

*Neighborhood Development and
Zoning in Cambridge*

Charles Sullivan

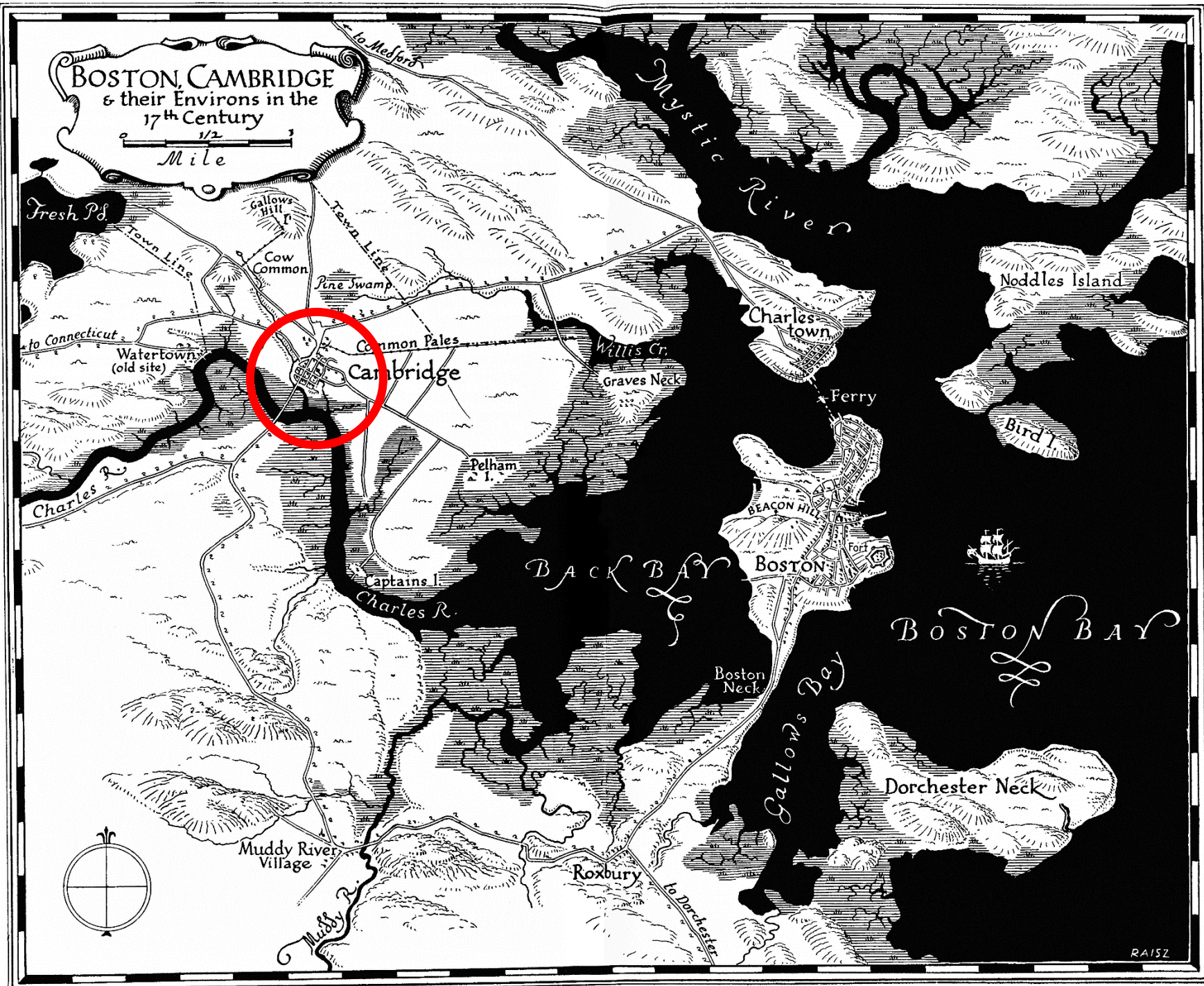
Cambridge Historical Commission

May 19, 2021

Cambridge in the 21st century is a community
in danger of losing its collective memory.

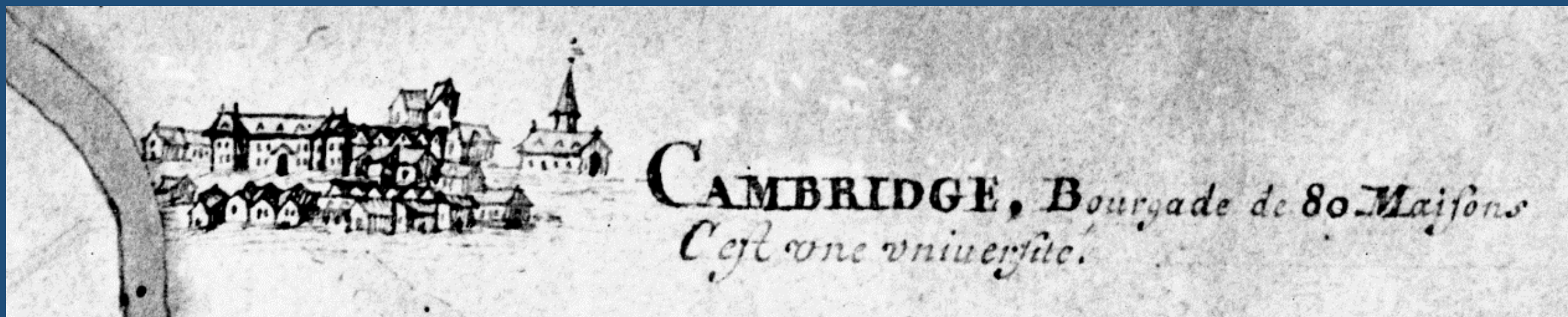
In 2010 the Census Bureau determined that 30% of owner-occupants
and over 70% of renters had arrived within the previous five years,
while only 17% of owner-occupants and 2% of renters
had lived here for more than twenty years.*

* U.S. Census Bureau, 2008–2010 American Community Survey. “Tenure by Year Householder Moved into Unit.”



Reconstructed plan of Cambridge and environs in the 17th century

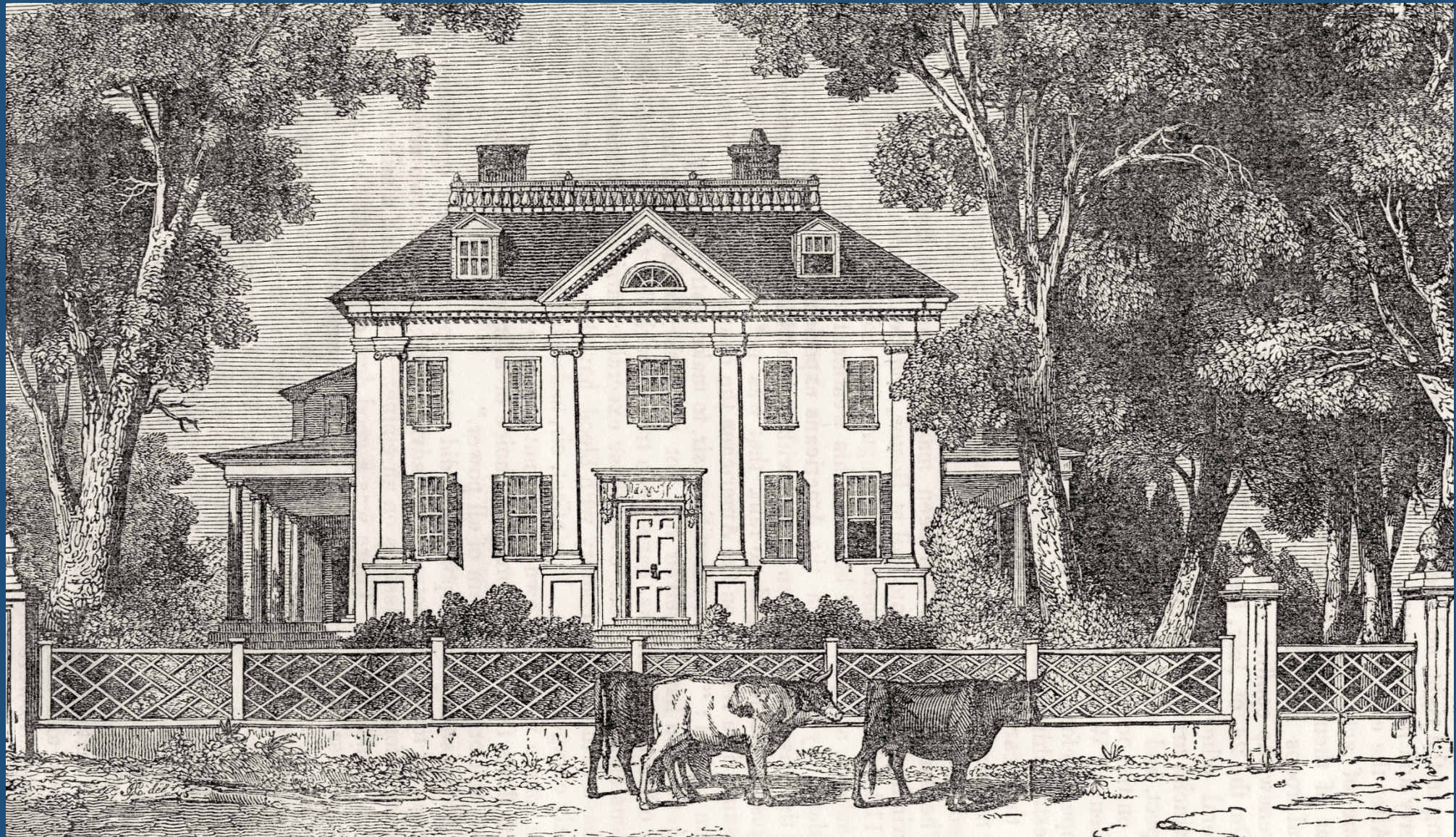
The village (Harvard Square) circled



First known view of Cambridge and Harvard College, 1693



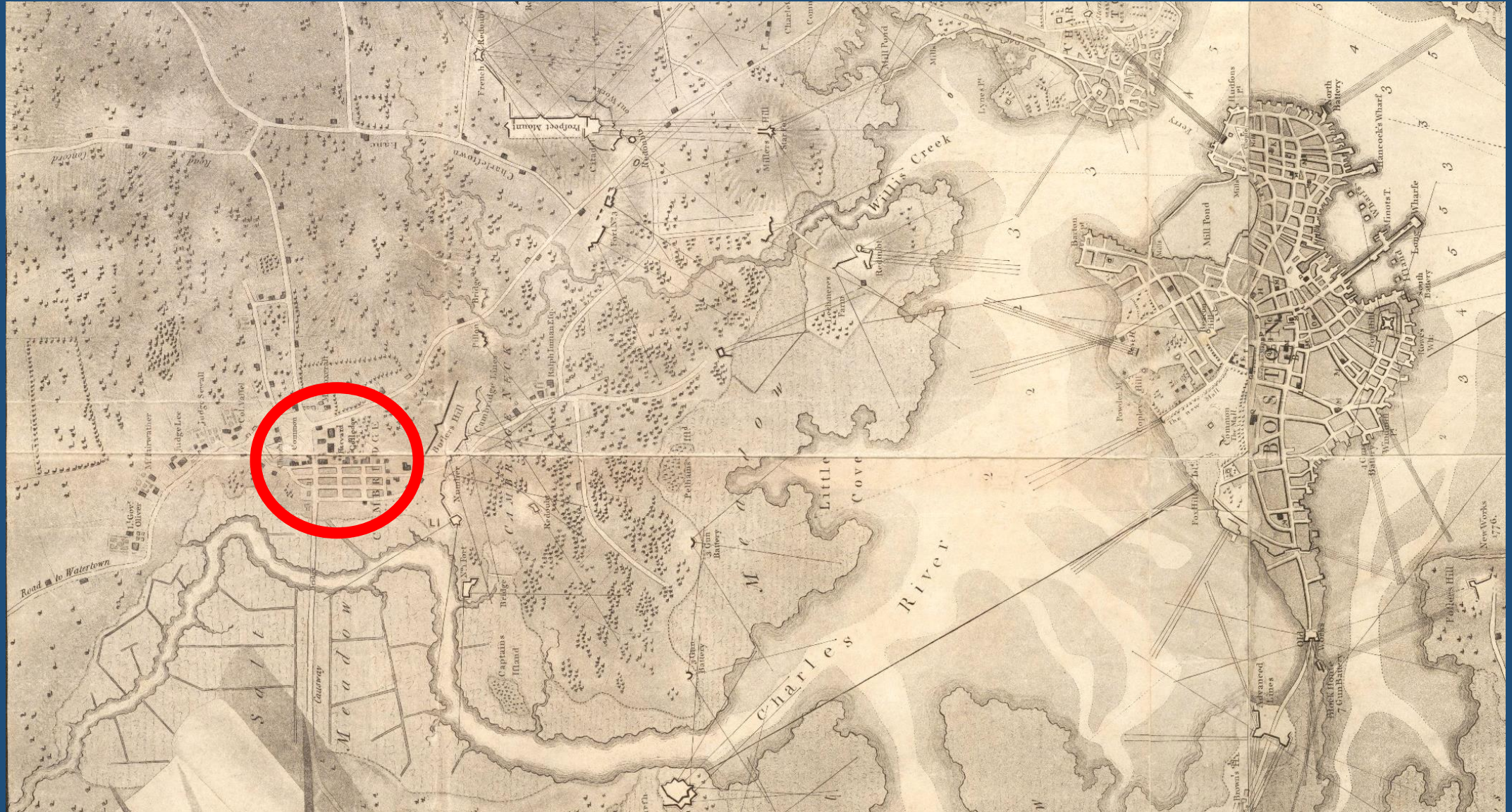
Loyalist Estates in 1775



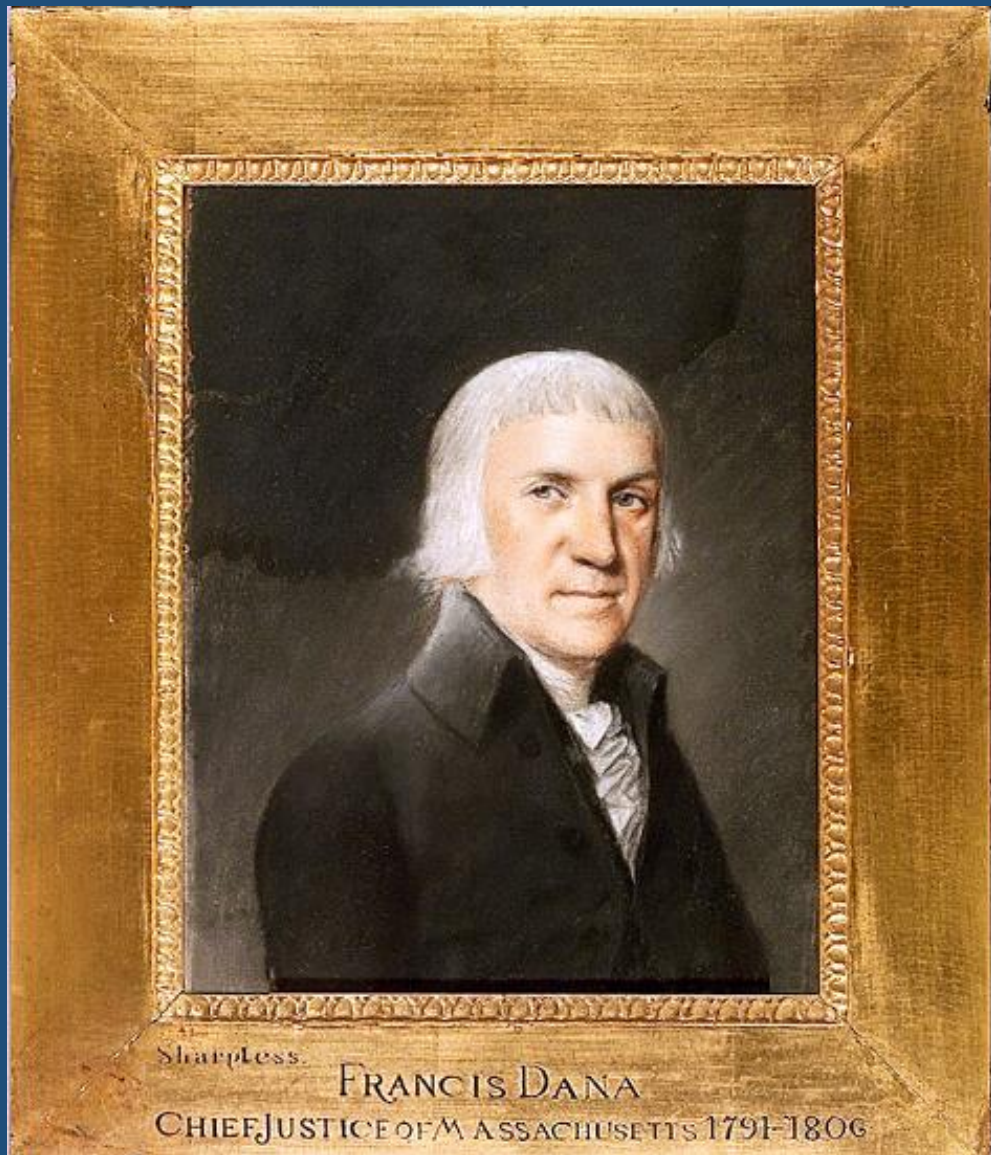
John Vassall Jr. house, 105 Brattle Street (1759)

with porches added by Andrew Craigie in 1791-94

Cambridge and Boston in 1777



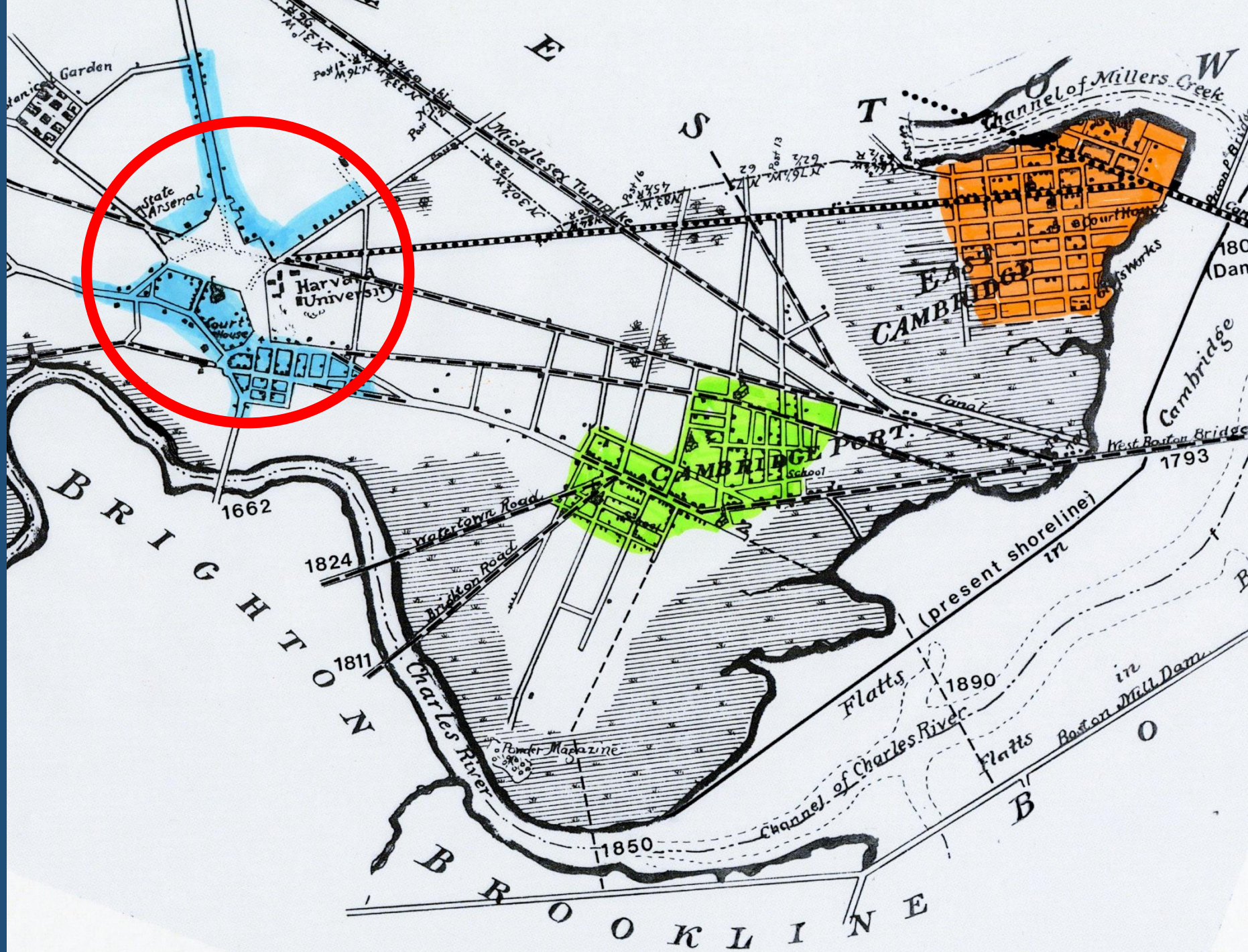
Henry Pelham, "A plan of Boston in New England with its environs ...", 1776



Francis Dana, Chief Justice of the
Supreme Judicial Court, 1791-1806



West Boston (Longfellow) Bridge, 1793



Three villages
on the verge
of dissolution,
1830

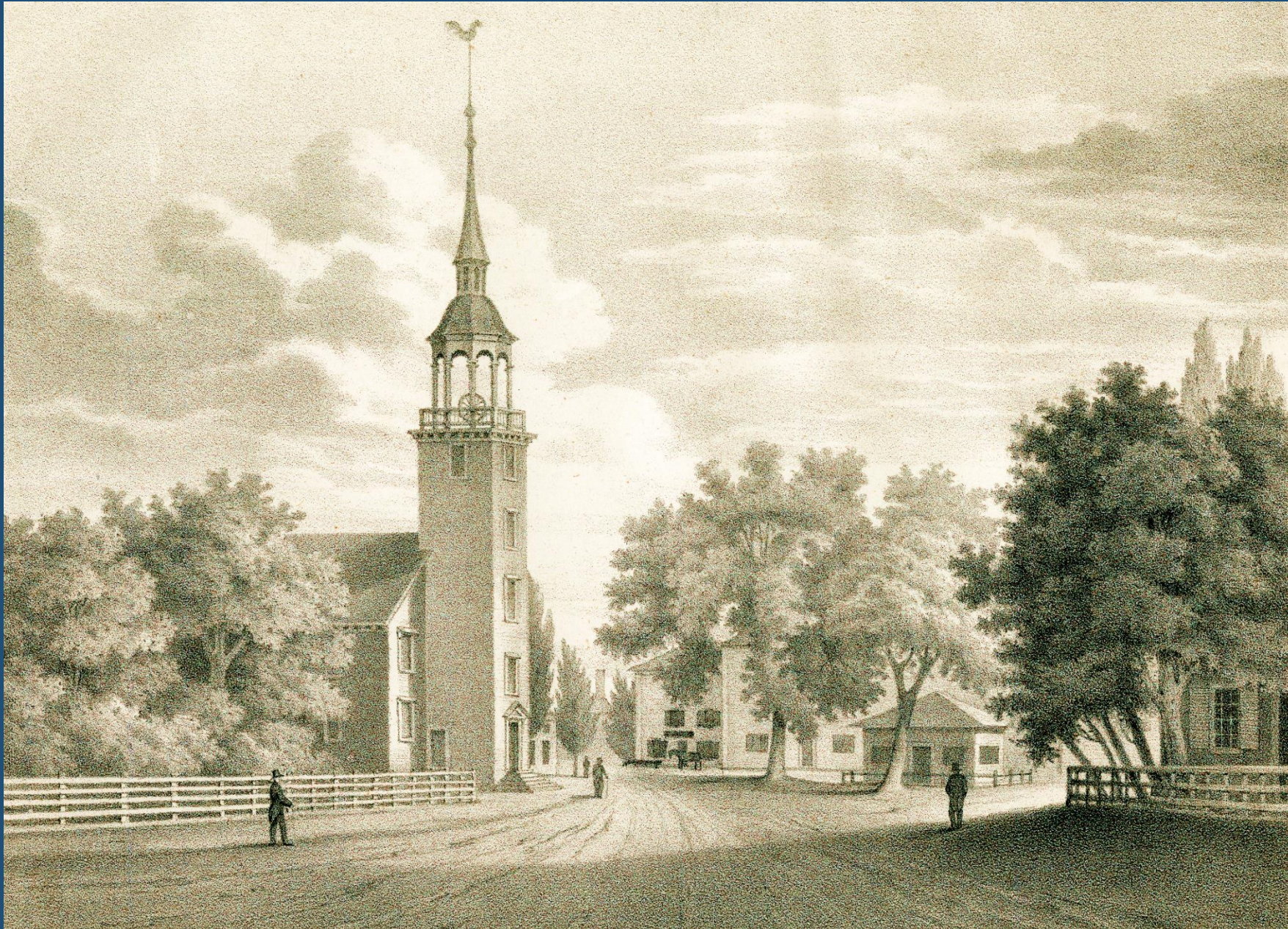
Old Cambridge
circled



The Old Hovey Tavern, Cambridgeport, ca. 1825



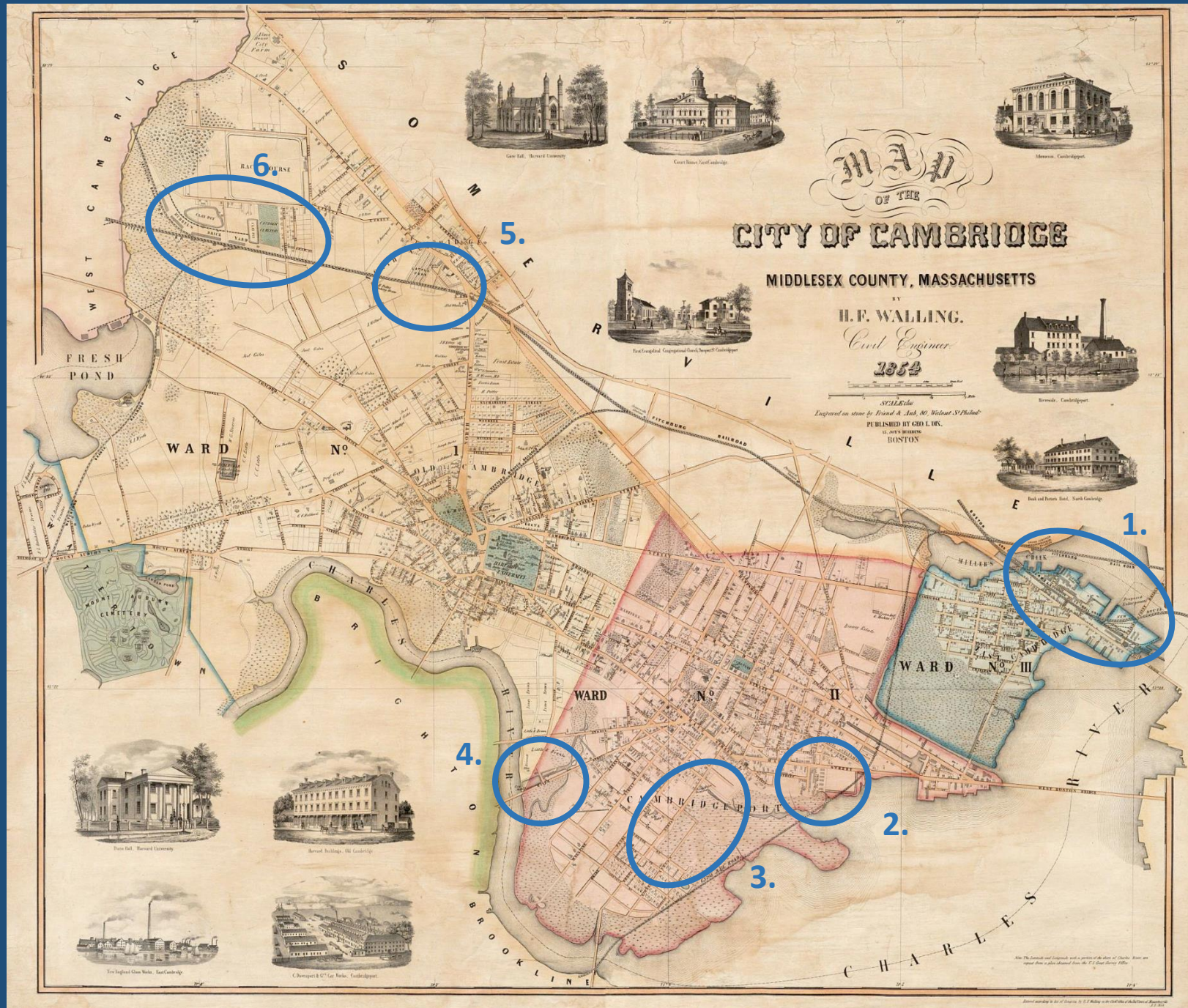
New England Glass Works, North Street, East Cambridge, ca. 1825



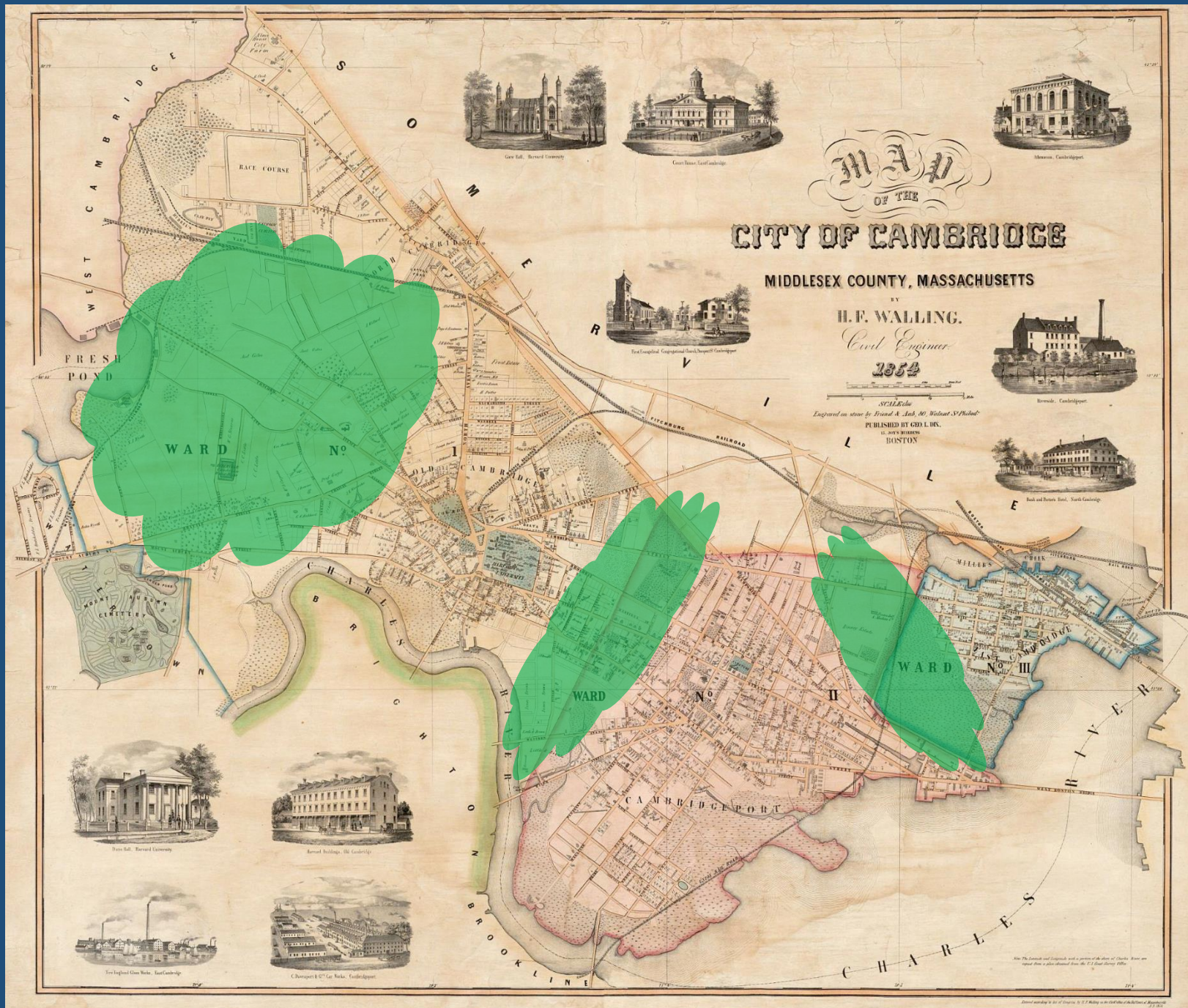
The village,
1833

Industries on the Periphery

1. Glass factories, rail yards
2. Railroad car manufacturing
3. Soap boiling
4. Printing, rope walks
5. Stockyards
6. Clay pits and brickyards



Henry F. Walling, "Map of the City of Cambridge ... Massachusetts," 1854



Open Spaces Between Villages

Henry F. Walling, "Map of the City of Cambridge ... Massachusetts," 1854



Known minority communities,
ca. 1800-1860

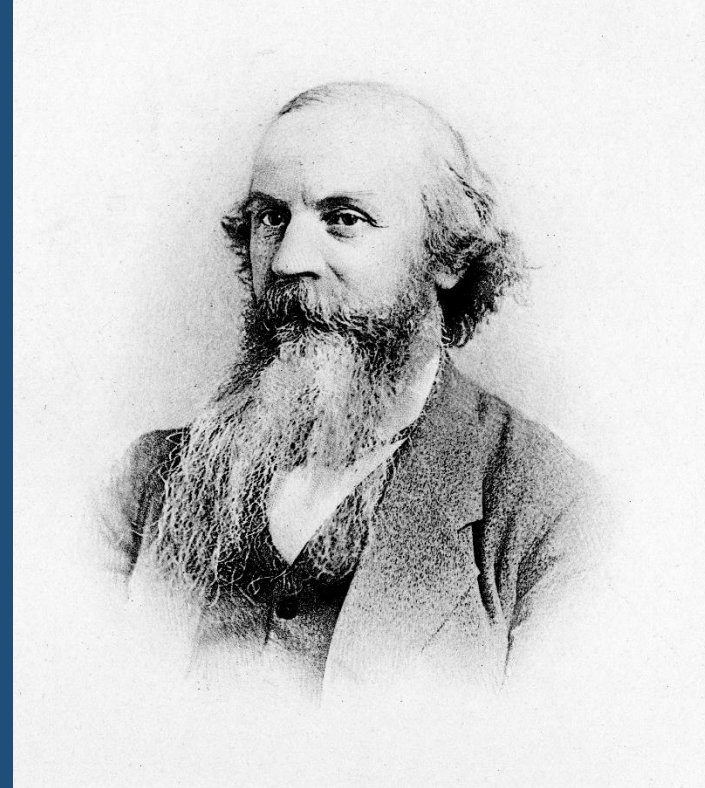
- A. Lewisville
- B. Harvard Square
- C. Harvard Hill
- D. Lower Port

Henry F. Walling,
"Map of the City of Cambridge ...
Massachusetts," 1854

Instruments of Change



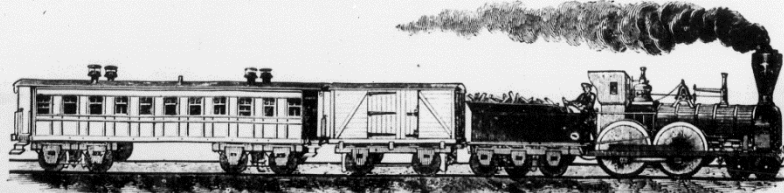
Gardiner Greene Hubbard (1822–1897)



Dr. Estes Howe (1814–1887)

HARVARD BRANCH RAILROAD.

FOR CAMBRIDGE COLLEGES.



ON AND AFTER MONDAY, JAN. 5, 1852,

TRAINS WILL RUN AS FOLLOWS:

**LEAVE CAMBRIDGE,
NEAR THE COLLEGES,**

7.30 A. M.
8.30 “
10.15 “
1.40 P. M.
3.30 “
4.25 “
6.30 “
7.10 “

**LEAVE BOSTON,
AT THE FITCHBURG STATION,**

8.00 A. M.
9.30 “
12.45 P. M.
2.15 “
3.50 “
5.30 “
6.50 “
11.15 “

✂ * Except on Saturdays, when it will leave at 10 P. M.

NEW ARRANGEMENT.

Season Tickets, \$6 per quarter. Package Tickets, ten for a dollar, will convey passengers from and to Cambridge to Dover Street, or to the New South Boston Bridge, by the Dover street Omnibus and the South Boston Omnibus, which leave the Fitchburg Station on the arrival of each train.

Tickets to and from Cambridge to Fitchburg Station at fifty cents for a package of seven. Single Tickets ten cents, for cars only. For sale at the Railroad Stations, and by Charles Stimpson, 105 Washington street, Boston.


Passengers taken to and from the Station in Cambridge to any distance now run by the Cambridge Omnibuses in the First Ward, for three cents. Order slate, at Wood & Hall's and at the Station.

The office in Boston is in the Lowell Ticket Office, Scolley's Buildings, Court street. Passengers called for at this Office.

PRINTED AT THE CAMBRIDGE CHRONICLE OFFICE.

Harvard Branch Railroad, 1849-54

HARVARD BRANCH RAILROAD.
FOR CAMBRIDGE



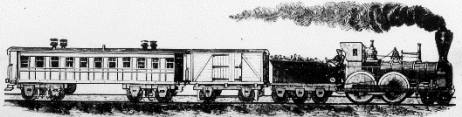
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Cambridge Omnibuses in the First Ward, for 5
and at the Station.
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Cambridge Gas Co., established 1852; gasholder at the foot of Ash Street

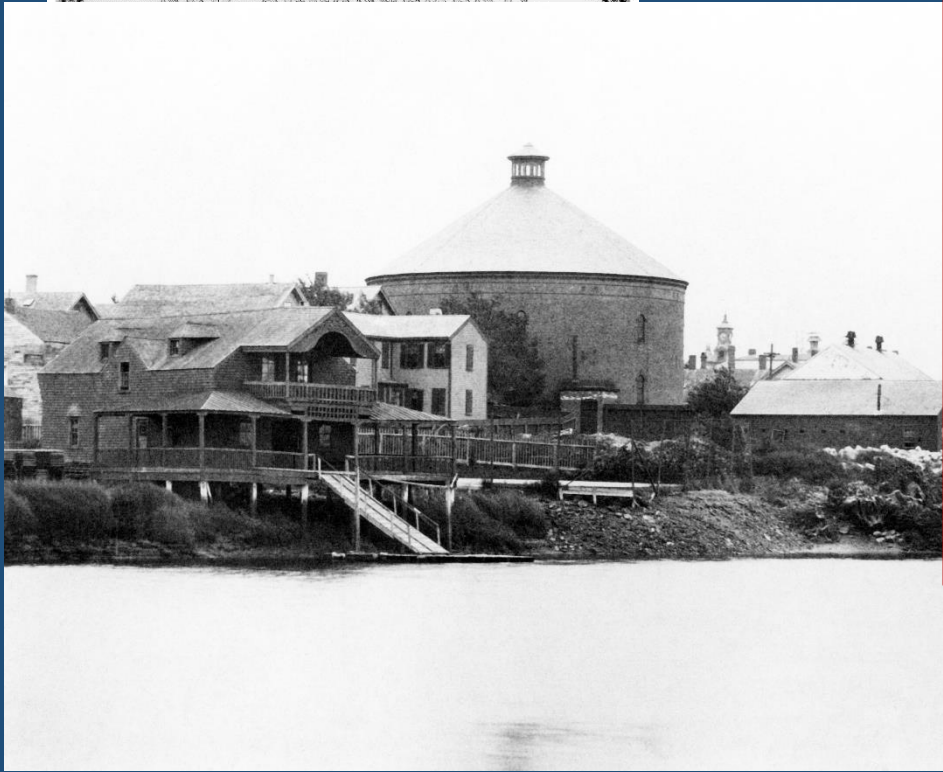
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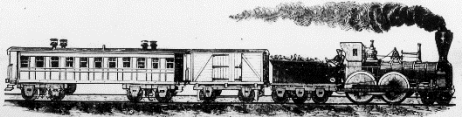
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Cambridge Water Works, established 1852
Standpipe on Reservoir Hill

HARVARD BRANCH RAILROAD.

FOR CAMBRIDGE COLLEGES.



ON AND AFTER MONDAY, JAN. 5, 1852,

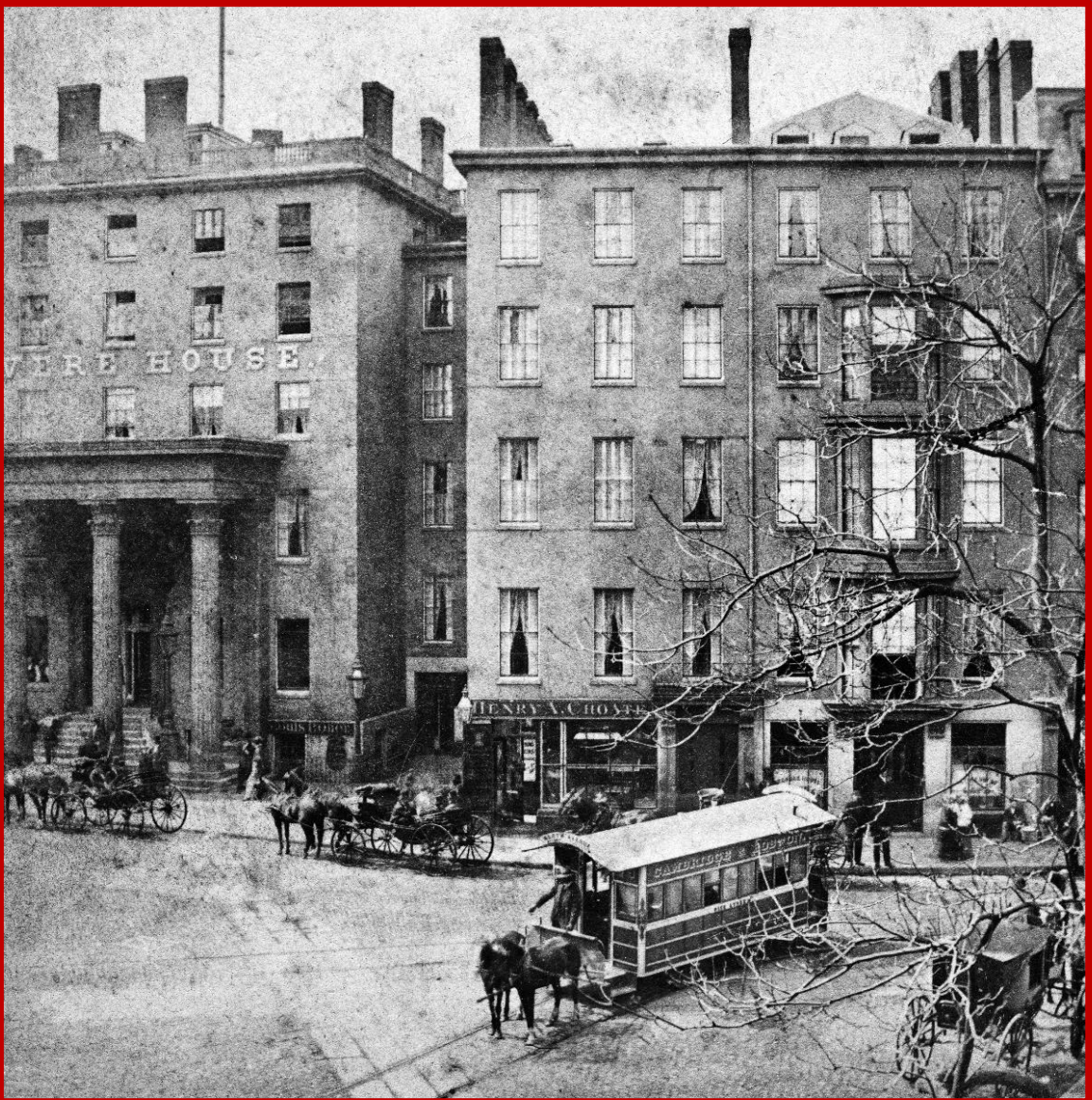
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Cambridge Railroad, established 1854
Boston terminal, Bowdoin Square



J.G. Chase, Rail Road Map of Boston, 1865



**CITY OF
CAMBRIDGE
MASS.
1877.**

- REFERENCES.**
- 1. City Hall, Mass. State
 - 2. Trinity Church, Mass. State
 - 3. First Church (Presbyterian) South of Main St.
 - 4. First Church (Congregational) Center Street
 - 5. First Baptist Church, West Cambridge
 - 6. First Methodist Church, West Cambridge
 - 7. First Episcopal Church, West Cambridge
 - 8. First Unitarian Church, West Cambridge
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Bird's Eye View of Cambridge, 1877

Motivation for Public Regulation of the Built Environment

Fire Safety

Major conflagrations in North American cities:

1866 Portland, Maine

1871 Chicago, Illinois

1872 Boston, Mass.

1874 Chicago, again

1877 St. John, N.B.

1889 Lynn, Mass

Fire Safety



19 and 21 Howard Street, 1895

Fire Safety



Second Chelsea Fire, Oct. 14, 1973. 200 buildings destroyed and 1,100 left homeless

Motivation for Public Regulation of the Built Environment

Public Health

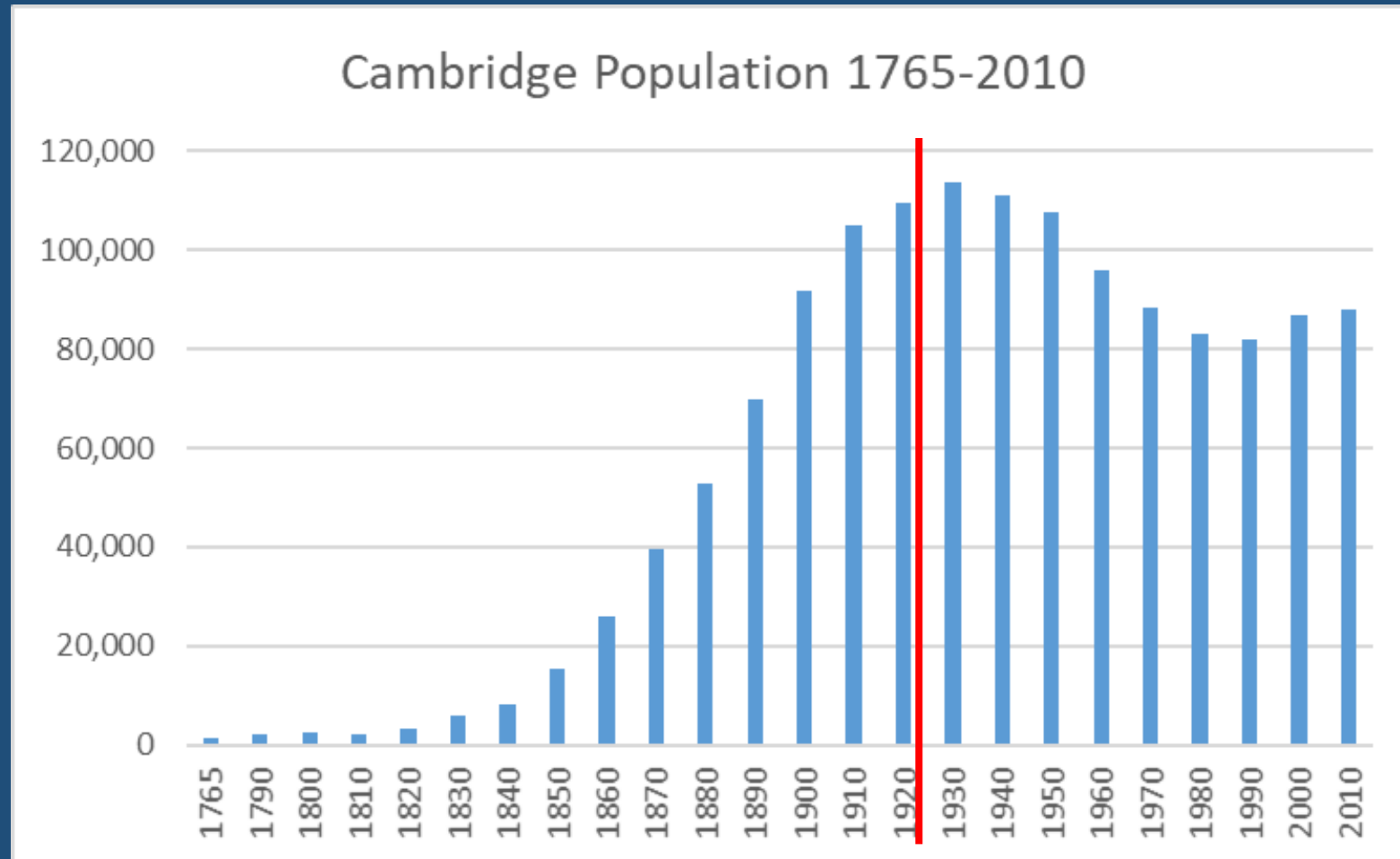
Outbreaks of Communicable Disease in Cambridge:

| | |
|-----------|---------------|
| 1872-73 | Smallpox |
| 1885-1940 | Tuberculosis |
| 1888-1910 | Typhoid |
| 1890-1904 | Malaria |
| 1893-1910 | Scarlet fever |
| 1893-1910 | Measles |
| 1894-95 | Diphtheria |
| 1901-02 | Smallpox |
| 1918-19 | Influenza |

Source: Cambridge Health Department reports and frequency of references in Cambridge newspapers

Motivation for Public Regulation of the Built Environment

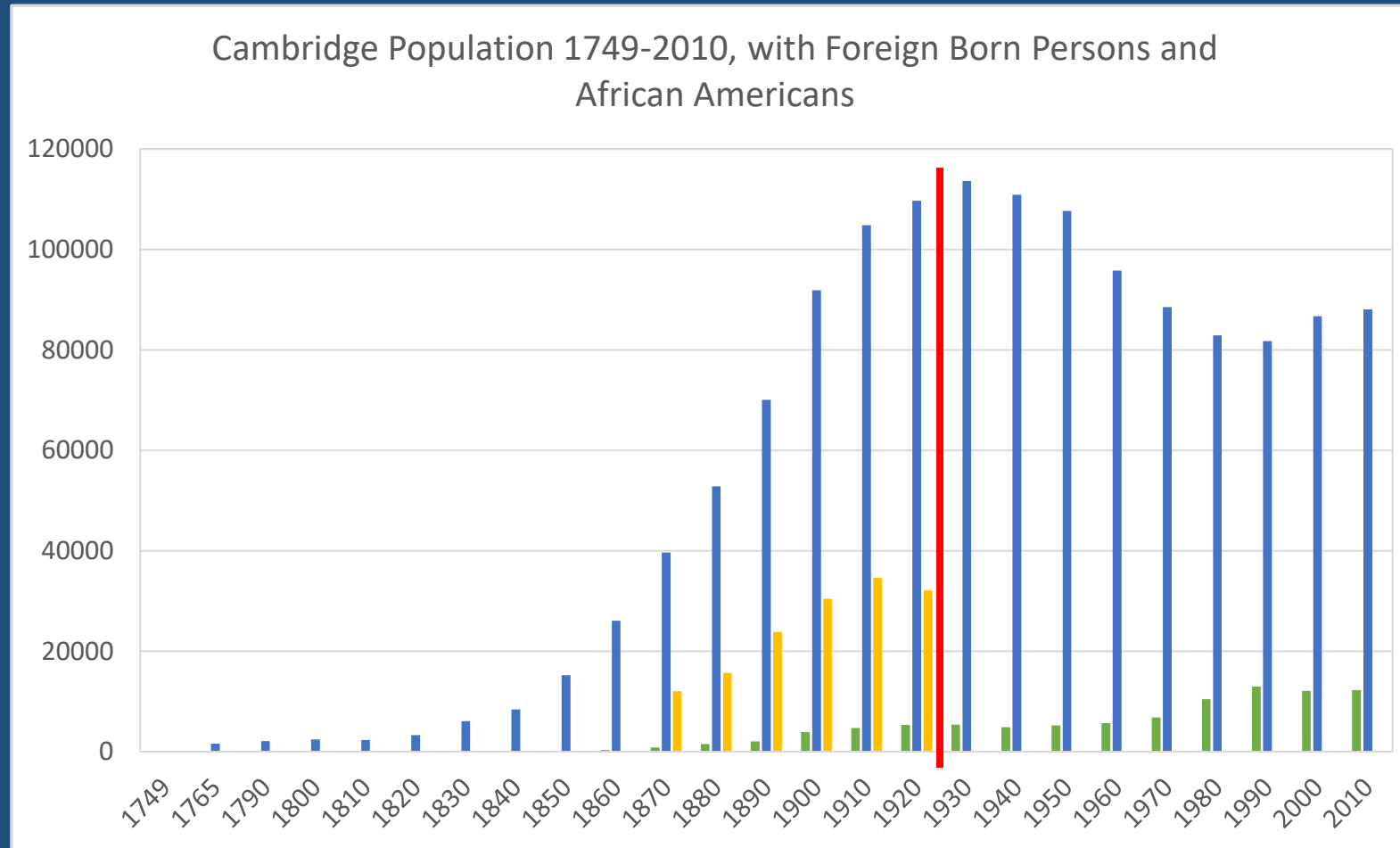
Population Growth



Red Line = Adoption of Zoning, 1923
Persons in group quarters (students) excluded

Motivation for Public Regulation of the Built Environment

Population Growth



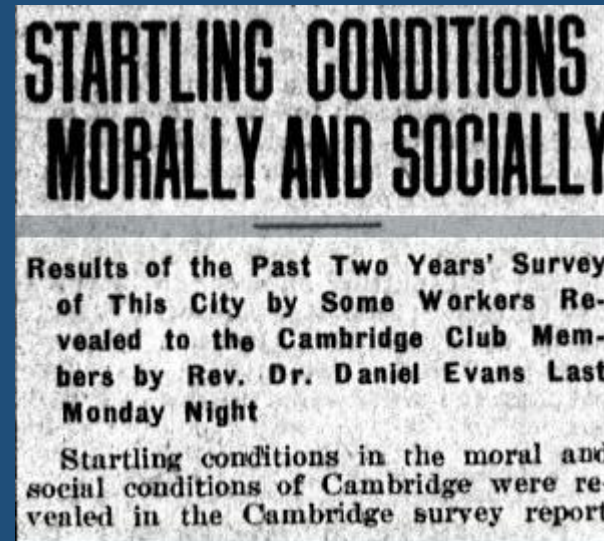
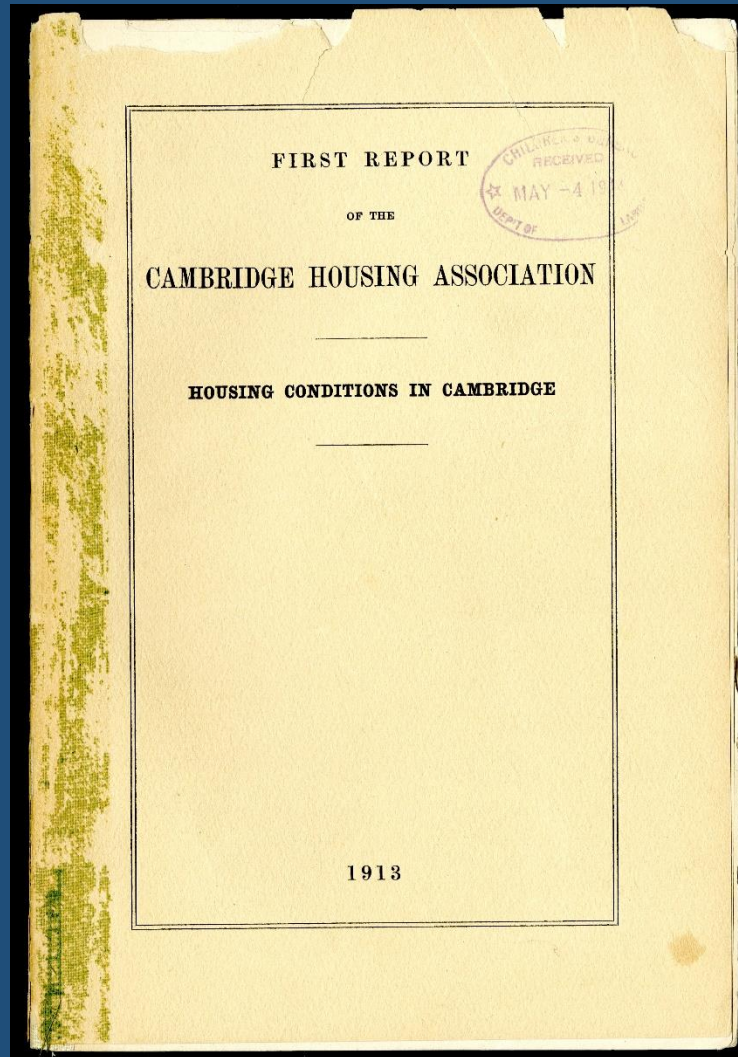
Blue=total population

Orange= Foreign Born

Green=African Americans

Motivation for Public Regulation of the Built Environment

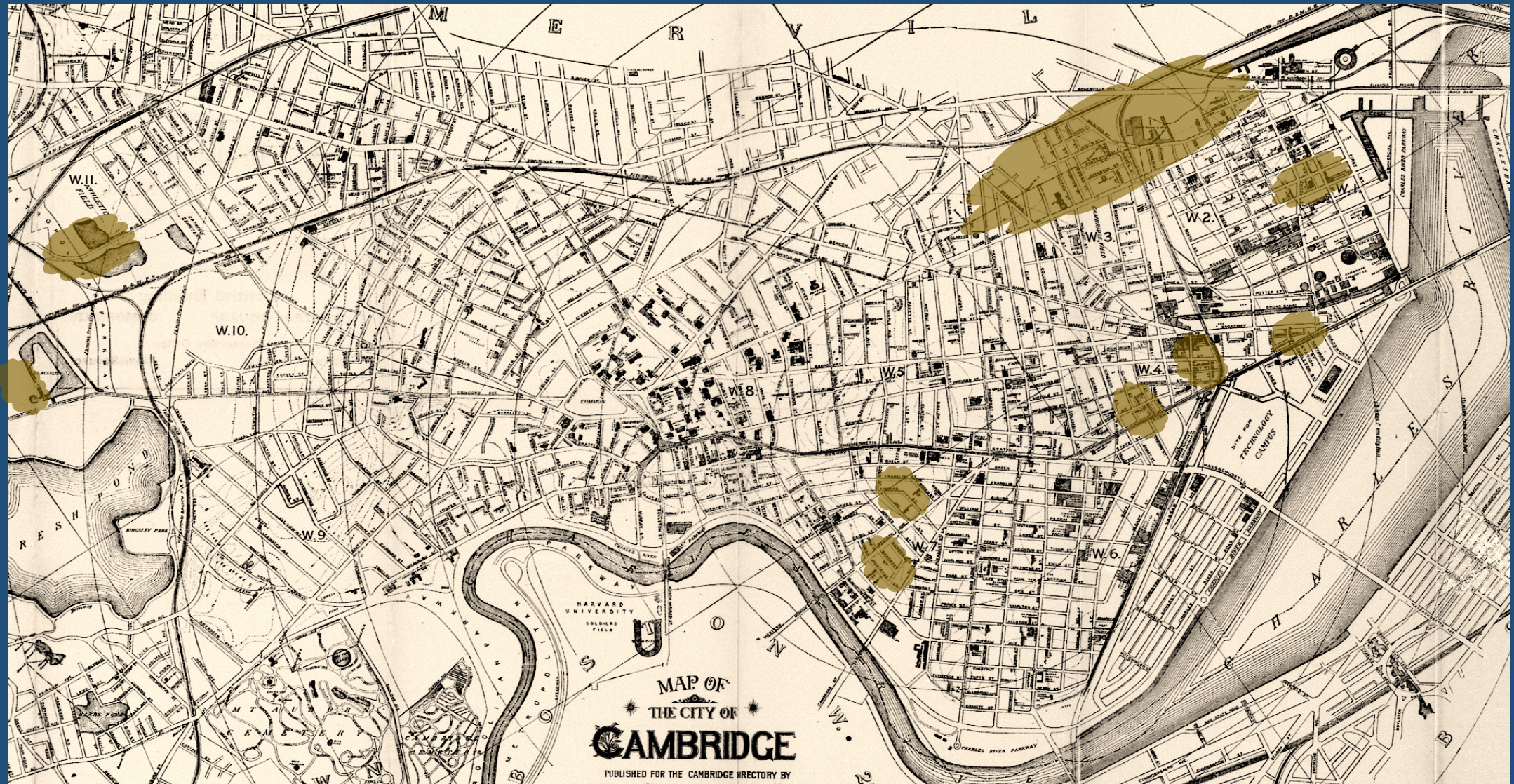
Deteriorating Social Conditions



Cambridge Chronicle, Nov. 21, 1914

Motivation for Public Regulation of the Built Environment

Deteriorating Social Conditions



Slum Conditions Identified in the Cambridge Housing Association Report, 1913

Motivation for Public Regulation of the Built Environment

Deteriorating Social Conditions



35-37 (1855) and 41 Clark Street (1868); razed 1937. Photo 1901.

Motivation for Public Regulation of the Built Environment

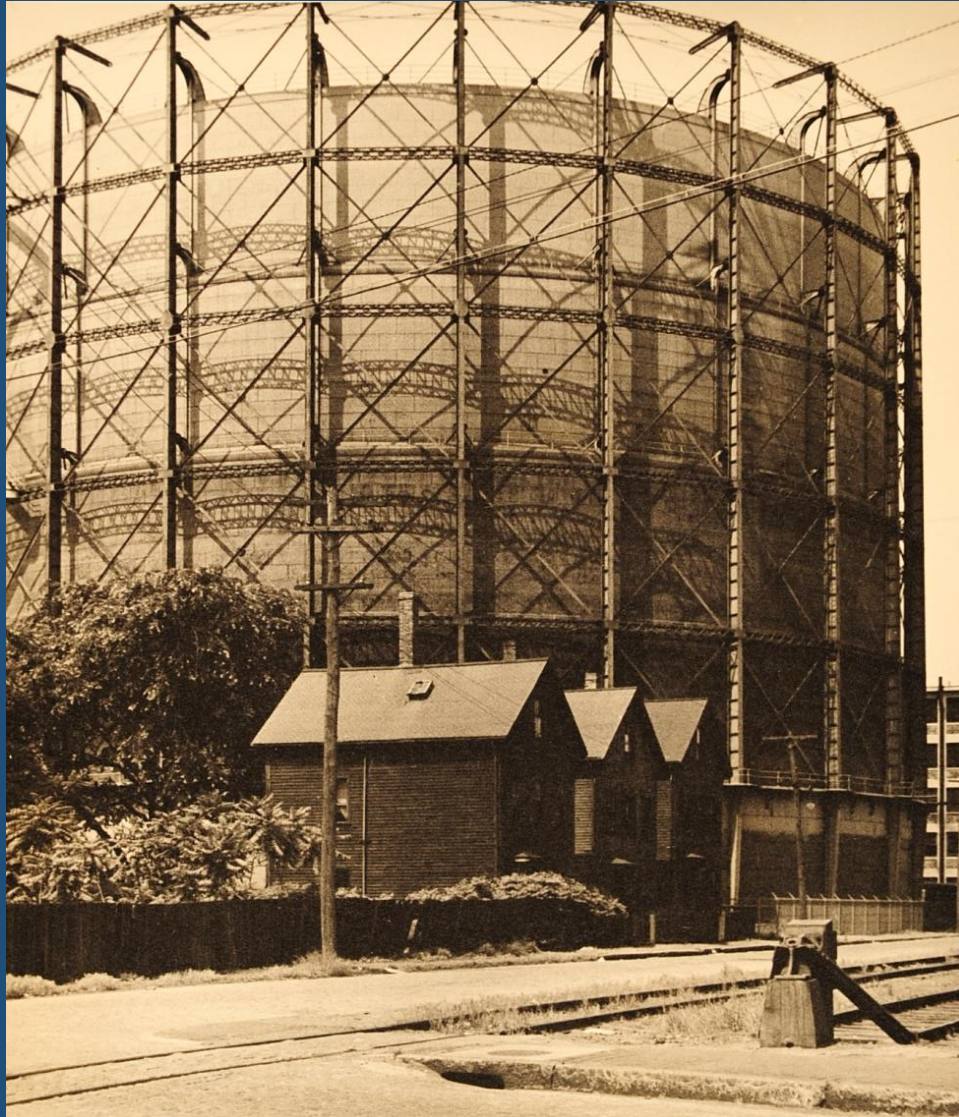
Incompatible Uses



Industrial Corridor between East Cambridge and Donnelly Field, 1957

Motivation for Public Regulation of the Built Environment

Incompatible Uses



Gasholder, cor. Third and Rogers Streets
Photo ca. 1940

Motivation for Public Regulation of the Built Environment

Incompatible Uses



Fleischmann Yeast Co. Building, 100 Inman Street (1917), and 102-104 Inman Street (1845)

Motivation for Public Regulation of the Built Environment

Rapid Change in Land Uses and Building Types



Massachusetts Avenue looking north from Cambridge Common about 1875

Motivation for Public Regulation of the Built Environment

Rapid Change in Land Uses and Building Types



The Montrose and The Dunvegan, 1648 and 1654 Massachusetts Avenue (1898; photo ca. 1900)

Motivation for Public Regulation of the Built Environment

Rapid Change in Land Uses and Building Types



Motivation for Public Regulation of the Built Environment

Spread of Multi-Family Housing, pre- and post-zoning



Three-deckers on Chilton and Standish streets 1911-1924

Two-family houses on Lake View and Lexington Avenues, 1924-1927. Photo 1929

Implementation of Building Regulations in Cambridge Preceding the Adoption of Zoning

Status quo ante: deed restrictions governing noxious trades, prohibiting sale to or occupancy by certain individuals, establishing setbacks, requiring a minimum investment in new construction. No public regulation whatever.

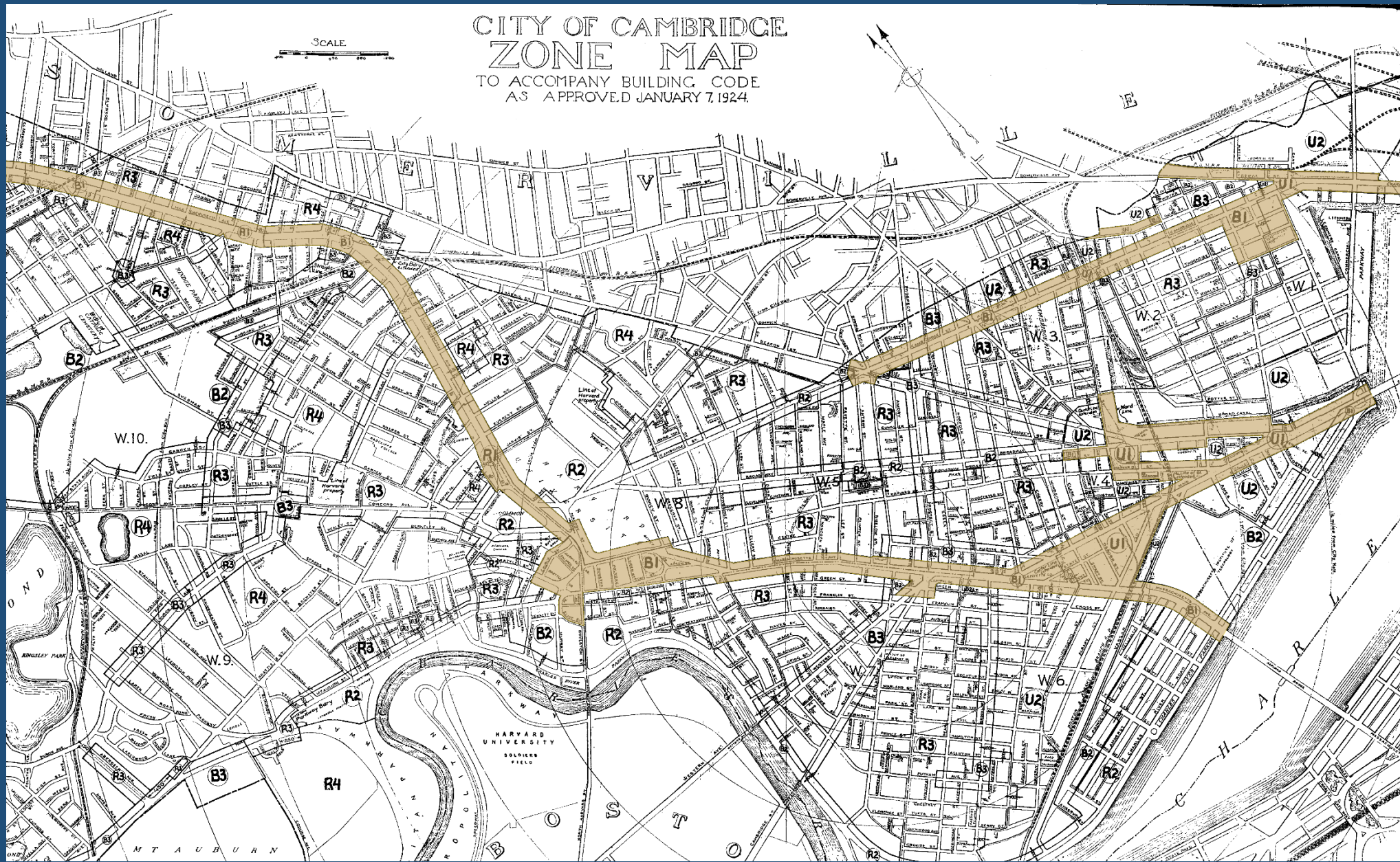
- | | |
|---------|---|
| 1863 | Preventing encroachments on public ways |
| 1877 | Regulation of chimneys, fire walls, and fire escapes for tenements, factories, places of assembly |
| 1885 | Comprehensive code covering all aspects of construction, heating, plumbing, and fire safety |
| 1894 | Buildings limited to 125' high citywide; fireproof construction required along major thoroughfares |
| 1895-97 | Wooden buildings restricted to 3 stories; multiple means of egress required; ceilings in tenements to be at least 8' high |
| 1908 | Building heights limited to 2½ times the width of the street; yard requirements for tenements |

Regulation of Tenements (and Three-Deckers)

- 1911-1913 Mass. General Court adopts Tenement Acts allowing cities and towns to prohibit three-deckers and regulate yards in residential districts
- 1916 Cambridge adopts Tenement Act and bans three-deckers
- 1923 Cambridge allows three-decker construction to resume; last one built in 1930

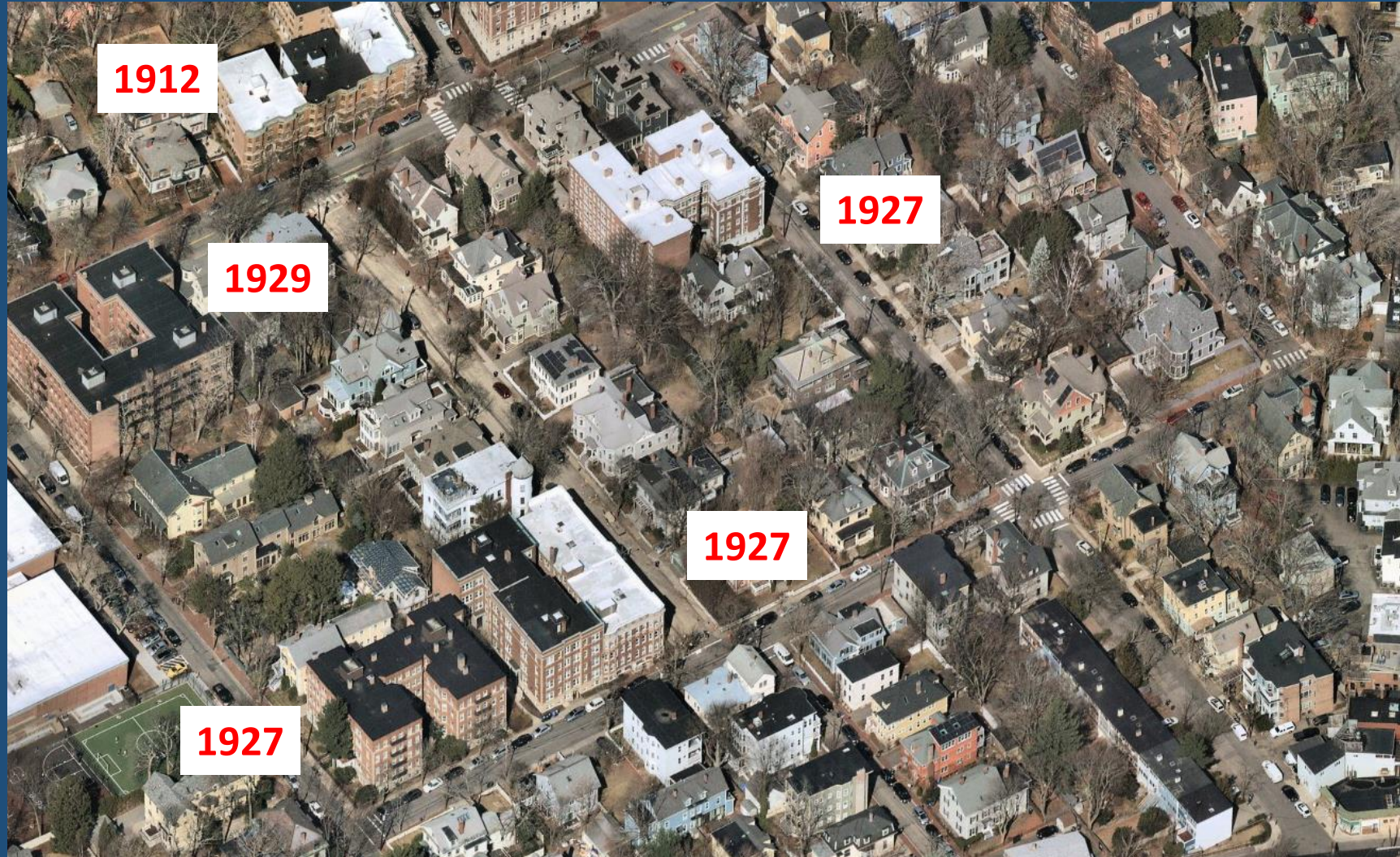
Cambridge's First Zoning Ordinance - 1924

- 1913 Cambridge Planning Board (CPB) appointed
- 1918 Constitutional amendment allowing zoning adopted by plebiscite
- 1920 Enabling legislation enacted by the General court
- 1920 CPB submits draft ordinance amending the Cambridge Building Code and extending it to regulate uses, separating industrial from residential with three use districts and four height districts; heights ranging from 40 to 80 feet
- 1924 As adopted, the height limit remained at 100' and apartment buildings were allowed in most residential districts. The Ordinance incorporated and amended the Building Code



The highest density business, residential, and unlimited-use districts (shaded) carried a 100-foot height limit

Apartment Building Construction Continues in Established Neighborhoods, 1924-1929



Avon-Linnaean-Bowdoin-Martin streets, originally built out by 1885

Cambridge's Second Zoning Ordinance - 1943

- 1940 1924 code said to be obsolete as a building code, and allow too few opportunities for residential construction.
- 1941 Proposed code would exclude certain noxious industries; reduce the size of industrial districts; increase height limits for apartment houses
- 1943 Zoning Code and Building Code adopted as separate ordinances

The 1942 Code in Action



100 Memorial Drive, 1949

Postwar Economic Decline

Construction Lags

TABLE 2.4 RESIDENTIAL CONSTRUCTION IN CAMBRIDGE, 1925-40

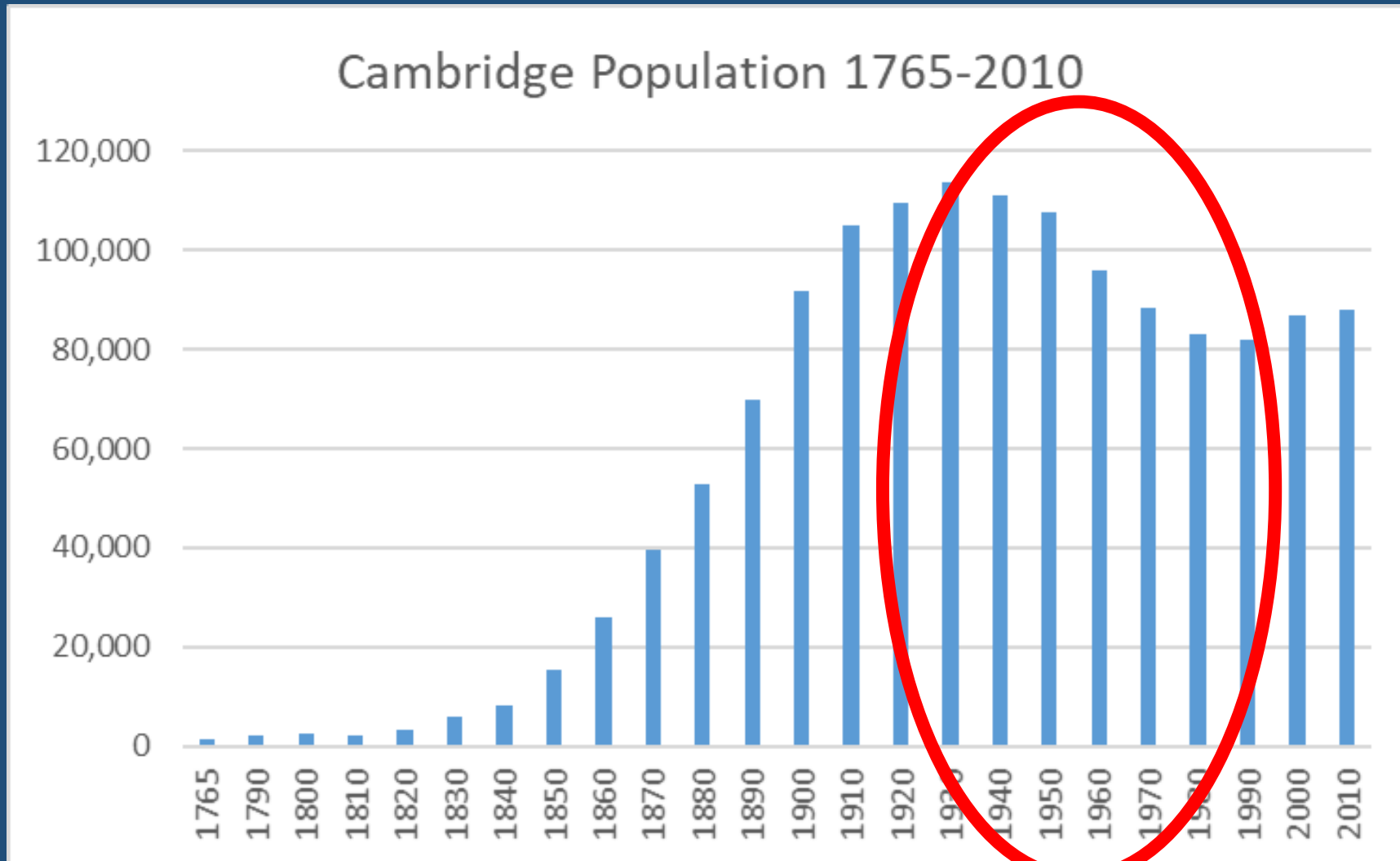
| Year | One-family Houses | Two-family Houses | Multifamily Buildings | Number of Dwelling Units | Estimated Cost* |
|------|-------------------|-------------------|-----------------------|--------------------------|-----------------|
| 1925 | 42 | 139 | 37 | 844 | \$4,620,840 |
| 1926 | 34 | 110 | 28 | 662 | \$4,063,950 |
| 1927 | 35 | 124 | 42 | 642 | \$3,046,150 |
| 1928 | 46 | 115 | 17 | 863 | \$3,681,500 |
| 1929 | 22 | 35 | 16 | 788 | \$3,698,400 |
| 1930 | 13 | 50 | 4 | 160 | \$791,143 |
| 1931 | 16 | 20 | 3 | 137 | \$674,850 |
| 1932 | 10 | 1 | 1 | 52 | \$160,000 |
| 1933 | 7 | 1 | - | 9 | \$42,000 |
| 1934 | 4 | 1 | - | 6 | \$32,800 |
| 1935 | 10 | - | - | 10 | \$73,000 |
| 1936 | 15 | - | - | 15 | \$101,500 |
| 1937 | 14 | - | 3 | 122 | \$392,750 |
| 1938 | 9 | 3 | 3 | 71 | \$245,600 |
| 1939 | 17 | - | 3 | 20 | \$114,300 |
| 1940 | 19 | 2 | 12 | 315 | \$843,600 |

*According to the Bureau of Labor Statistics CPI Inflation Calculator, \$1.00 in 1934 had the same buying power as \$17.40 in 2013.

Source: Cambridge Annual Documents, 1925-40

Postwar Economic Decline

Population Falls



Postwar Economic Decline

Neighborhoods Deteriorate



Rogers Block, 535-563 Main Street (1872), razed for Tech Square 1957. Photos 1950.

Postwar Economic Decline

Neighborhoods Deteriorate



Rogers Block, 535-563 Main Street (1872), razed for Tech Square 1957. Photos 1950.

Postwar Economic Decline

Neighborhoods Deteriorate



126 Putnam Avenue (1873), razed for Putnam Gardens 1954. Photo 1953.

Postwar Economic Decline

Neighborhoods Deteriorate



13 (center), 15, and 19 Cottage Street. Photo 1957.

Postwar Economic Decline

Neighborhoods Deteriorate



13 (center), 15, and 19 Cottage Street. Google photo 2021.
Combined Assessed Value in 2021, \$5,001,500.

Postwar Economic Decline

Tax Base Evaporates



Kendall Square, 1955

Postwar Economic Decline

Tax Base Evaporates

**Tax Rate Is \$49.80;
Up \$1.50 Over 1954**

Cambridge Chronicle, March 17, 1955

Postwar Economic Decline

Tax Base Evaporates

**Tax Rate Is \$49.80;
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Cambridge Chronicle, March 17, 1955

**Tax Rate Is \$54.60;
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Cambridge Chronicle, March 15, 1956

Postwar Economic Decline

Tax Base Evaporates

**Tax Rate Is \$49.80;
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Cambridge Chronicle, March 17, 1955

**Tax Rate Is \$59.40;
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Cambridge Chronicle, April 4, 1957

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Cambridge Chronicle, March 15, 1956

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Cambridge Chronicle, March 15, 1956

**Tax Rate Set at \$61.80
Up \$2.40 Over 1957 Rate**

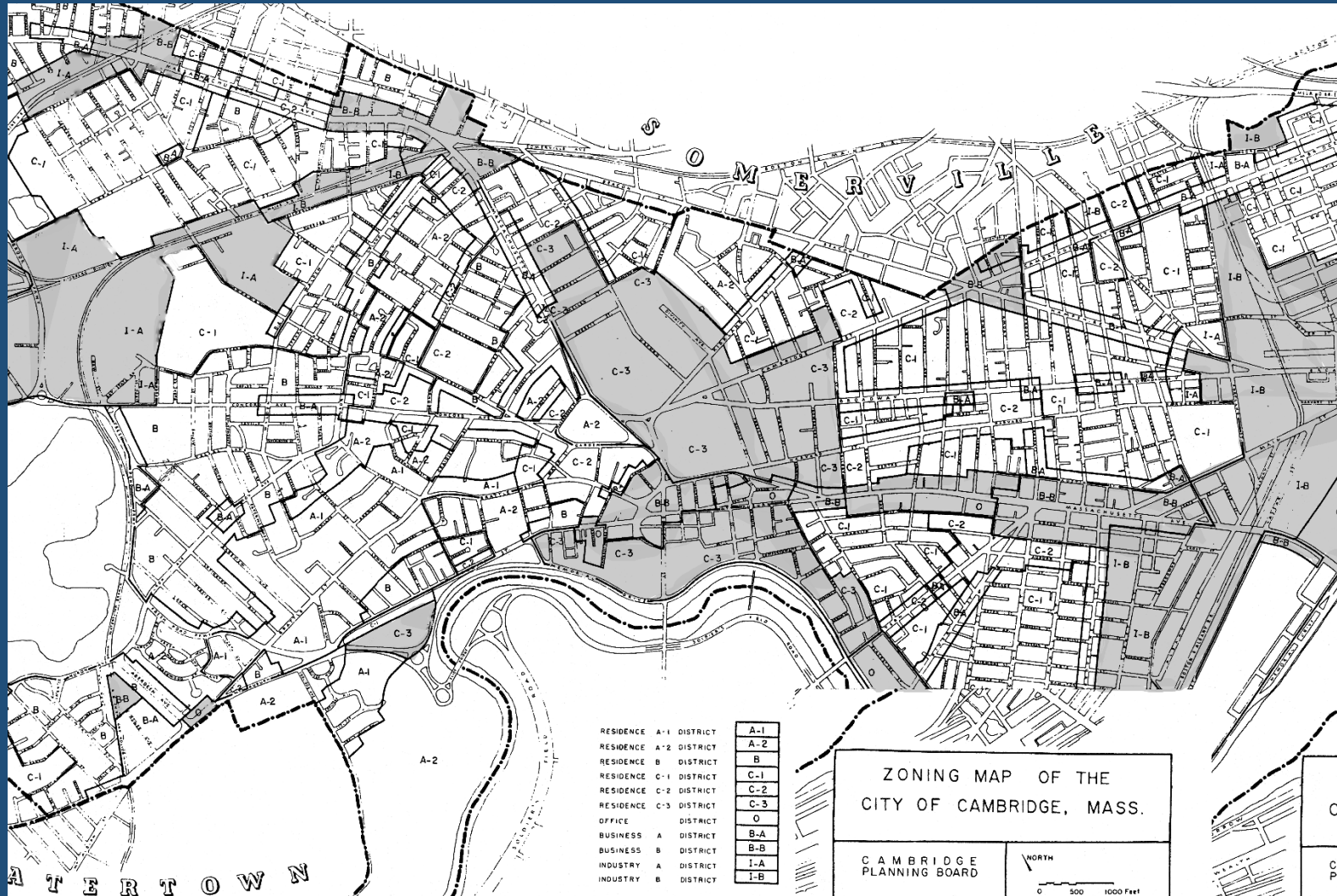
Cambridge Chronicle, Feb. 13, 1958

Cambridge's Third Zoning Ordinance - 1961

1958 Harvard Planner Josep Lluís Sert appointed to CPB; elected chair

1961 The new code adopted Modernist design principles, encouraging superblocks on plazas and isolated towers. It introduced new dimensional requirements, including setbacks, minimum lot sizes, and the bulk calculation known as the Floor-Area Ratio (FAR) that tied building volumes to lot sizes. The new code abolished height limits around MIT and Alewife, in Central Square, in Harvard Square, and on most of the Harvard campus, as well as in the Agassiz, Observatory Hill, and Riverside neighborhoods where the university was actively expanding.

1961 Zoning Map



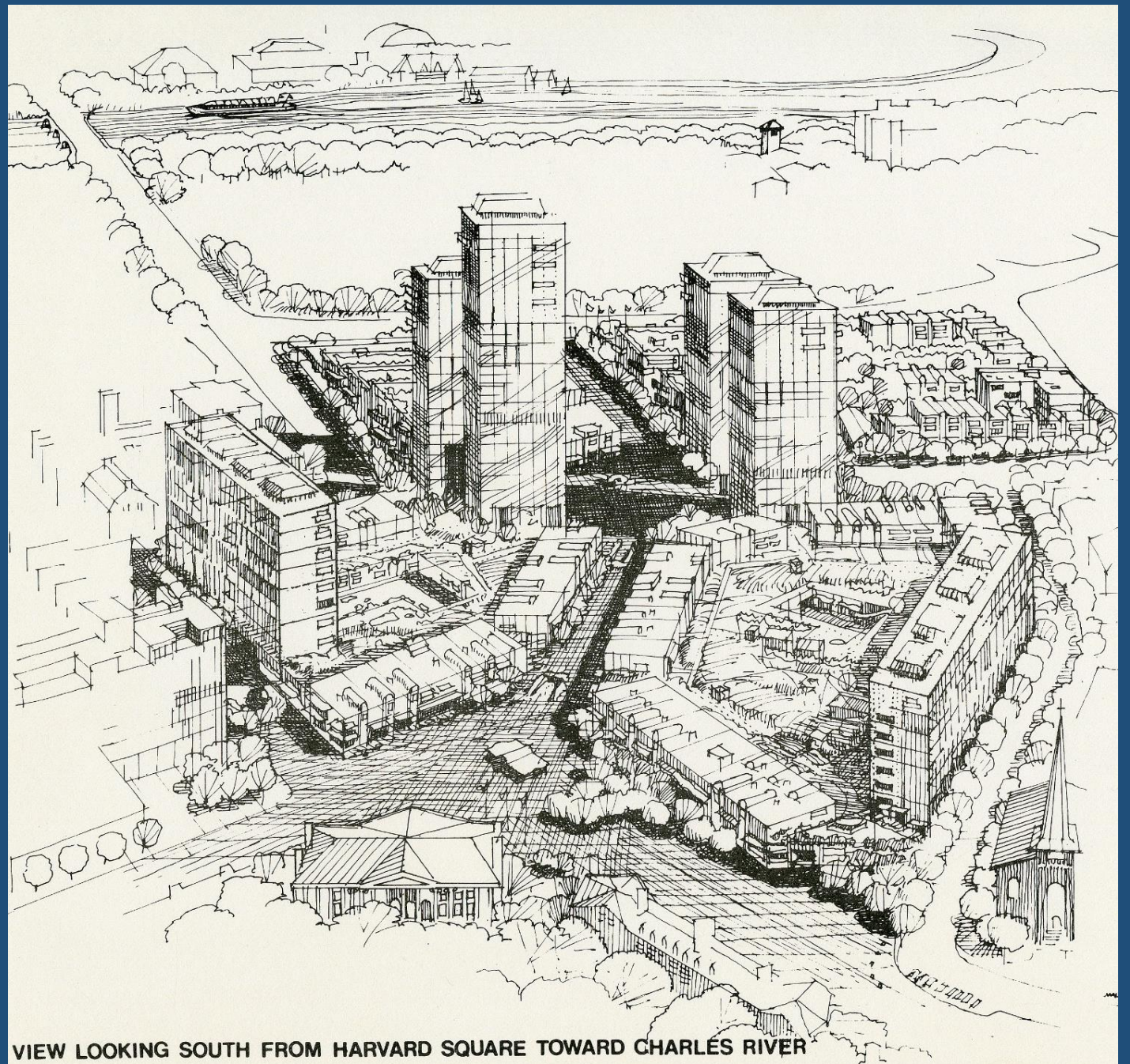
The zoning code that took effect in 1962 abolished height limits in the shaded areas. Holyoke Center (1960), William James Hall (1963), Peabody Terrace (1963), and Mather House (1967) conformed to the new code. By 2009 many C-1 neighborhoods had been downzoned; heights were capped at 85 feet in older, settled areas, and 120 feet on the periphery of the city.

The 1961 Code in Action



Peabody Terrace (1963 and Mather House (1967)

Cambridge Redevelopment Authority
proposal for redevelopment
of Harvard Square, 1968
(Okamoto/Liskamm, architects)



VIEW LOOKING SOUTH FROM HARVARD SQUARE TOWARD CHARLES RIVER

The 1961 Code in Action



Inman Square Apartments (1972)

The 1961 Code in Action



Rindge Towers (1970-72)

The 1961 Code in Action



5 Centre Street (1970)

The 1961 Code in Action – 1978 Townhouse Amendment



318, 320, and 324 Harvard Street (1840, 1977, 1843)
The catalyst for adoption of neighborhood conservation districts

The 1961 Code in Action – 1978 Townhouse Amendment



Harvard Street between Lee and Dana streets; post-1961 in blue, post 1978 in red

The End