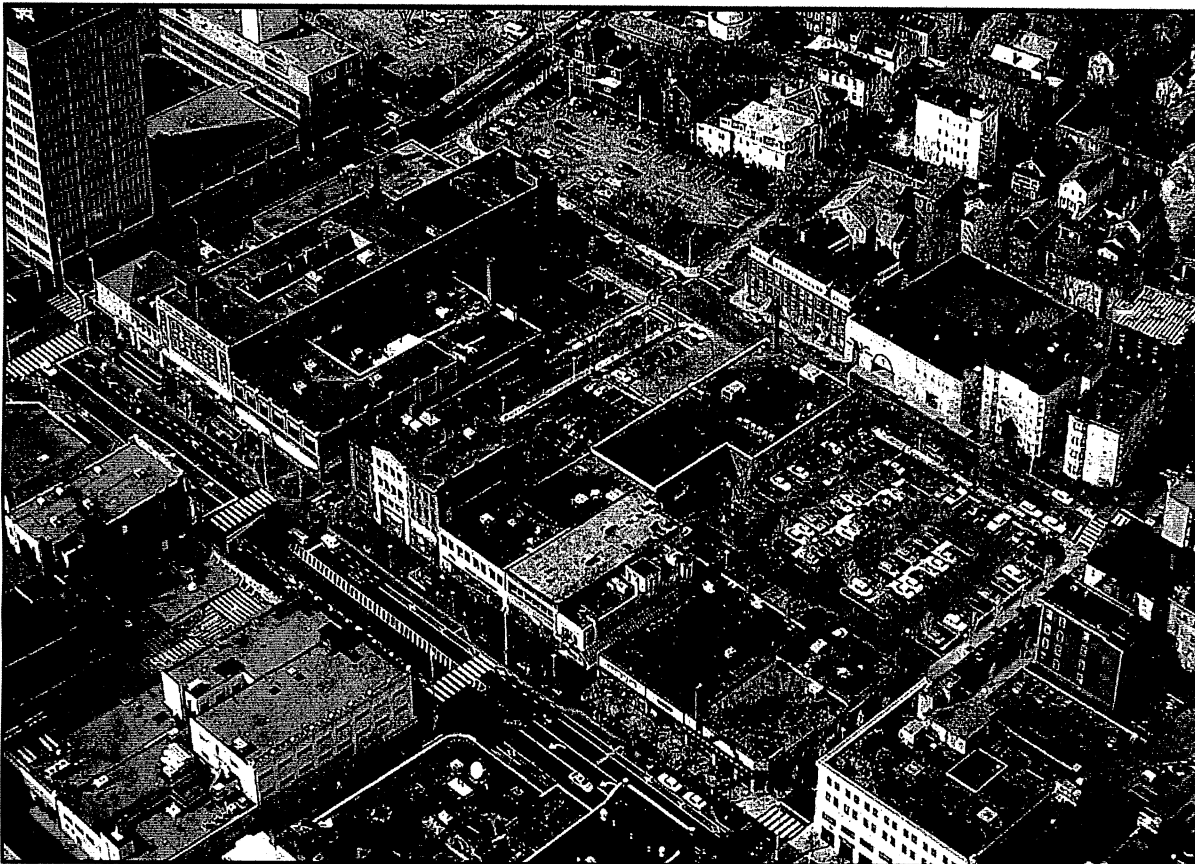
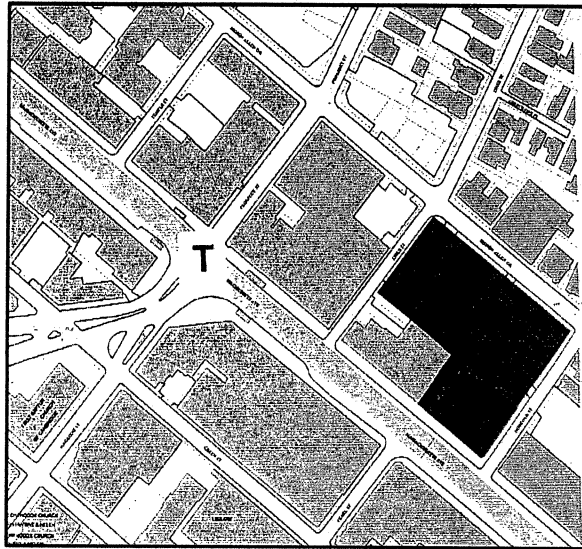
### *Prospect Street Parking Lot*

The larger of the two lots is 53,000 sf. The site is suitable for a 3-story building and would allow various building configurations. It is one of the few vacant sites. It is one block from the MBTA and bus lines and has potential for on-site parking. It is located in a highly dense residential area of Mid-Cambridge. It is privately-owned and its availability is unknown. This site is removed from an address on Massachusetts Avenue and is considered to be behind Central Square. The owner owns a smaller 17,000-sf parking lot across Prospect Street from this site. Its preliminary tally was a "5."



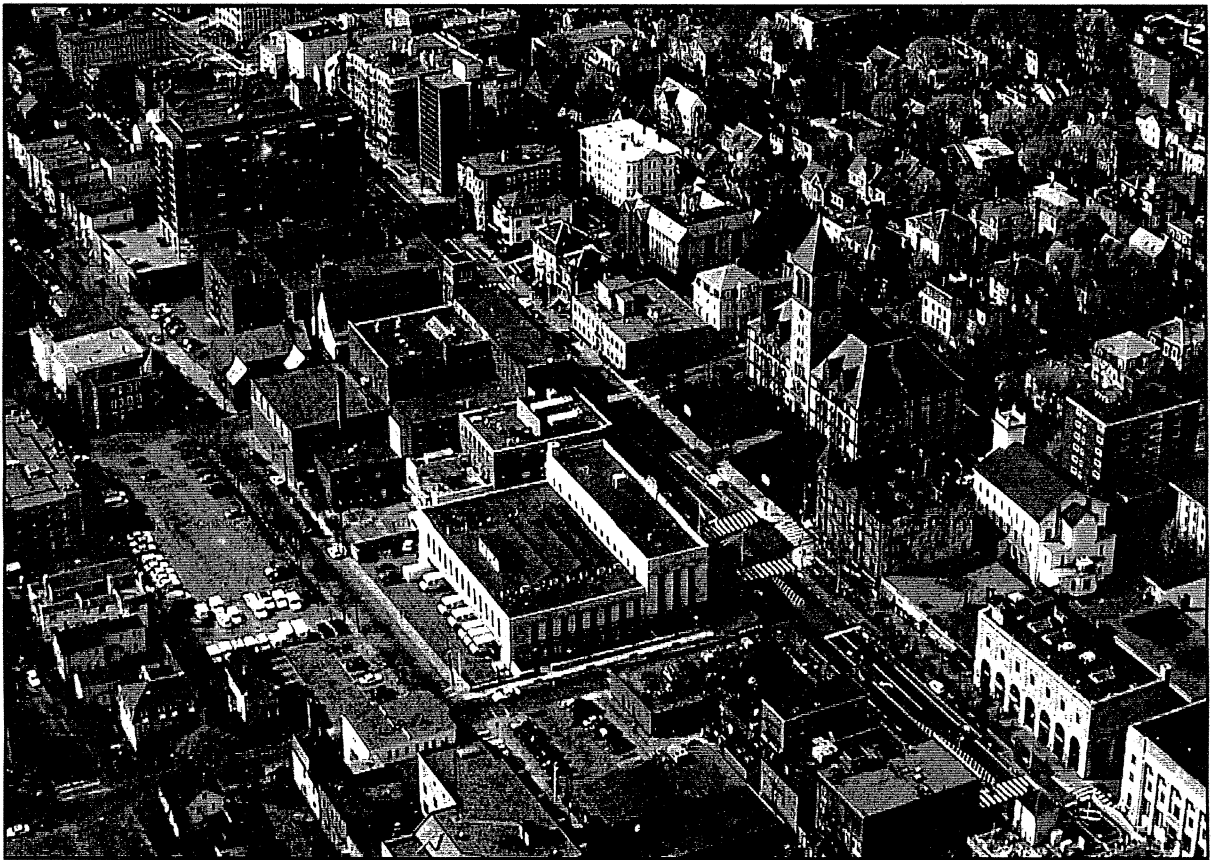
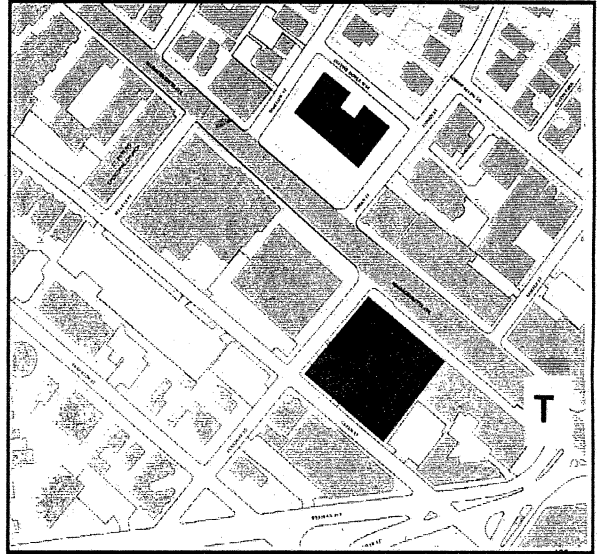
*Naggar Block (Central Square)*

The size of the site allows various building configurations, most of which could accommodate a 3-story library building. The former cinema building entrance is considered historically significant, at a minimum, its facade would likely remain. It is adjacent to the Central Square MBTA stop and bus lines and has good parking potential. The City owns two parking lots on this block. It is located in a highly dense residential area (Area 4). It is privately owned and is considered available. This site has the ability to have two addresses, one on Massachusetts Avenue and one on Bishop Allen Drive, and potential for open space. Its preliminary tally was a "5."



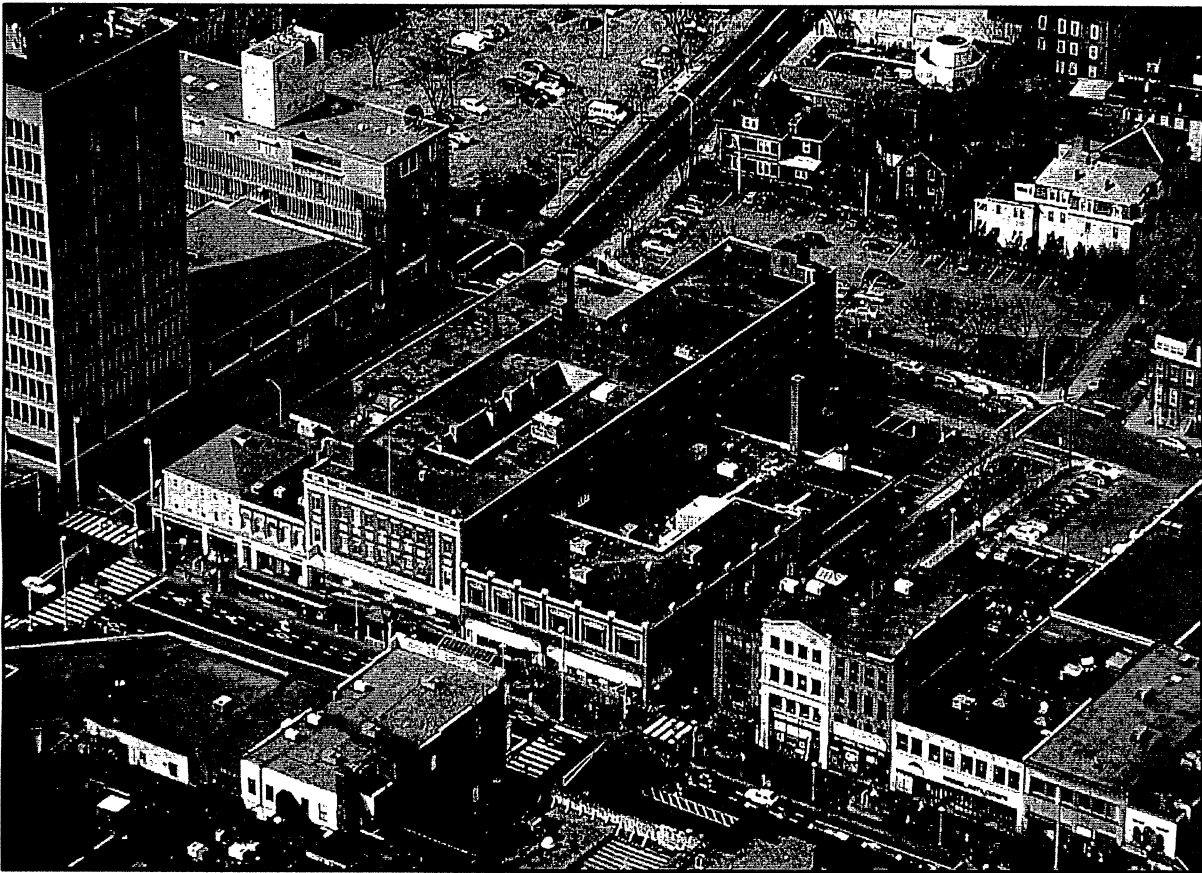
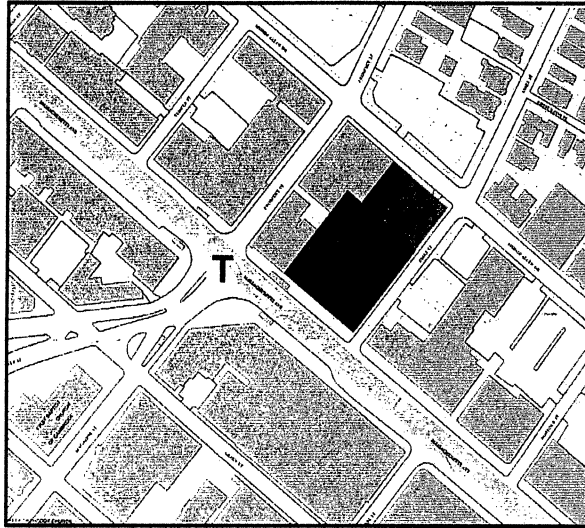
*7-Eleven Block (Central Square)*

The potential for the program is good; the 36,000-sf site would allow various building configurations for a 3-story library. The structures in this block have little historic value. The site is adjacent to the MBTA and bus lines and has the potential for adjacent parking. The site is located in a highly dense residential area (Riverside). All properties on this site are privately owned; availability is unknown. This site was the location of the former Cambridge Athenaeum Library. Building a library on this site contributes to the notion of a civic district, encompassing the City Hall, YMCA, Senior Center, and Post Office. Its preliminary tally was a "5."



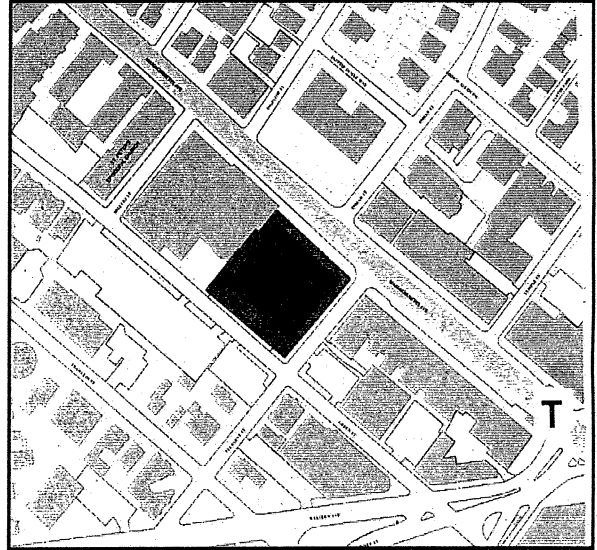
*TAD/Dangle Block (Central Square)*

The 46,000-sf site has fair potential for various configurations. It would accommodate a 3-story building. Several buildings in this block are considered "contributing" and their facades would likely have to remain, restricting potential. The site is on the MBTA and bus lines and has fair potential for parking on site with extensive re-building. It is privately owned and available, but has some lease restrictions. Its preliminary tally was a "4.5."



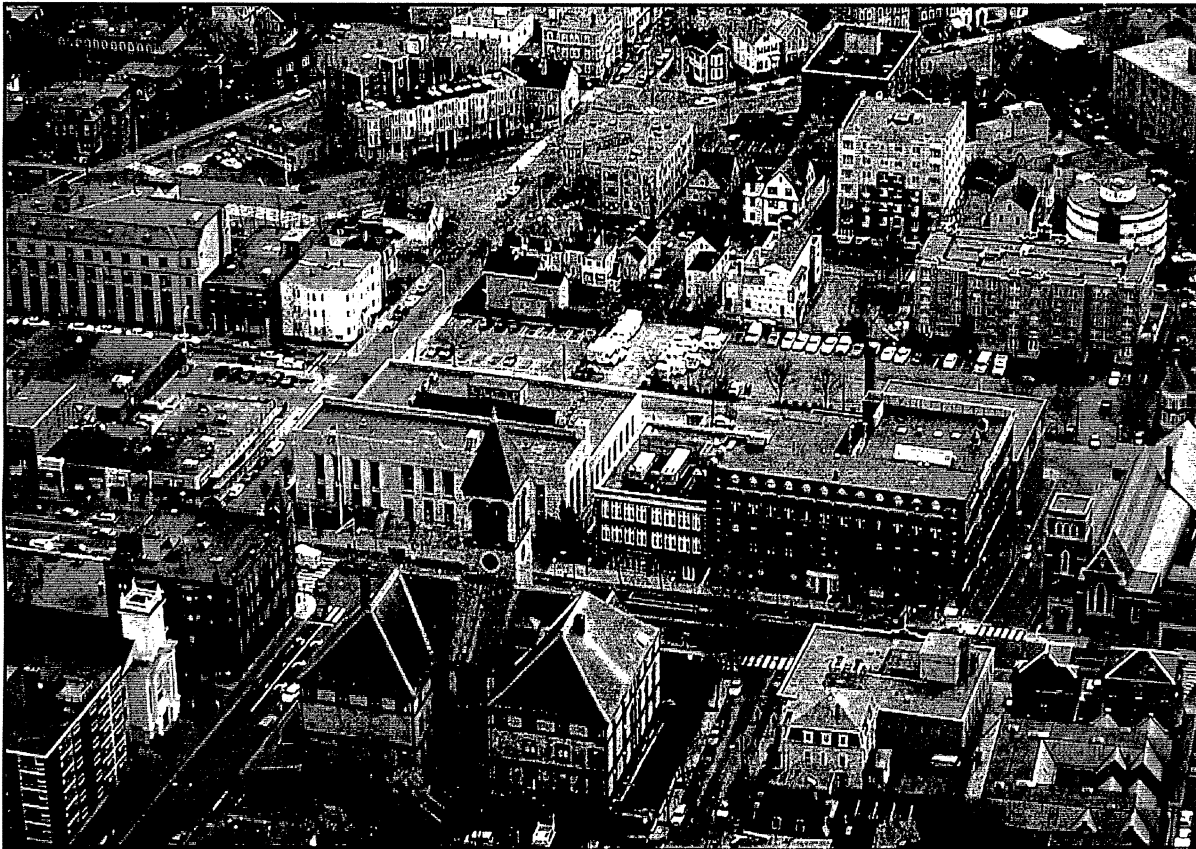
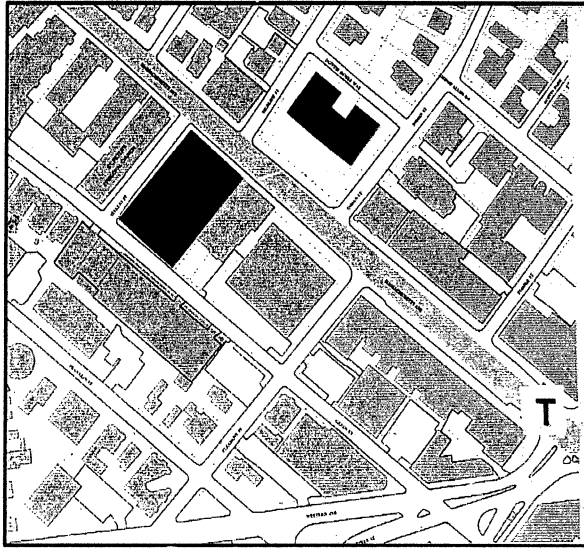
*Post Office (Central Square)*

This site has fair potential for a library program. The 2½-story portion fronting Massachusetts Avenue would likely have to remain for historic preservation purposes, requiring the necessary 2- to 3-story addition be built over the rear portion of the building. The site is adjacent to the MBTA and bus line, and has potential for adjacent parking. It is the property of the federal government; any relocation of the facility would require a site located within the 02139 zip code due to existing labor agreements. We consider the monumental facade questionable for a civic library building. Its preliminary tally was a "4.5."



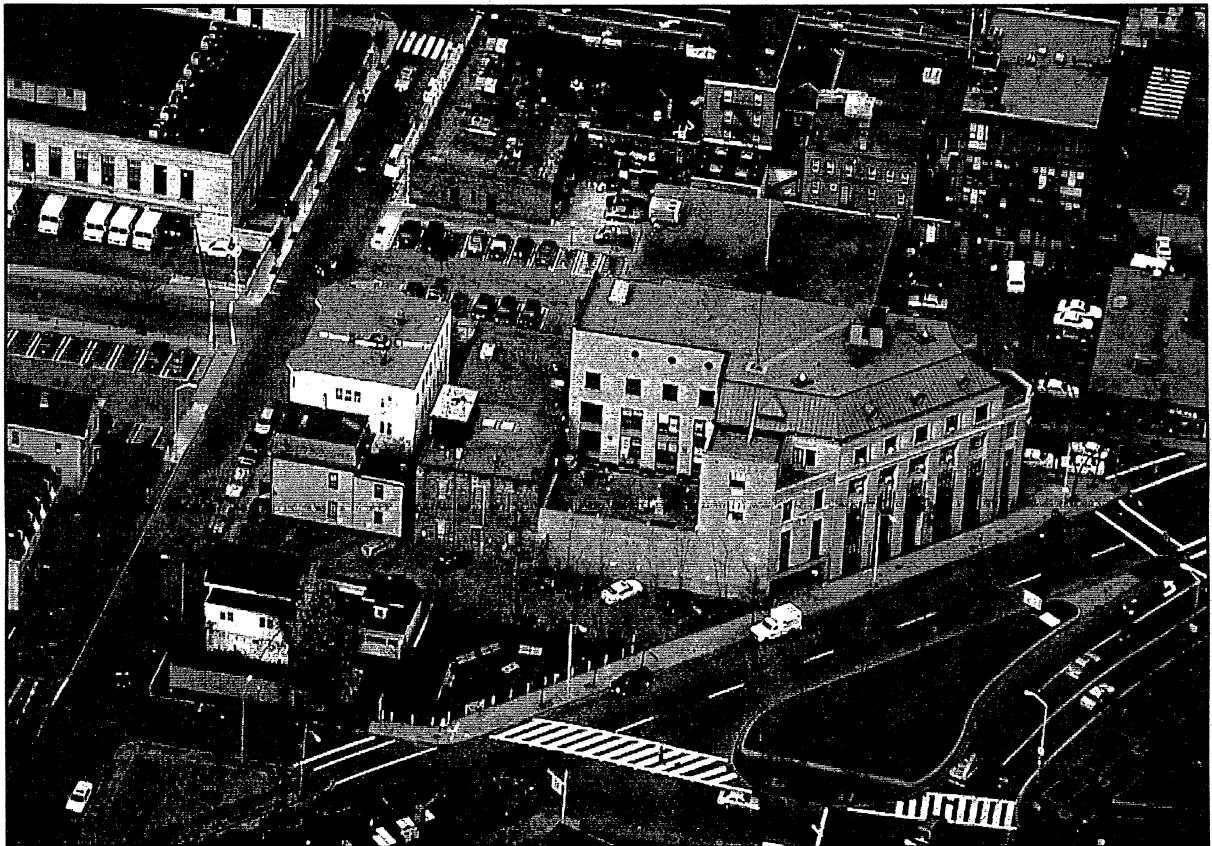
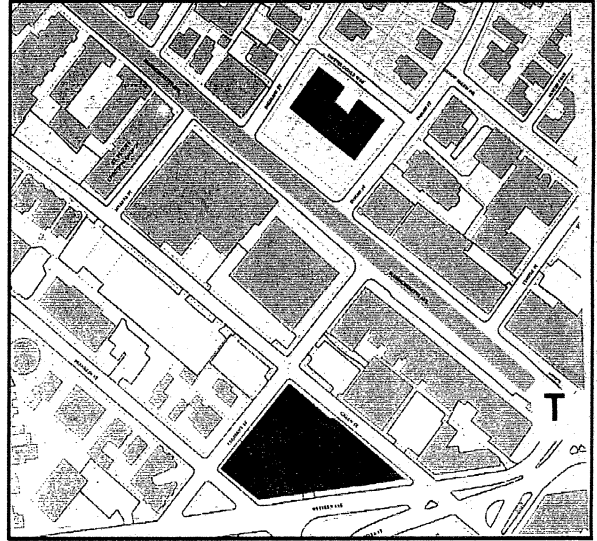
*YMCA (Central Square)*

The existing site is 30,000 sf, its program encompasses 180,000 sf. The building has historic facades on two sides which would likely be saved. This restricts the potential for reconfiguration. It is adjacent to the MBTA and bus line, and has parking potential adjacent to the site on Green Street. It is privately owned, but potentially available, as the YMCA would like to build a modern facility on its adjacent property. The development is restricted by the inclusion of privately-funded, single-room occupancy (SRO) facilities in its program. Its preliminary tally was a "4."



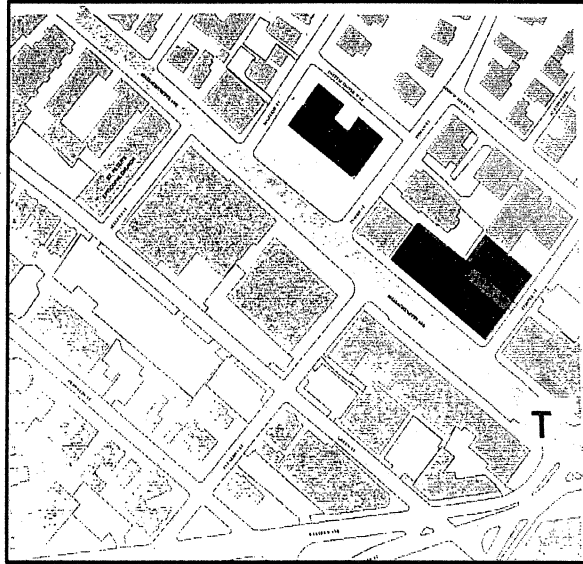
*Police Station Block (Central Square)*

The existing 51,000-sf building has historic facades, which would restrict the footprint and potential reconfiguration for a library. The parcel would likely have to encompass the entire block which includes residential uses. The site is adjacent to the MBTA and bus lines and has limited parking potential. It is located in a highly dense residential area (Riverside). It is potentially available, but requires relocation of the police station functions and acquisition of adjacent properties. It is removed from a Massachusetts Avenue address. Its preliminary tally a "4."



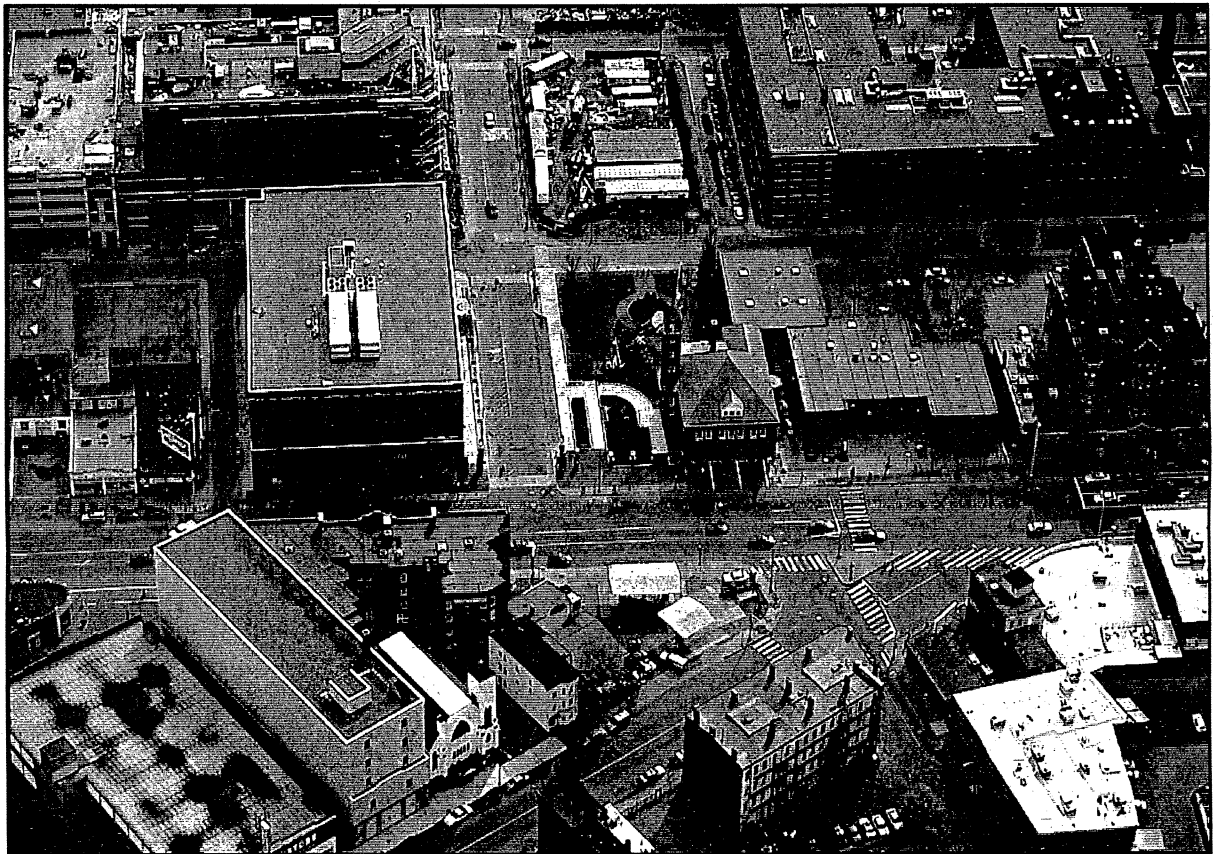
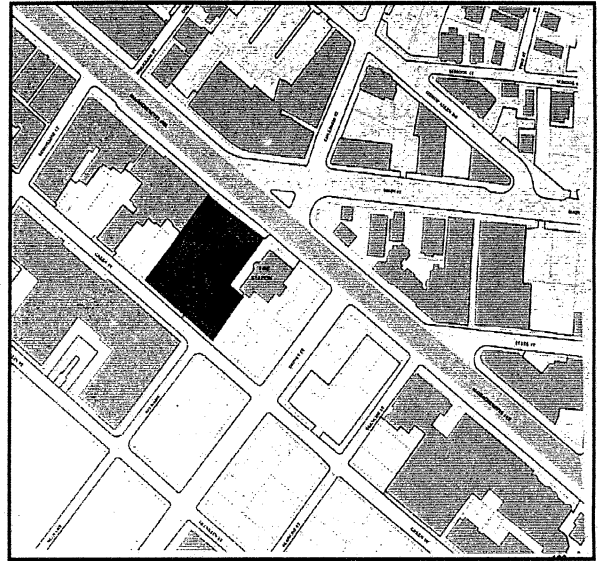
*Cambridge Gas + Light (Central Square)*

This Mid-Cambridge site encompasses the Gas + Light structure and the YWCA's abandoned pool. The site has historic facades. Its building envelope somewhat restricts the potential for reconfiguration and may require the adjacent Massachusetts Avenue retail property, which has no historic quality. The site is located adjacent to the MBTA and bus lines, and has no parking potential. Its availability is unknown. The Gas + Light building has library presence and good frontage on Massachusetts Avenue. Its preliminary tally was a " 3.5."



*Salvation Army Site (Central Square)*

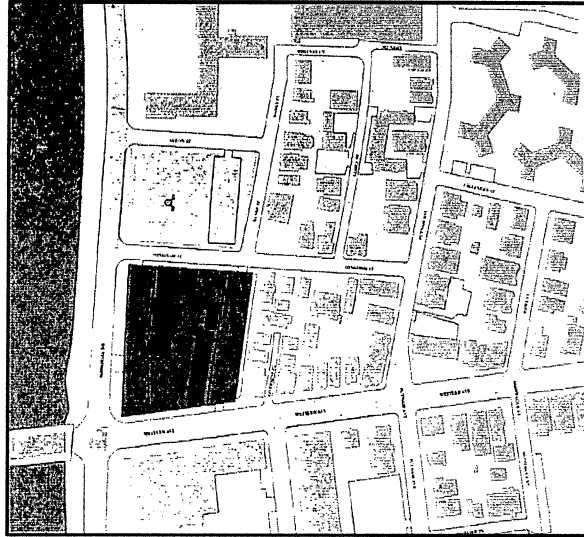
This 28,000-sf site is adjacent to the fire station. It could accommodate a 4-story building. Its adjacent properties restrict the potential building configuration. It is on bus lines, is more than a 5-minute walk from the MBTA and has no on-site parking potential. It is located in a highly dense residential area (Area 4). It is privately owned and would require relocation; its availability is unknown. Its preliminary tally was a "2."



## *Charles River*

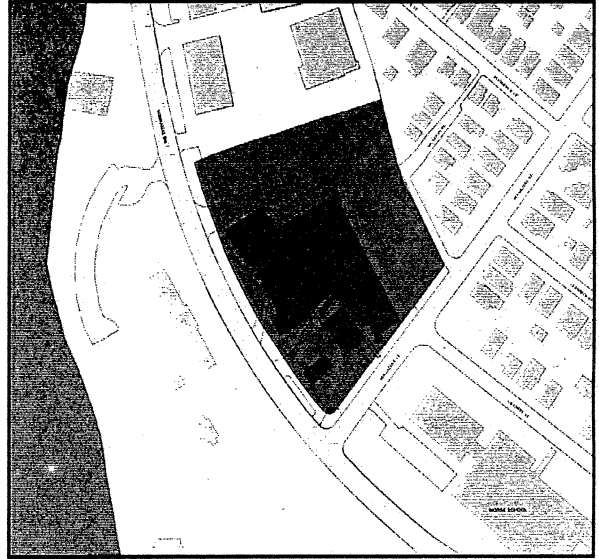
### *Mahoney's Site*

This site and the adjacent parcel are owned by Harvard University. The potential exists for a 3-story library building. The site has good suitability for the library program and provides excellent south-facing orientation to the river. The adjacent parcel could be open space associated with the library. The site is accessed only by bus and car and has on-site parking potential. It is located in a moderately dense residential area (Riverside). The site is the prime river site of three considered. Its preliminary tally was a "3."



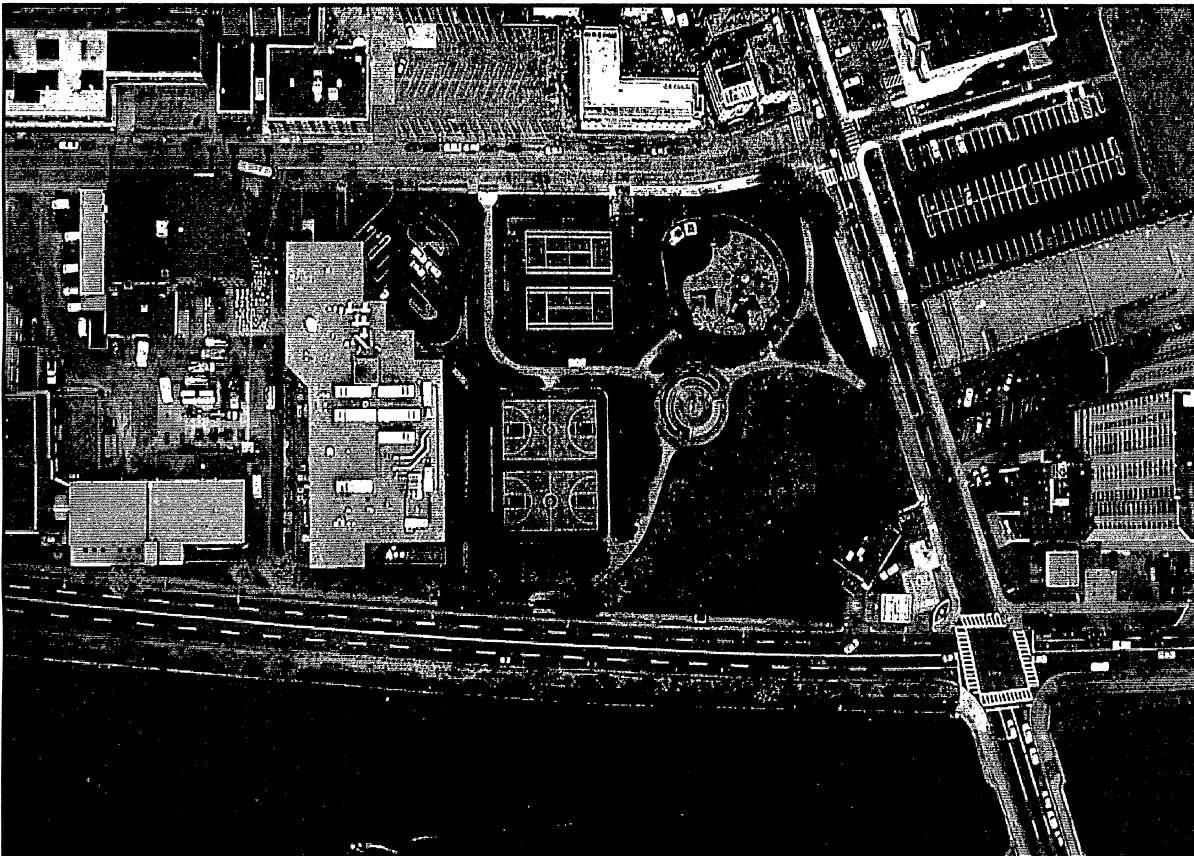
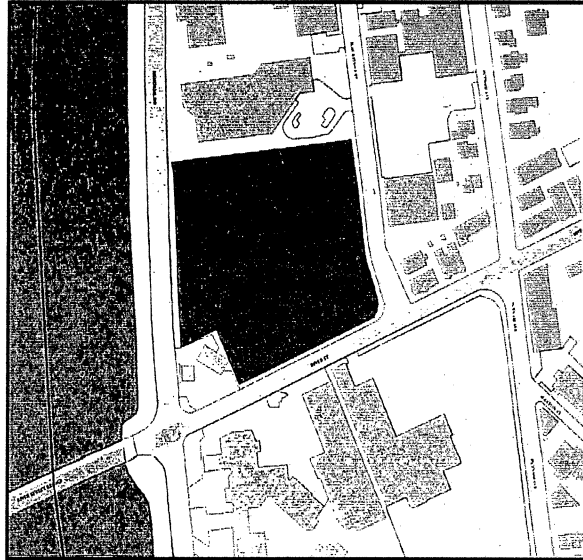
*Micro Center (Charles River)*

The potential exists for a 3-story library building. The site has good suitability for the library program and provides several orientations to the river. The existing parcel size is 70,000 sf. It has limited access by bus, no MBTA access, and has potential for on-site parking. It is located at the edge of a moderately dense residential area (Cambridgeport). Its availability is unknown. Its preliminary tally was a "3."



*Riverside Press Park/Playground (Charles River)*

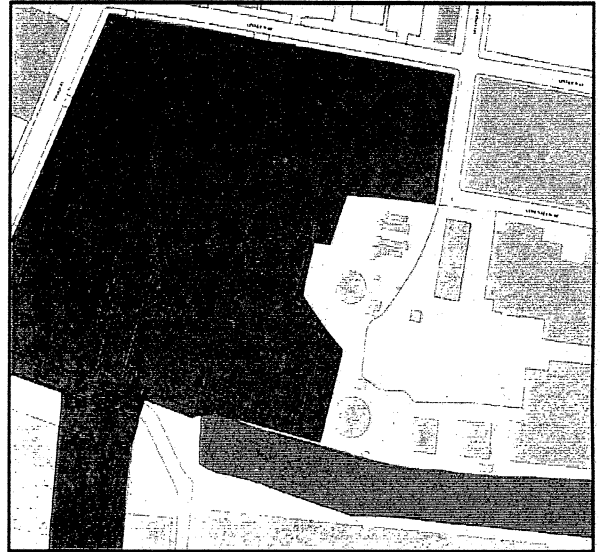
The potential exists for a 3-story library building. The site has good suitability for the library program and provides several orientations to the river. Its parcel size totals 131,000 sf. It has limited access by bus, no MBTA access, and has potential for on-site parking. It is located at the edge of a moderately dense residential area (Riverside). There is an existing open space/playground which would likely need to be preserved. Its preliminary tally was a "2.5."



## *Kendall Square*

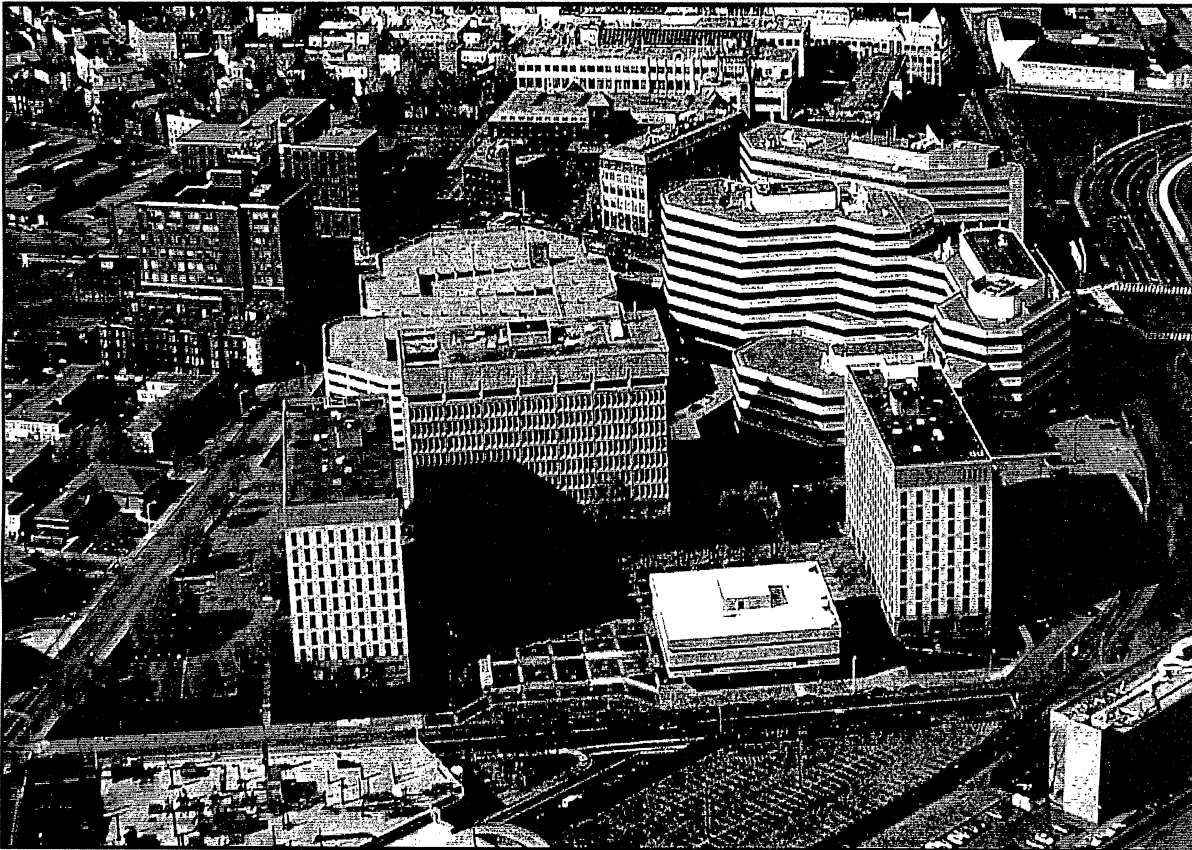
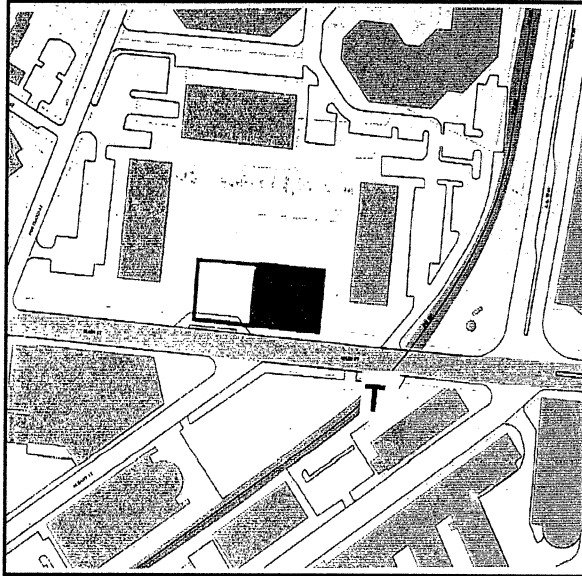
### *Commonwealth Energy Site (First, Third, Binney & Main Streets)*

The site is currently under agreement between Comm. Energy and a private developer. It spans ten acres with frontage on Main Street. A 3-story library could be built here as part of the Phase 1 development plans. The site is adjacent to bus routes, is within a 5-minute walk of the Kendall Square MBTA stop and has unlimited parking potential. It is located in a low-density area (East Cambridge) and is close to the city line and the Charles River; it borders on the canal. This site is clearly the most pioneering site of all; its identity is that of a (future) business center. However, the potential to create a library with supporting retail, office and entertainment uses is envisioned by the developer, making this site an incubator of potential civic activity. Its preliminary tally was a "4."



*Technology Square (Polaroid) (Kendall Square)*

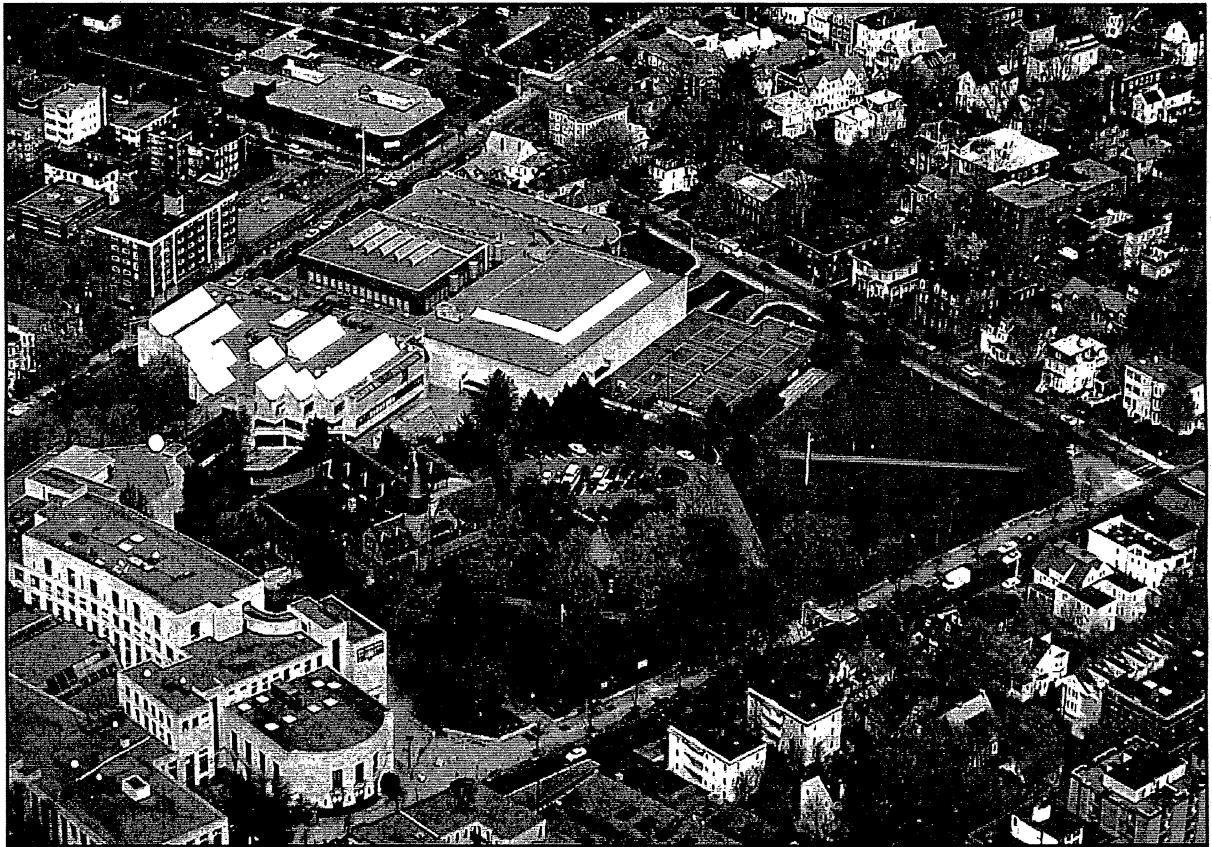
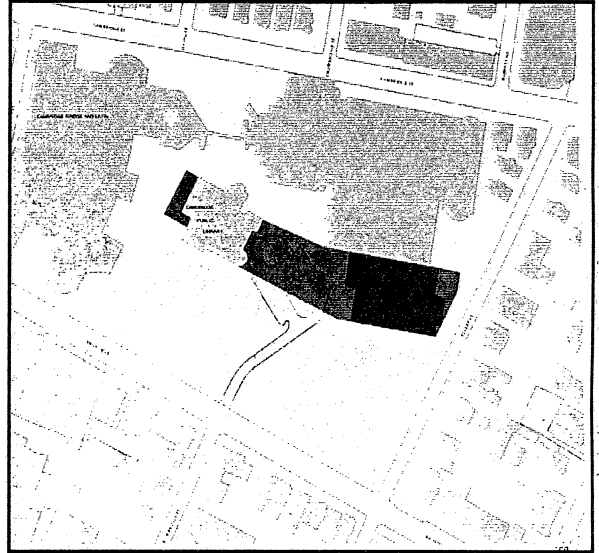
The building profiled is the one fronting on Main Street. The site is owned by Polaroid Corp. It has a fair suitability for a library program because its layout is restrictive, being only 40,000 sf. It would require a 3-story addition along Main Street. The site is adjacent to bus routes and to a likely Urban Ring stop, it is within a 10-minute walk of the Kendall Square MBTA stop, and has sufficient parking adjacent to the site. It is located at the edge of a moderately dense residential neighborhood (Area 4). Its availability is unknown. It is a pioneer site for a library because of its strong identity as a center for business. Its preliminary tally was a "3."



## *Mid-Cambridge*

### *Existing Main Library at 449 Broadway*

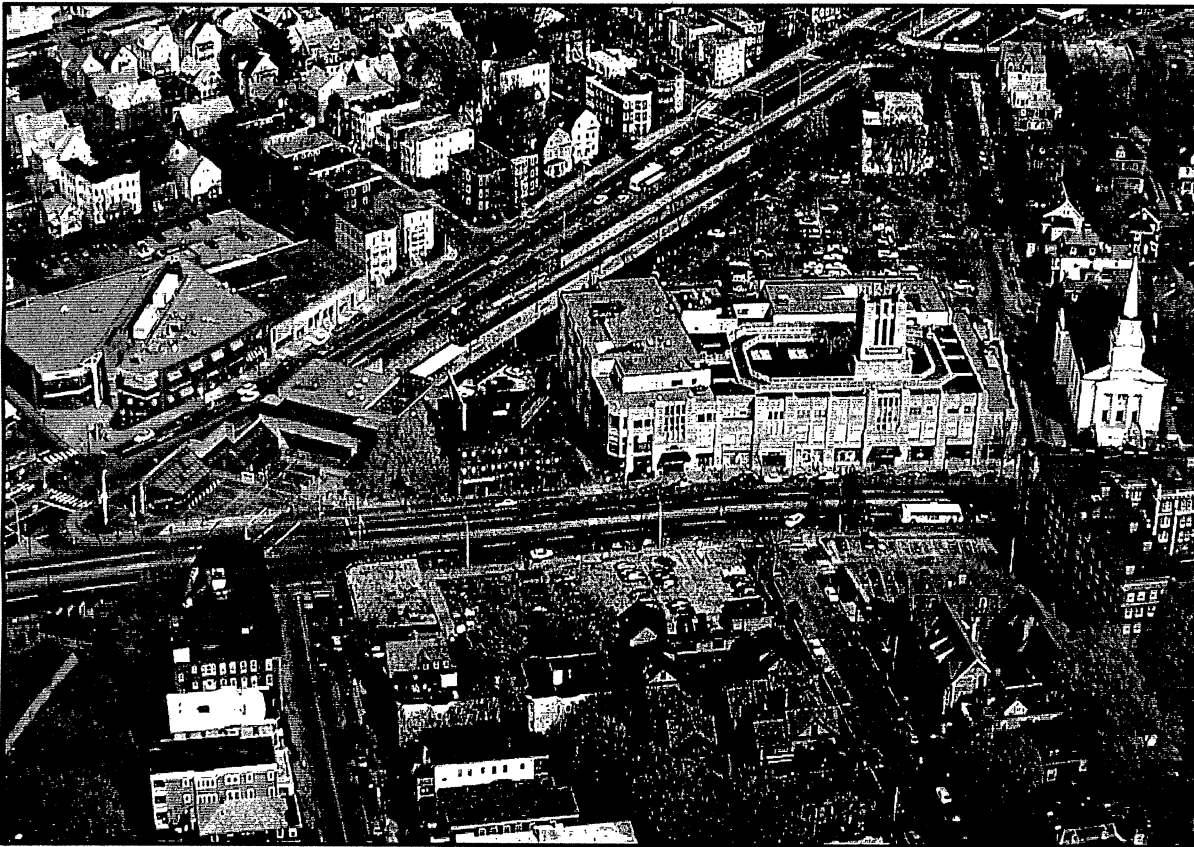
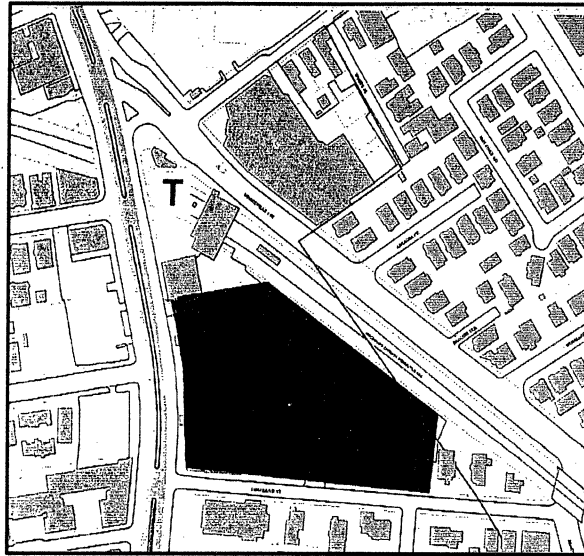
This site would allow a 2- to 3-story building; however, the layout would be fairly linear, restricting an ideal building layout. The site is within 10 minutes of the MBTA Red Line, adjacent to bus stops and has limited on-site parking potential. It is located in a high residential density area. The site is available; it requires re-use of the high school parking deck and replacement of the tennis courts. The layout shown obscures the unattractive south-facing wall of the gym, and the addition would not cast shadows on the park. Its preliminary tally was a "4."



## *Porter Square*

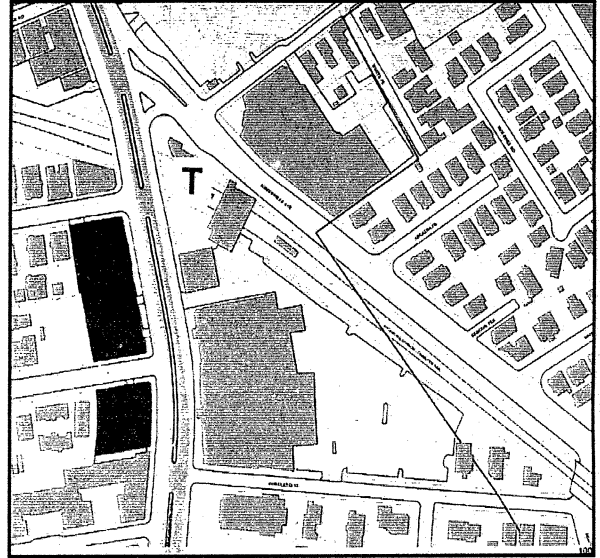
### *Sears Building--Porter Exchange*

This site has good suitability for the library program; it would fit in less than half of the existing building, preserving retail at grade. The parcel size is 108,000 sf. Its structure is considered historically significant. It is on bus lines and the Porter Square MBTA stop and has good on-site parking. The site is located in a high density residential area and is close to the Cambridge-Somerville City line. Lesley College owns the property and considers it unavailable. The building is strongly identified as a commercial center, but the area has good "civic heart" potential. Its preliminary tally was a "4."



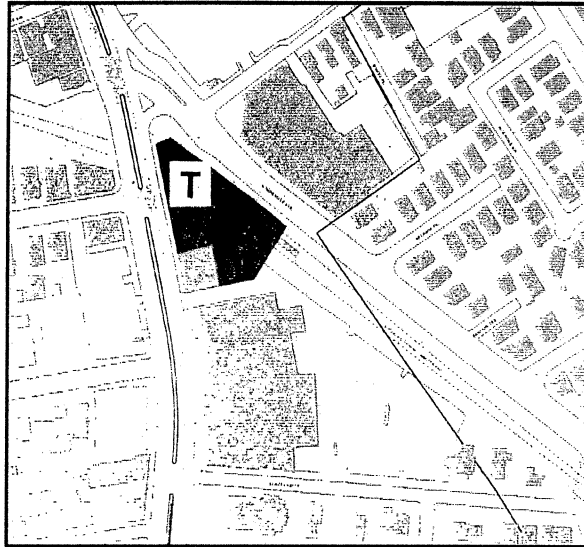
*Porter Square Parking Lots (Porter Square)*

This 19,000- to 27,000-sf site would accommodate a 5-story library, which is a poor fit--long and linear footprint. It abuts new residential development. It is adjacent to bus and MBTA and has extremely limited on-site parking potential. It is located in an area of high residential density and is close to the Cambridge/Somerville City line. Its availability is unknown. The 5-story height of a proposed library is this sites' greatest impediment. Its preliminary tally was a "3.5."



*Porter Square MBTA Station (Porter Square)*

This site could accommodate a 4-story building constructed on air rights over the Red Line tracks. Its footprint would be affected by the MBTA. The Commonwealth Lock Building adjacent to the site is considered significant. The site is above the MBTA, is adjacent to bus lines and has no on-site parking potential. It is likely unavailable. Although it is considered to be in a fairly civic location, it presents many technical difficulties such as noise and vibration mitigation. Its preliminary tally was a "2.5."





## DEVELOPMENT CRITERIA

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The March 24th public meeting presented the initial phase of work. Analysis of the following categories was discussed:

### *Physical Characteristics of the Program and the Cambridge Context*

- Presentation of the physical implications of a 90,000-100,000 sf building for the City
- Civic spaces and places in Cambridge

### *Understanding the City of Cambridge*

- Presentation and discussion of potential areas of the City in which a "civic heart" might be located

### *Major Factors for Site Selection*

- Discussion of the overall categories of criterion that might be applied to the selection process.

## **Illustration of the Program**

Sasaki staff referred to the size of City Hall (approximately 50,000 sf) for comparison and asked the audience to imagine taking the existing library and tripling its size. It was noted that the City could use the library as an asset to establish a civic center or "heart" as well as use it to reinforce an existing center. It was stated that the library has the ability to become an emblematic symbol for the City--a landmark.

The question was asked as to how large a site is needed. The program's net area is approximately 69,000 sf, requiring a gross footprint of approximately 99,000 to 100,000 sf. The largest single portion of the program is the nonfiction collection, requiring 22,407 sf. If this collection were to be located on one floor, the minimum footprint for the library itself would be 22,407 sf. Parking for 100 cars requires an additional 30,000 sf. Service, loading and drop-off areas also would require additional

area. Thus, the minimum footprint probably would be roughly 22,000 to 25,000 sf for building and 55,000 sf on the surface if parking is on-site.

The impact of building height on efficiency was also studied. For example, a 1-story, 100,000-sf building would be 75% efficient; a 3-story building would be 70% efficient; and a 5-story building would be only 60% efficient. Going above five stories is infeasible.

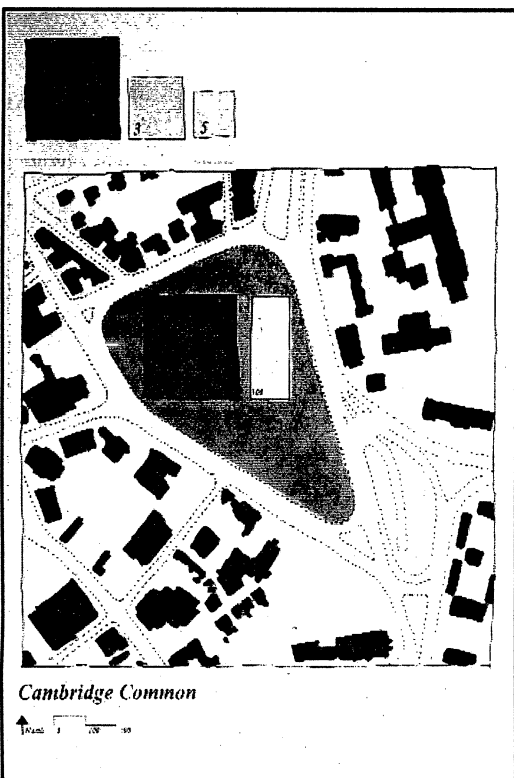
Based upon operational and building efficiency factors, it was noted that it is desirable for the library to be 3 stories, thus preferring a site of 30,000 to 35,000 sf.

## Program Summary and Minimum Required Building Footprint

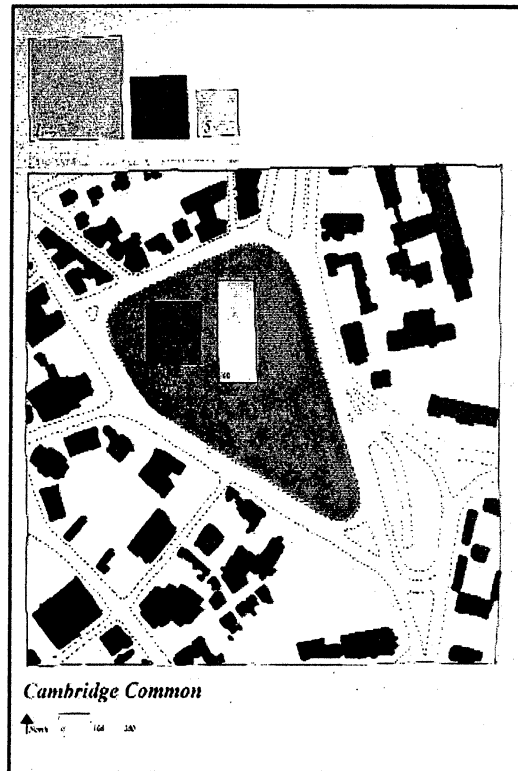
Area	Net Square Footage Total	Efficiency Ratio	Gross Square Footage Total	
Building Vestibule/Lobby	1,570	70%	2,243	
Circulation Desk Area	1,900	70%	2,714	
Reference/Information Services	7,300	70%	10,429	
Periodicals	2,200	70%	3,143	
Public Area: AV Collection	3,000	70%	4,286	
Public Area: Cambridge Room	3,500	70%	5,000	
General Collection				
Fiction	6,560	70%	9,371	<b>Minimum Footprint</b>
<b>Non-fiction</b>	<b>15,683</b>	<b>70%</b>	<b>22,407</b>	
Young Adult	744	70%	1,079	
Children's Services	11,500	70%	16,429	<b>22,400 sf</b>
Multi-media Meeting Rooms	4,800	70%	6,857	
Administration	2,270	70%	3,243	
Technical Services	2,500	70%	3,571	
Non-public: Senior Services	450	70%	643	
Non-public: Systems	200	70%	286	
Non-public: Staff Kitchen/Lunchroom	620	70%	886	
Non-public: Staff Lockers	350	70%	500	
Non-public: Maintenance	1,150	70%	1,643	
Bookstore/Snack Bar (optional)	400	70%	571	
TV Studio (optional)	3,650	70%	3,786	
<i>Total Net Assignable Square Feet</i>	<i>69,360</i>			
<i>Total Non-assignable Square Feet</i>	<i>29,726</i>			
<b>Total Gross Square Feet</b>			<b>99,086</b>	

## Physical Characteristics of the Program

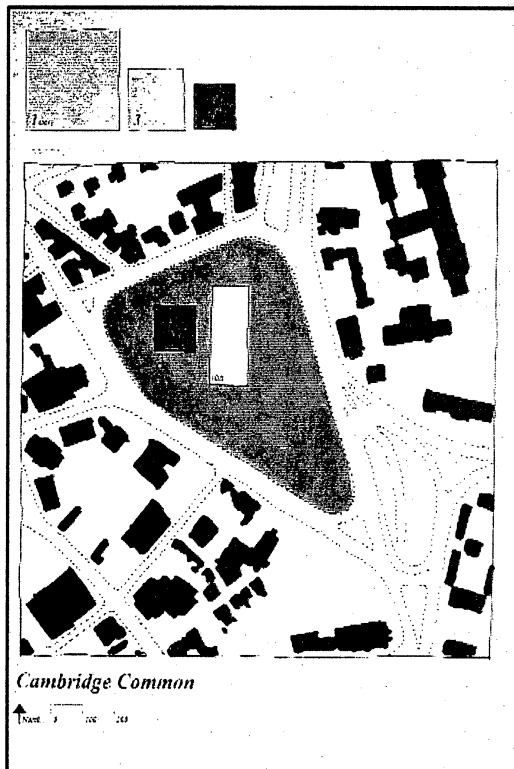
The images depict the 90,000- to 100,000-sf required footprint of the library as it would appear if placed on an easily recognizable site--the Cambridge Common. One-, three-, and five-story footprints with an adjacent surface parking area for 100 cars are shown for comparison.



Cambridge 1



Common 2

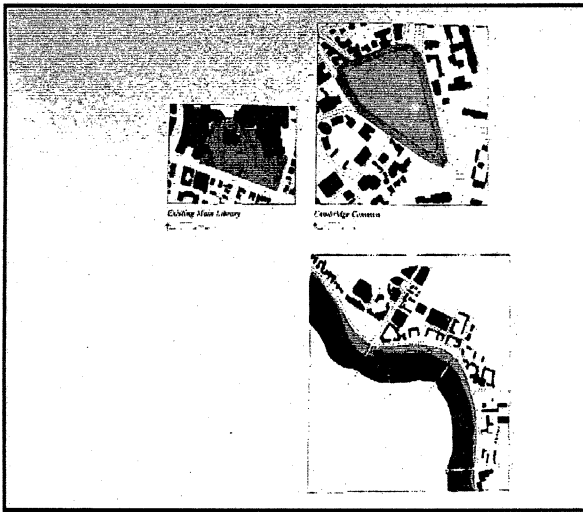


Common 3

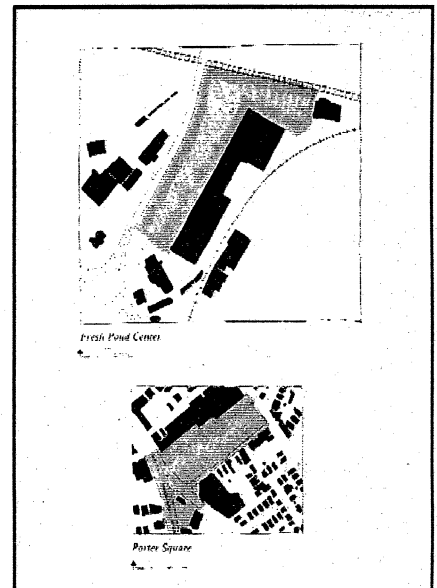
## Understanding the City of Cambridge

It is important to have an understanding of what makes Cambridge unique. Sasaki staff describe the City as one having a series of centers or civic spaces, united by public streets and transportation, with branch libraries scattered proportionately through-

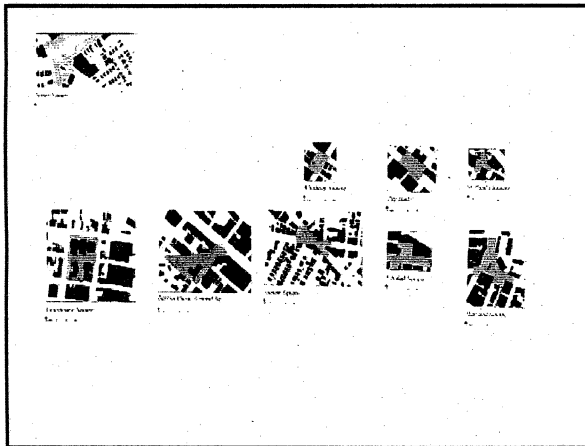
out. The spaces are park-like (Cambridge Common, the riverfront area near Harvard, the existing library site), urban (Harvard, Kendall and Central Squares), or suburban (Fresh Pond, Porter Square). The following images illustrate these centers or civic spaces in Cambridge:



The library, the common and the river: Examples of existing open spaces in Cambridge.



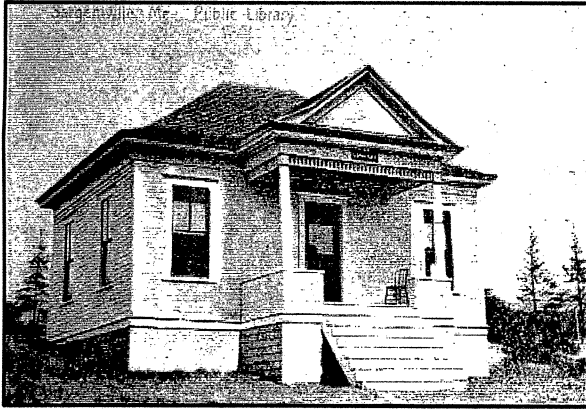
Fresh Pond Center and Porter Square: Examples of existing edge or undeveloped sites, possible pioneer sites.



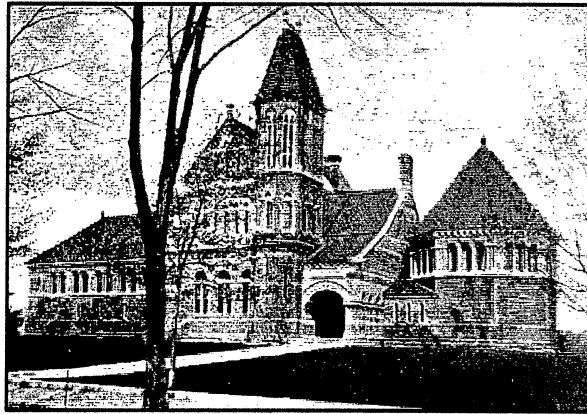
Winthrop Square, City Hall, St. Paul's Square, Courthouse Square, Baron Player, Inman Square, Kendall Square and Harvard Square: Examples of existing urban spaces in Cambridge with strong building definition.

The following photographs illustrate how libraries have achieved “postcard” or emblematic status. The images, from a library architect, depict primarily the New England vernacular architecture of libraries, ranging from one-room libraries to the library in the park to more urban sites where the library is built to

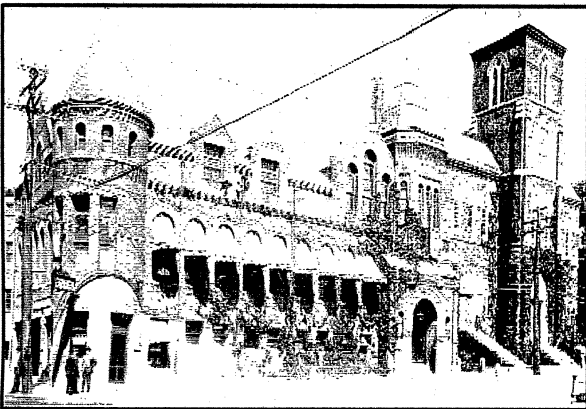
the street edge, often with commercial space at grade. Other images depict libraries which achieve a measure of grandeur. These libraries (Boston, New York) often combine public open space as a forecourt to the library building.



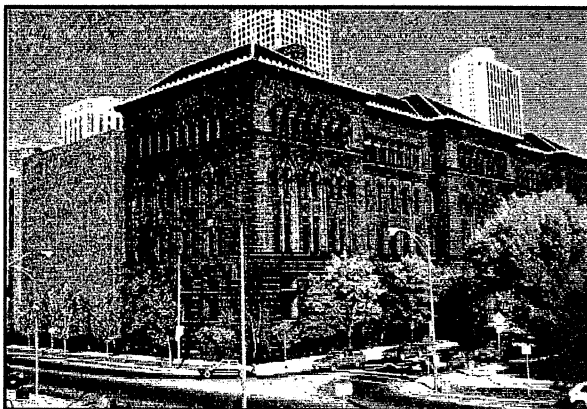
Shack



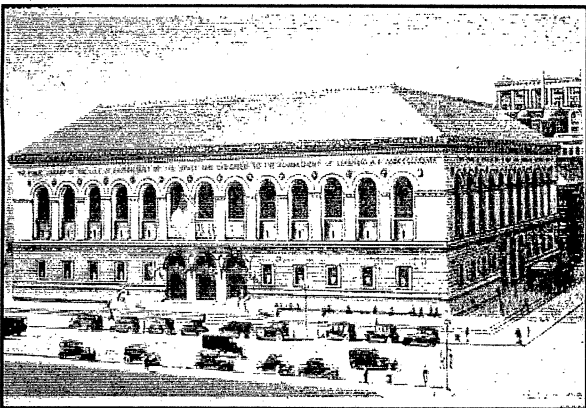
Woburn Public Library



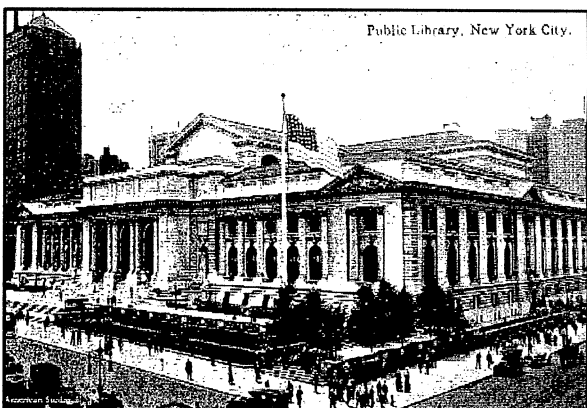
Mixed-use Library



Chicago Public Library



Boston Public Library



New York Public Library

The following lists factors discussed in the first public meeting as important considerations affecting site selection:

***Physical Factors Affecting Site Selection***

- Size of Parcel
- Potential for Expansion
- Configuration of Site: Dimension, Frontage
- Service Capacity: Front Door, Back Door
- Utilities: Water, Sewer, Electric, etc.
- Soils/Environmental Quality
- Access to Public Transportation: Train, Bus, Drop-off, Book Drop, Bike, Pedestrian
- Availability of Parking: On-site, Off-site
- Regulatory Constraints: Zoning
- History of Site and Environs: Historic Character, Architectural Distinction
- Sustainability: Public Safety/Evening Use, Environmental Impact

***Community Factors Affecting Site Selection***

- Interface with Library 21 Mission Goals for a "Civic Heart":
  - equal access to knowledge
  - distinguished architecture
  - enlarged collections, enriched programs
  - home for new technology
  - destination for visitors
- Demographics: Concentration of Residents in Area
- Civic Infrastructure: Branch Libraries, Schools, Youth Centers
- Land Use/District Context: Abutters and Nearby Land Uses Within 5-Minute Walk
- Community Development Objectives: Preservation of Open Space, Compatibility of Land Uses and Mixed-use Development, Economic Development
- Access: Promotion of Alternative Modes of Transportation Other Than by Car
- Sustainability: Part of a Larger Community of Uses--Contribution to the City

***Financial Factors Affecting Site Selection***

- Site/Development Pro-forma
- Acquisition Costs/Assessed Value
- Redevelopment Costs
- Relocation Costs
- Parking costs
- Operations/Maintenance Costs

***Physical + Community + Financial = "Civic Success"***

- The Library will be a Distinguished Work of Architecture
- The Library will have a Strong Sense of Place (public space)
- The Library will Achieve "Post Card" or Emblematic Status
- The Library will Achieve "Fit":
  - architecture of the program
  - architecture to site and location--"architectural fabric"
  - site to community context--"uniquely Cambridge"
- The Library will Ensure Ground-level Integration of Uses with a Connection to the Street and to Public Open Space

*The following sections are included under separate cover:*

**Public/Private Interface**

**Minutes of Public Meetings**

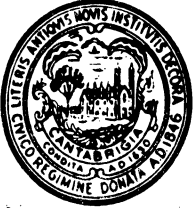
March 24, 1998

April 30, 1998

June 10, 1998

**Newspaper Articles**

**Public Comments and Correspondence**



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27.

EXECUTIVE DEPARTMENT  
ROBERT W. HEALY  
City Manager

RICHARD C. ROSSI  
Deputy City Manager

June 22, 1998

To the Honorable, the City Council:

Please find enclosed the final report on the Cambridge Library Site Selection Study, prepared by Sasaki Associates, Inc. I recommend that a presentation to the City Council by Sasaki on the report be arranged, at the City Council's convenience.

Very truly yours,

Robert W. Healy  
City Manager

Enclosures

Consent Agenda #27 4605

Relative to the final report  
on the Cambridge Library Site  
Selection Study.

In City Council June 22, 1998

*Scheduled Hearing.*