



CAMBRIDGE HIGH SCI'CO .S

Catalano Report

Claims New High Schools Constructed at
No Cost to the Taxpayers - ?

Rejects Modernization & Expansion of Ridge.
Due primarily to Acquisition, Demolition
& Relocation Problems. (50 dwellings - 150 families
to meet SBAB site requirement (Assessed Value 3M)

Provides recreational facilities for
Community on the right ~~for~~ eligible
for 65% saving City 1.3M

Preserves Ridge for use as school Admin Bldg
Building + other City departments saving 3.465M?

Cost ~~24,578,400~~

26,544,672

Less 65% = 9,290,635

STEERING COMMITTEE

Marvin Gilmore, parent
Joan Pierce, parent
Sara Berman, parent
Les Wood, parent
Ruth Catavalo, parent
Barbara Armistead, parent
Robert Sweeney, headmaster
Michael Turner, headmaster
Manuel Conceison, teacher

Alflorencia Cheatham, School Supt.
Joseph Sateriale, Asst. Supt.
Richard Phelps, Director
Bert Giroux, Director
Raymond D'Arcy, consultant
Eric Miller, student
Vincent Jones, student
George Collins, Educ. Planner
Eduardo Catalano, Architect

COMMUNITY ADVISORY GROUPS

Community Schools
C.I.T.Y.
Youth Program
Just-A-Start
Early Childhood Development
League of Women Voters
P.A.C.E.
A.D.A.
Achievement Program
Y.M.C.A.

Teachers for Better Schools
Year Around Schools
Cable T.V.
Chamber of Commerce
Physical Education Group
Visual and Performing Arts
Cambridge Adult Education
Peabody School P.T.A.
Fitzgerald School P.T.A.
Kennedy School P.T.A.

SUMMARY OF THE SUMMARY

1. With new programs made possible by the construction of adequate facilities the City will be reimbursed yearly in an amount which will finance the construction of the new High Schools at no cost to the taxpayers.
2. Building the Schools in St. Peter's Field provides the most comprehensive educational and community development and the most economical proposal to the City.
3. Construction can start a year from now - for completion of the Schools in August of 1977.
4. An educational program is ready for submission to the State upon receiving directives from the School Committee.

B A C K G R O U N D

In January of 1974 the City Council, at the request of the School Committee, voted funds for the completion of studies on the New High Schools.

The School Department, the Architect and the Educational Planner organized a Steering Committee composed of community leaders - parents, school administrators, teachers, students and members of various community interest groups - as a permanent body to provide guidance in formulating an educational program, selection of a site, design and construction of the High Schools and their effect on taxes in the City.

P R O P O S A L

AS THE RESULT OF A STUDY OF THE VARIOUS ALTERNATIVES AVAILABLE, IT IS RECOMMENDED THAT THE NEW HIGH SCHOOLS BE BUILT ON THE SITE KNOWN AS ST. PETER'S FIELD - COMBINED WITH CITY RECREATIONAL FACILITIES WHICH HAVE BEEN PROPOSED BY THE CITY PLANNING DEPARTMENT.

This proposal is by far the most comprehensive and economical of all the studies made:

- a. Modernization and expansion of Rindge as a single comprehensive school within the present and expanded site.
- b. New schools within the present and expanded site.
- c. New schools - Fresh Pond site.
- d. New schools - Kendall Square site.
- e. New schools - St. Peter's Field site.

WHY THIS PROPOSAL IS THE MOST COMPREHENSIVE AND ECONOMICAL

1. IT PROVIDES INCREASED BENEFITS TO CITY AT NO COST TO TAXPAYERS
The educational program developed, by complying with all the statutory requirements for Assistance Grants from the State Department of Education, makes the City eligible to receive an annual reimbursement by the State in the amount of \$571,000.

This annual reimbursement, which cannot be received under the present conditions will finance the construction of the High Schools at no cost to the taxpayer or to a maximum cost of about 6 cents per \$1,000 over a 20-year bond period.

5. IT PRESERVES RINDGE AS A BUILDING, SAVING \$3,465,000

This proposal avoids the demolition of Rindge which is inflexible and obsolete for educational uses and provides no open spaces for the school population but which can be well adapted to house other less special educational needs as well as scattered Municipal departments and agencies, thus freeing land and buildings which can be sold for additional revenue to the City.

6. IT SAVES \$3,000,000 BY NOT REQUIRING LAND ACQUISITION

To be eligible for a State Grant the present site would have to be increased by 6 acres of contiguous land, at a present City assessment of \$3,000,000. This would require the demolition of 50 dwellings and the displacement of 150 families. The site selected does not require additional land and will offer 44 acres of recreational fields versus 6 of the expanded present site.

7. IT REPRESENTS THE LOWEST COST TO THE CITY

	COST OF PROJECT TO CITY	TRUE COST TO CITY*
THIS PROPOSAL	\$ 9,290,635.20	\$ 9,290,635.20
STUDY A - Modernization and expansion of Rindge	\$ 9,617,260.44	\$14,382,260.44
STUDY B - New schools on present site, expanded	\$11,334,900.00	\$16,099,900.00
STUDY D - New schools in Fresh Pond	\$ 8,664,132.00	\$ 9,964,132.00

* True cost to City includes cost of developing the city dump for recreational use and the value of Rindge for other uses, to make the four studies comparable.

For complete details on costs, see chart included.

8. IT AVOIDS DOUBLE SESSIONS AND HAZARDS

The proposal avoids double sessions during 2½ years of construction thus eliminating hazards to students and the cancellation of programs, as Rindge has no duplicate shop facilities to allow classes and modernization work to take place simultaneously

9. IT RECLAIMS DROP-OUTS AND BRINGS NEW RESOURCES TO THE CITY

By means of the new programs and a more responsive environment, this proposal will greatly reduce the number of drop-out students and will produce more skillful citizens who will bring new economic resources to the City.

ON THE SITE AND ITS SOIL CHARACTERISTICS

There has always been concern about the construction of buildings on land fill because of:

- a. Extra foundation costs
- b. Methane gas hazards

During the last decades more land fills have been developed for different uses - such as housing, schools, recreation buildings and offices.

This proposal has considered all the problems related to such conditions, including the construction schedule which can start a year from now.

GENERAL COMMENTS

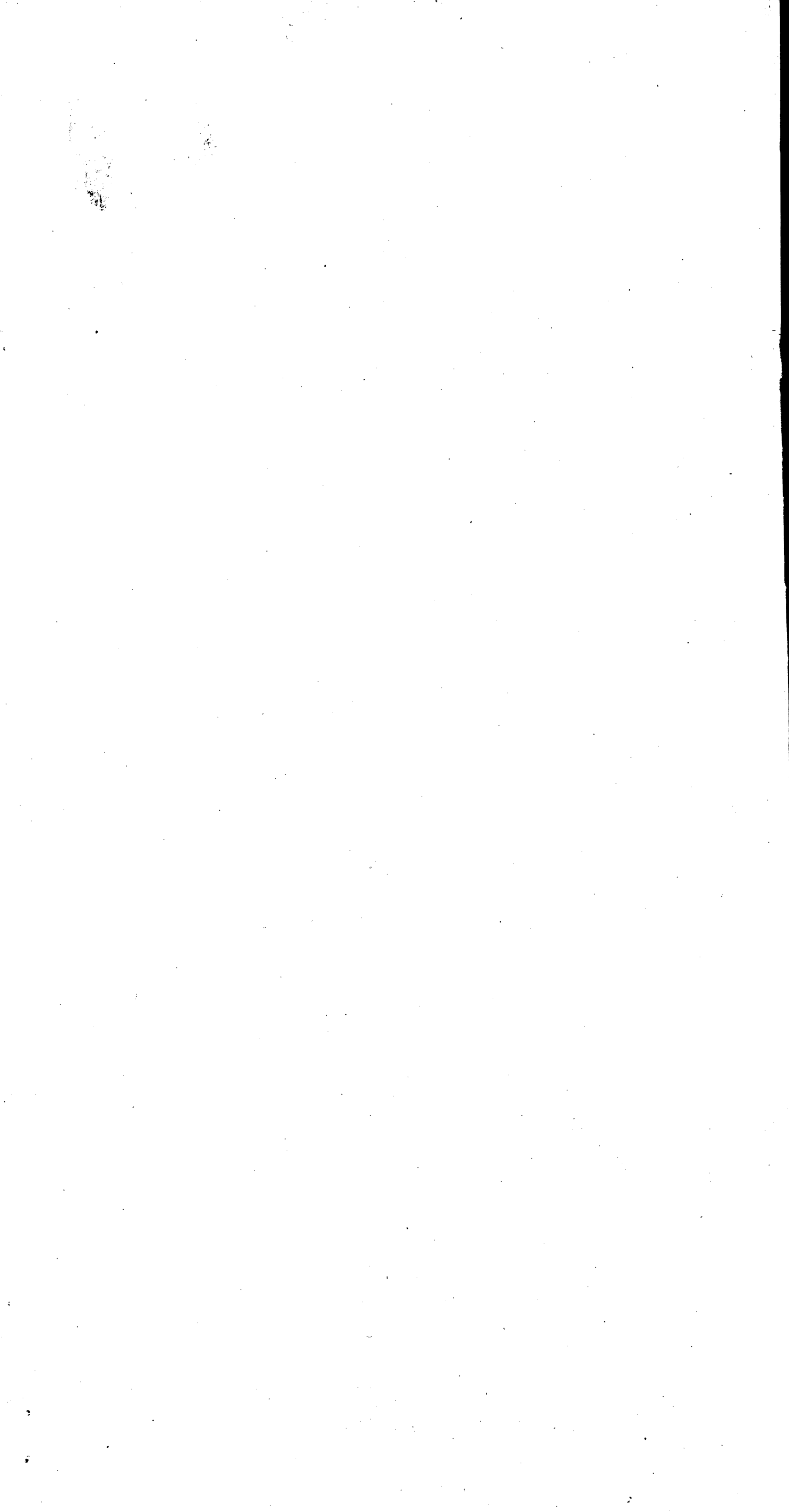
1. The proposed site has soil conditions which require special foundations and preloading procedures. Additional expenses above normal have been included in the total cost of the project.
2. Construction could start immediately because the buildings need to be built on piles, without depending on preloading procedures which will be required for athletic fields and for parking areas only.
3. Preloading of those areas, which the City is gradually performing, can be completed within a year. This overlaps the time needed to design and bid the Schools.
4. Two years of preloading are required to achieve adequate compaction of the athletic fields. This time is shorter than the 2½ years required for the construction schedule. The Schools can be in operation, with a fully developed site, in September of 1977.
5. All technical information of soil characteristics of the site, technical solutions and cost, are available. The City, in 1971, commissioned Haley and Aldrich, Cambridge Soil and Foundation Engineers to perform studies of the site. Excerpts from a letter from Dr. Aldrich follow:
In our opinion it is technically feasible to develop the St. Peter's Field site extended into the land fill for the School complex provided certain design criteria are met.
 - a. *Pile foundations for the buildings.*
 - b. *A methane gas collection system below the buildings to prevent the concentration of gas in explosive quantities, once the structures are built. Various*

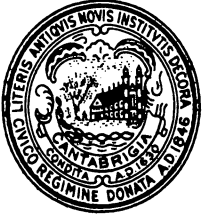
methane control systems have been successfully employed in past developments. See Volume II, Section 5-04B of Haley and Aldrich Report to the City of Cambridge.

c. Examples of buildings on refuse filled land of which we have first hand knowledge are:

1. University of Massachusetts - Columbia Point
2. New Bedford High School - New Bedford, Mass.
3. Proposed Housing for the Elderly - Arlington, Mass.
4. Watertown Skating Arena - Watertown, Mass.
5. Avco Building - Everett, Mass.

COMPARATIVE COST STUDIES - FOR BUILDINGS & SITES				
	STUDY A	STUDY B	STUDY C	STUDY D
	Modernization and Expansion of Rindge War Memorial	New Schools on present site War Memorial	New Schools in Saint Peter's Field - full Physical Education	New Schools in Fresh Pond - Minimum Athletic Fields
Construction cost: modernization, furnishings & equipment	231,062 sf @ \$30.00 \$ 6,931,860.00	-	-	-
Construction cost: new buildings/exp. - furn. & equipment	132,940 sf @ \$48.00 \$ 6,381,120.00	364,000 sf @ \$48.00 \$17,472,000.00	364,000 sf @ \$48.00 \$17,472,000.00	364,000 sf @ \$48.00 \$17,472,000.00
School Department - Administration	21,000 sf @ \$48.00 \$ 1,008,000.00	21,000 sf @ \$48.00 \$ 1,008,000.00	21,000 sf @ \$20.00 Rindge * \$420,000.00	21,000 sf @ \$20.00 Rindge \$420,000.00
Field House	27,000 sf @ \$35.00 \$ 945,000.00	27,000 sf @ \$35.00 \$ 945,000.00	71,500 sf @ \$40.00 \$ 2,860,000.00	71,500 sf @ \$40.00 \$ 2,860,000.00
Extra foundation cost	-	-	436,000 sf @ \$ 3.10 \$ 1,351,600.00	436,000 sf @ \$ 2.90 \$ 1,264,400.00
Membrane protection cost	-	-	196,000 sf @ \$ 2.50 \$ 490,000.00	-
Parking	200 cars - garage \$ 700,000.00	200 cars - garage \$ 700,000.00	500 cars - on grade \$ 64,800.00	300 cars \$ 50,000.00
Tennis Courts above parking	\$ 70,000.00	\$ 70,000.00	Included in fields	-
Athletic Fields - 6 acres in purchased land	\$ 260,000.00	\$ 260,000.00	-	-
Athletic Fields - 45 acres	-	-	\$ 1,700,000.00	18 acres - \$730,000.
Demolition of houses in purchased land - sidewalks	\$ 190,000.00	\$ 190,000.00	-	-
Demolition of C.H.L.S.	\$ 220,000.00	\$ 220,000.00	\$ 220,000.00	\$ 220,000.00
Demolition of Rindge	-	\$ 285,000.00	-	-
War Memorial modernization	\$ 200,000.00	\$ 200,000.00	-	-
Extra cost due to site restrictions & less efficiency 4-5%	\$ 600,000.00	\$ 700,000.00	-	-
Total construction cost	\$17,505,980.00	\$22,050,000.00	✓ \$24,578,400.00	\$22,924,400.00
Fees, contingency City exp.8%	\$ 1,400,478.40	\$ 1,764,000.00	\$ 1,966,272.00	\$ 1,841,120.00
Total building cost	\$18,906,458.40	\$23,814,000.00	\$26,544,672.00	\$24,757,520.00
Amt contributed by State 65%	\$12,289,197.96	\$15,479,100.00	\$17,254,036.80	\$16,093,388.00
Amt contributed by City 35%	\$ 6,617,260.44	\$ 8,334,900.00	\$ 9,290,635.20	\$ 8,664,132.00
Land acquisition by City 100%	\$ 3,000,000.00	\$ 3,000,000.00	-	-
COST OF PROJECT TO THE CITY	A \$ 9,617,260.44	B \$11,334,900.00	C \$ 9,290,635.20	D \$ 8,664,132.00





CITY OF CAMBRIDGE

CAMBRIDGE, MASSACHUSETTS 02139
Tel. 876-6800

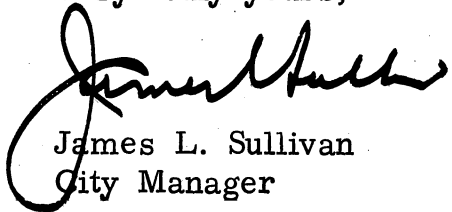
EXECUTIVE DEPARTMENT
JAMES L. SULLIVAN
City Manager

May 20, 1974

To the Honorable, the City Council:

For your information enclosed please find a summary of the report prepared by the Steering Committee and Eduardo Catalano on the proposed new high schools.

Very truly yours,



James L. Sullivan
City Manager

JLS/b

Agenda # 4

309

Report on the proposed new high schools.

In City Council

May 20, 1974

Placed on File