

The Commonwealth of Massachusetts Department of Education

350 Main Street, Malden, Massachusetts 02148-5023

Telephone: (781) 338-3000

December 6, 2002

Jacquelyn Mandell
441 Lowell Street
Reading, MA 01867

Re: School Building Assistance – Request for Public Records

Dear Ms. Mandell:

I am responding on behalf of the School Building Assistance Program to your request for public records regarding the building project at the High School in the Town of Reading . Upon your visit to our office on December 6, 2002 we have furnished you with the December 1 preliminary submission that you specifically requested.

After your review, we have furnished you with copies that you have selected. We are in receipt of your check # 5276 in the amount of \$ 4.60 for this service.

Information about the School Building Assistance program can be accessed on the Department of Education's web site at: http://finance1.doe.mass.edu/sbuilding/1_sbbuilding.html.

Should you have any further questions regarding the Department's response to your request for public records, feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "CMLynch".

Christine M. Lynch, Administrator
School Building Assistance
(781) 338-6520

C: Janice B. O'Keefe, Commissioner's Office

Enclosures

Reading Memorial High School Three Options to Address Educational and Physical Facilities Needs

The following pages summarize the financial, phasing and key completed project differences/attributes of the three options Flansburgh Associates has been asked to explore by the Reading School Building Committee. The charge to the Architect was to explore project approaches that would meet the Massachusetts Department of Education, School Building Assistance requirements for funding under the "Capital Project" reimbursement program.

While the lists are not exhaustive, they highlight the differences among three options each conceived to deliver, at completion, a facility to serve the high school needs of the Reading Public Schools for the foreseeable future. The primary differences among these approaches are in the development of strategies to minimize the impact of so major a construction project on the intensively used spaces of a public high school. The goal of each is to minimize the current impact while achieving the same final goal, a facility that meets all aspects of the educational program as determined by the Reading School Committee.

The financial projections are preliminary, based on square foot costs and include a contingency to acknowledge this preliminary status. Each option is designed to meet the program for a projected enrollment of 1320 students.

Flansburgh Associates, Inc.
October 2002

OPTION 1

"Full Renovation"

- 334,000 SF
 - 100% Renovated Space
 - 38-42 Months Construction – 7 Phases
 - \$53 million total cost; \$21 million Town of Reading cost
-
- All elements of the educational program are included and in the proper relationship to other programs (Math is next to Science; Administration is adjacent to the main entry; etc.)
 - All spaces meet MAAB/ADA requirements for accessibility – except the former Media Center mezzanine, which is no longer used for program space.
 - Some renovated classroom spaces are up to 10% smaller in area than program goals.
 - Science Labs, Music, Art and Drama programs will be supported through new and or better facilities, furniture and equipment.
 - Media Center consolidates on one floor, improving control and use.
 - The Old Gymnasium houses all Physical education programs, both Men's and Women's PE locker rooms are built out on the first floor. The Field House becomes a Sports Team and Community -use facility.
 - Auditorium is upgraded for music and drama use as well as community uses.
 - Existing separate entry for Auditorium will be retained and enhanced through consolidation of Arts and Music to adjacent space. Access control will be improved.
 - Field capacity will be substantially improved by incorporation of structured artificial turf on multipurpose field and one practice field.
 - Automobile access will be improved by incorporation of full loop around building and additional curb cut onto Birch Meadow Drive. Some additional parking will be created on site.
 - Educational program will continue to occupy the school during the construction. Multiple relocations for some classroom uses will be required during construction.
 - Administrative Offices will not have command of temporary entrance location during some phases of construction.
 - Inconvenience/distraction for teachers and students is high during construction.
 - Opportunities for Contractor to fail in meeting schedule are highest due to number of phases.

OPTION 2

"Mostly Renovation"

- 324,000 SF
 - 94% Renovated Space
 - 36-38 Months Construction – 6 Phases
 - \$52 million total cost; \$21 million Town of Reading Cost
-
- All elements of the educational program are included and in the proper relationship to other programs (Math is next to Science; Administration is adjacent to the main entry; etc.)
 - All spaces meet MAAB/ADA requirements for accessibility except the former Media Center mezzanine which is no longer used for program space.
 - Some renovated classroom spaces are up to 10% smaller in area than program goals.
 - Science Labs, Music, Art and Drama programs will be supported through new and or better facilities, furniture and equipment.
 - Media Center consolidates on one floor, improving control and use.
 - Cafeteria (new construction) connects existing facilities and creates new school "Commons".
 - Access between original building and Media Center wing improved by new lower floor connection.
 - The Old Gymnasium houses all Physical education programs, both Men's and Women's PE locker rooms are built out on the first floor. The Field House becomes a Sports Team and Community -use facility.
 - Auditorium is upgraded for music and drama use as well as community uses.
 - Existing separate entry for Auditorium will be retained and enhanced through consolidation of Arts and Music to adjacent space. Access control will be improved.
 - Incorporation of structured artificial turf on multipurpose field and one practice field will substantially improve field capacity.
 - Automobile access will be improved by incorporation of full loop around building and additional curb cut onto Birch Meadow Drive. Some additional parking will be created on site.
 - Demolition of "arts wing" will lower total cost and reduce long term maintenance costs.
 - Educational program will continue to occupy the school during the construction. Multiple relocations for some classroom uses will be required during construction.
 - Administrative Offices will not have command of temporary entrance location during some phases of construction.
 - Inconvenience/distraction for teachers and students is high during construction.
 - Opportunities for Contractor to fail in meeting schedule are high due to number of phases.

OPTION 3

"More Replacement/Smaller Facility"

- 273,000 SF
 - 56% Renovated Space
 - 31-33 Months Construction – 3 Phases
 - \$54 million total cost; \$23 million Town of Reading cost
-
- All elements of the educational program are included and in the proper relationship to other programs (Math is next to Science; Administration is adjacent to the main entry; etc.)
 - All spaces meet MAAB/ADA requirements for accessibility.
 - All classroom spaces meet program space goals.
 - Science Labs, Music, Art and Drama programs will be supported through new and or better facilities, furniture and equipment.
 - Media Center consolidates on one floor, improving control and use.
 - Cafeteria (new construction) creates new school "Commons".
 - Access issues of older facilities are eliminated by consolidation in new space and connection to Field House.
 - The Old Gymnasium is torn down. The Field House serves PE as well as Sports Team and Community –uses.
 - Auditorium is replaced with design to serve music and drama use as well as community uses.
 - New separate entry for Auditorium will be created with new adjacent off-street parking. Access control will be improved.
 - Incorporation of structured artificial turf on multipurpose field and one practice field will substantially improve field capacity.
 - Automobile access will be improved by incorporation of additional curb cut onto Birch Meadow Drive. Substantial additional parking will be created on site.
 - Demolition and replacement of "1950's building" will increase first cost while reducing long-term maintenance costs. Lower total square footage will, however, reduce opportunities for 'casual occupation, storage and separation of uses (PE vs. sports use).
 - Educational program will not occupy space under construction. Single relocation to new space will be completed after new construction. Only the "science wing" uses will require temporary relocation.
 - Administrative Offices will maintain control of primary entrance location during all phases of construction.
 - Inconvenience/distraction for teachers and students is lower during construction –ala Parker Middle School project.
 - Opportunities for Contractor to fail in meeting schedule are lower due to two simpler construction phases. Failure to complete a phase would have no impact on users.

Projected Enrollment 1320 Students

COST OF CONSTRUCTION Item	Option 1			Option 2			Option 3		
	Unit	S.F.	Cost	Unit	S.F.	Cost	Unit	S.F.	Cost
Construction									
New Construction	\$145	0	\$0	\$145	19,093	\$2,768,485	\$145	120,000	\$17,400,000
Basic Renovation	\$70	170,109	\$11,907,630	\$70	170,834	\$11,958,380	\$70	79,588	\$5,571,160
Extensive Renovation	\$90	114,761	\$10,328,490	\$90	95,907	\$8,631,630	\$90	41,471	\$3,732,390
Major Renovation (Total Size)	\$120	49,554	\$5,946,480	\$120	38,517	\$4,622,040	\$120	31,493	\$3,779,160
		334,424			324,351			272,552	
Phased Construction Cost			\$400,000			\$160,000			
Temporary Facilities			\$2,000,000			\$1,500,000			
Sitework: Fields, Parking, & Landscape			\$5,100,000			\$5,100,000			\$5,100,000
Site Utilities			\$500,000			\$500,000			\$800,000
Building Demolition			\$276,000			\$576,000			\$1,988,000
Hazardous Materials Abatement			\$405,000			\$350,000			\$100,000
Design Contingency			\$0			\$0			\$0
Total			\$36,863,600			\$36,166,535			\$38,470,710
Contingencies									
Estimating Contingency (10%)			\$3,686,360			\$3,616,654			\$3,847,071
Construction Contingency/ New 5%			\$0			\$138,424			\$870,000
Construction/Renovation 10%			\$2,818,260			\$2,521,205			\$1,308,271
Owner's Contingency/1%			\$368,636			\$361,665			\$384,707
A/E Services Contingency @ 5% Fee			\$175,102			\$171,791			\$173,118
Total			\$7,048,358			\$6,809,739			\$6,583,167
Design and Engineering Fees									
Architect Fee			\$3,502,042			\$3,435,821			\$3,462,364
Total			\$3,502,042			\$3,435,821			\$3,462,364
Furniture and Equipment									
Furniture Acquisition @ 1000/student			\$1,320,000			\$1,320,000			\$1,320,000
Fees and Expenses			\$132,000			\$132,000			\$132,000
Total			\$1,452,000			\$1,452,000			\$1,452,000
Computer Technology: Infrastructure & Equipment									
Equipment @ 1200/student			\$1,584,000			\$1,584,000			\$1,584,000
Infrastructure			\$668,848			\$648,702			\$545,104
Fees and Expenses			\$158,400			\$158,400			\$158,400
Total			\$2,411,248			\$2,391,102			\$2,287,504
Additional Project Costs									
1 Surveying			\$55,000			\$55,000			\$55,000
2 Geotech. Cons. + Testing			\$20,000			\$20,000			\$20,000
3 Civil Engineering/Landscape			\$200,000			\$200,000			\$200,000
4 Food Service			\$40,000			\$40,000			\$40,000
5 Acoustics			\$12,000			\$12,000			\$12,000
6 Cost Estimating			\$80,000			\$80,000			\$80,000
7 Graphics			\$0			\$0			\$0
8 Testing and Monitoring at Construction			\$200,000			\$200,000			\$200,000
9 Bidding Printing, Adendum & Distribution			\$100,000			\$100,000			\$100,000
10 Legal			\$50,000			\$50,000			\$50,000
11 Reimbursable Expenses - Architect			\$0			\$0			\$0
12 Construction Manager			\$800,000			\$760,000			\$680,000
13 Security Consultants			\$15,000			\$15,000			\$15,000
14 Environmental Testing			\$10,000			\$10,000			\$10,000
15 Environmental Impact Report			\$0			\$0			\$0
18 Utility Costs			\$10,000			\$10,000			\$10,000
19 Model / Rendering			\$25,000			\$25,000			\$25,000
20 Traffic Consultant			\$25,000			\$25,000			\$25,000
21 Asbestos Report and Monitoring Services			\$65,000			\$65,000			\$65,000
22 Budget / Auditing Services			\$0			\$0			\$0
23 Building Commissioning			\$50,000			\$50,000			\$50,000
24 Auditorium/Studio Consultant			\$25,000			\$25,000			\$25,000
Total: Additional Project Costs			\$1,782,000			\$1,742,000			\$1,662,000
Total Project Cost			\$53,059,248			\$51,997,197			\$53,917,745
Estimated SBA Reimbursement Percentage			60.11%			59.81%			58.05%
Estimated Amount Reimbursed			\$31,893,914			\$31,099,524			\$31,299,251
COST TO TOWN			\$21,165,333			\$20,897,673			\$22,618,494

Transmittal

Date: December 1, 2002 Transmitted / Sent via: Courier
 Project No.: 2204.00 Project: Reading Memorial High School
 Sent to: Ms. Christine Lynch
 Company: Mass. Department of Education; School Building Assistance
 Address: 350 Main Street
 City, State, Zip: Malden, MA 02148

Transmittal of: These are transmitted as indicated.

Drawings Accepted Accepted as Corrected For Construction For Review
 Prelim. Submission Not Accepted Revise and Resubmit For Your Record For Your Use

Copies	Date	Ref. / Dwg. No.	Description
1	Dec 1, 2002		Submission for Preliminary Prioritization

Distribution Remarks / Special Instructions

Prepared by: Robert Peirce

FLANSBURGH ASSOCIATES

December 1, 2002

Ms. Christine Lynch
Massachusetts Department of Education
School Building Assistance
350 Main Street
Malden, MA 02148

RE: Reading Memorial High School
Renovation / Addition
Reading, Massachusetts
FAI Project No. 2204.00

Dear Christine:

We are pleased to present, on behalf of the Town of Reading, this submittal for preliminary prioritization of the Reading Memorial High School project. The Town of Reading intends to submit this project for a Capital Grant on June 1, 2003. This submittal includes the following items.

1. Long Range Plan
2. Rationale for Capital Construction
3. Inventory of Existing High School Space
4. Enrollment Projections (12 years)
5. Existing Conditions Report
6. Project Options & Cost Estimates

This section includes the option chosen by the School Building Committee for schematic development.

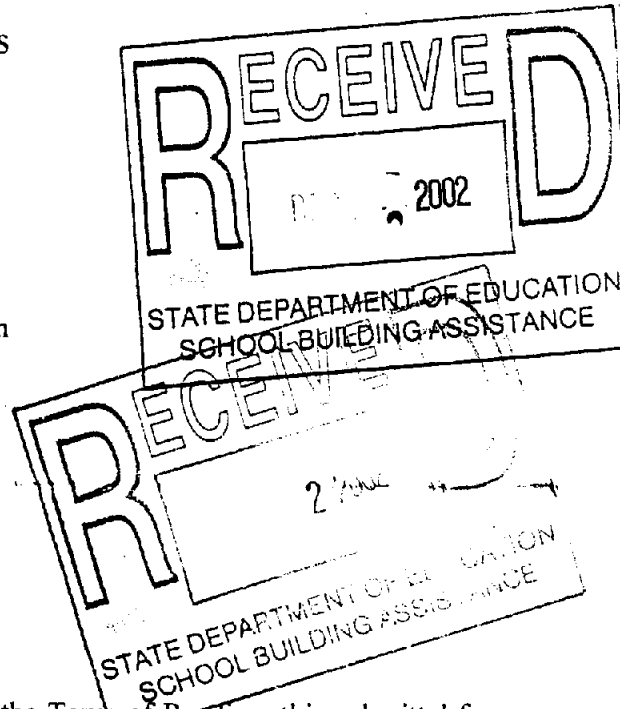
After an extensive review, which included several public information presentations, the School Building Committee has voted to proceed with Option 3. Flansburgh Associates has been asked to develop schematic design and cost estimates for that option. It is anticipated that the project will be brought to the voters in February, 2004.

Based upon our October meeting, and the SBA memo of August 26, 2002, it is our understanding that that this completes the current submittal requirements for this project. However, if there are any questions, or if further information is required, please do not hesitate to call.

Sincerely,



Robert E. Peirce, AIA
Associate
FLANSBURGH ASSOCIATES, INC.



Architecture
Master Planning
Interior Design
Programming

Principals
David S. Soleau, AIA
Kate M. Brannelly, FSMPS
Alan S. Ross, AIA
Duncan P. McClelland, AIA
Sidney R. Bowen, III

Chairman
Earl R. Flansburgh, FAIA, NA

Senior Associates
Samuel Bird, AIA
Jorge M. Cruz, AIA
Suzanne M. Rivitz, AIA

Associates
Valerie M. Curtis
David R. DeFilippo, AIA
Vincent E.J. Dubé, AIA
Rose M. Fiore
Kimberly A. Genereux
James A. Highum, AIA
Peter W. Lambert
Thomas J. Mueller, AIA
Dominic I. Pedulla
Robert E. Peirce, AIA
James B. Williams, Jr., AIA

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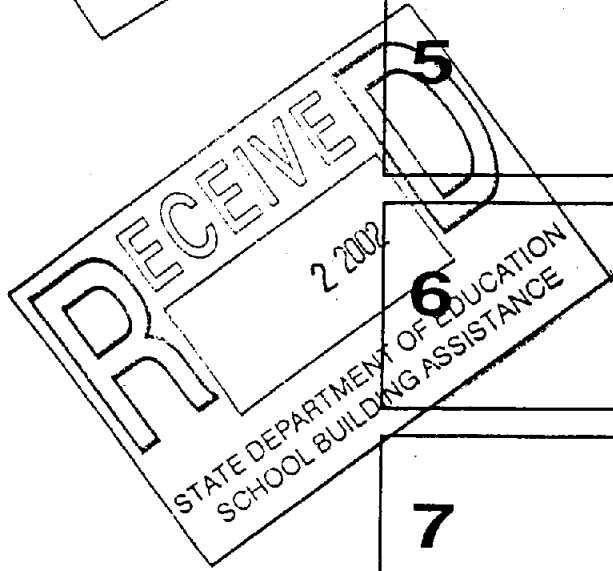
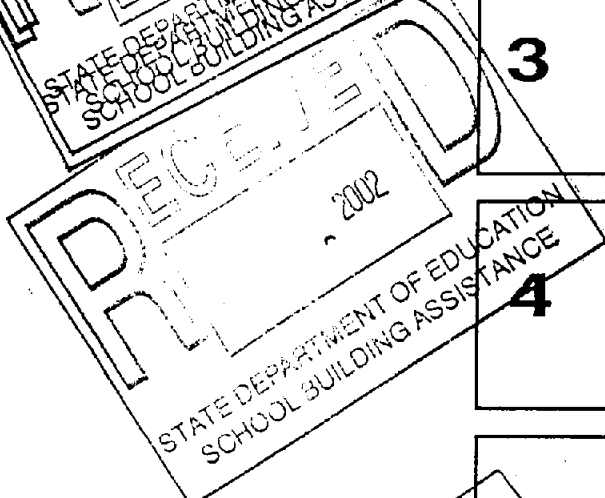
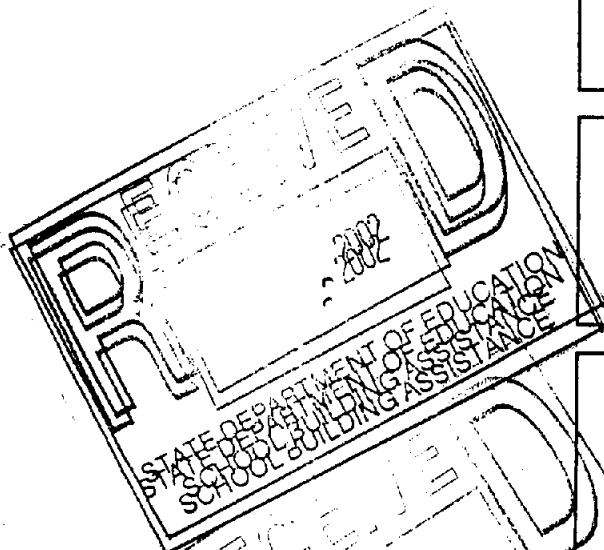
Existing Conditions Report

6

Project Options & Cost Estimates

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FLANSBURGH ASSOCIATES

Memorandum

Date: December 2, 2002

To: Christine Lynch

From: Flansburgh Associates, Inc.

Re: Reading Memorial High School

The following Long Range Plan is a preliminary draft developed by the Reading School Department.

**DRAFT****READING PUBLIC SCHOOLS
ADMINISTRATION OFFICES**

Harry K. Harutunian, Ph.D.
Superintendent

82 Oakland Road, Post Office Box 180
Reading, Massachusetts 01867-0280

Dennis A. Richards
Associate Superintendent

Telephone 781-944-5800
Fax 781-942-9149

December 2, 2002

Commonwealth of Massachusetts
Department of Education
School Building Assistance
350 Main Street
Malden, MA 02148

Attn: Christine Lynch
Director School Building Assistance

Dear Ms. Lynch,

In 1993 and 1994 the Reading Public Schools received approval for work to be done on the Birch Meadow Elementary School (1993-1994) and the Joshua Eaton Elementary School (1994-1995) from the Department of Education and Reading Town Meeting. These projects cost approximately \$6.2 million combined. Your department approved these projects based on student enrollment projections, which were done in December of 1992, showing Reading kindergarten enrollment peaking in October of 1993 with a steady decline in enrollment over the next 10 years.

From 1970 to 1989 Reading's population was fairly consistent at about 22,500. The census bureau data indicates that the population increased in 2000 to 23,708. This increase of approximately 1,000 people in the last decade includes over 500 school-age children. Among adults there are close to 50% more college graduates living in Reading than there were 10 years ago, and the medium per capita income has gone up almost 150%. The value of residential property continues to rise and the Town ranks 56th in the state for average residential tax rate. Most housing units are single family homes occupied by the owner. With the steady increase in pre-k through grade 5 students, the school district in 1993 enlarged and upgraded the Joshua Eaton Elementary School and then the Birch Meadow Elementary School.

DRAFT

This population ripple entered the Walter S. Parker Middle School, which was just rebuilt (1995-1997). The demographic projections from 1992 showed that with the additional classrooms and rebuilding of the Walter S. Parker Middle School Reading would provide enough classroom space K-8 to accommodate all long-range projections. Unfortunately, in 1997 the School Committee reviewed a report from the New England School Development Council (NESDEC) which showed that within the next 3 to 4 years there would not be enough combined space between the Walter S. Parker Middle School and the Arthur W. Coolidge Middle School to accommodate students. In 1998 the School Committee and the Town of Reading approved renovations and new additions to the Coolidge Middle School to bring both middle schools up to a capacity enrollment of 600 students.

In the fall of 1995 Reading saw the largest number of births (341) that it has seen in the past two decades. In 1996 there were 302 births which, although not as high as 1995, was much higher than expected. In January 1997 the Superintendent was directed by the Reading School Committee to form an enrollment study committee made up of parents, selectmen, building committee members, local government officials, teachers and administrators to investigate the enrollment problem.

We presently have two building projects that are on the School Building Assistance list, a new elementary and the renovation and addition to the Barrows Elementary School that were influenced by the enrollment study committee's report. The Reading School Committee and Town Meeting approved these projects in 1998. Unfortunately, due to long-term litigation, with which your office is familiar, neither project has started. Now we are at a point where we will be moving forward with both projects.

With all the additions/renovations to our elementary and middle schools, it was inevitable that the high school facility would need to be reviewed. Several studies pertaining to the high school have been done since 1995. These studies were done to determine the soundness of the high school facility and to determine whether the high school facility could meet the programmatic needs of student.

Over the past two years the School Building Committee has taken on the high school construction project as its major function. During that time SBA's policies and procedures have changed, making the previous reports obsolete. In 2002, after a comprehensive review, the School Building Committee hired Flansburgh Associates to bring forth a series of plans for the School Building Committee's review so the School Building Committee could make a recommendation on construction options. As you are aware, members of your office have toured Reading Memorial High School several times and have had numerous meetings with the Chairman of the School Building Committee, Chairman of the School Committee, me and representatives from Flansburgh Associates.

Reading High School is in desperate need of support from the Department of Education School Building Assistance Program. It is our intent to file an application on June 1, 2003 for Option 3, which calls for a 55% renovation and 45% new construction. Reading Memorial High School was built in the early 1950s with an addition in the late 1960s. Reading plans to file for a

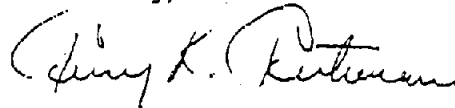
DRAFT

program to renovate some existing space and to add new construction to Reading Memorial High School to provide enough classroom space and program updates for Reading high school students.

The Reading School Building Committee, with the full approval of the Reading School Committee, has engaged the services of the architectural firm of Flansburgh Associates to do a feasibility study/schematic drawings to address ways to accommodate the student population for the next 40 years. After months of study by the Reading School Building Committee and a vote of the Reading School Committee we have decided to address the needs of Reading Memorial High School by doing a complete renovation and addition to the high school. The high school will then have a capacity of just under 1,400 students. This capacity expansion will meet the enrollment concerns that we saw over the last ten years at our elementary and middle schools. This long-range plan should provide for the educational needs of the students of Reading as well as the structural needs of the facility, which will house Reading's children for their high school education.

Your endorsement and support of the renovation and new construction of the Reading Memorial High School would be greatly appreciated.

Sincerely,



Harry K. Harutunian, Ph.D.
Superintendent of Schools

645-3

**Commonwealth of Massachusetts
DEPARTMENT OF EDUCATION
School Building Assistance
Rationale for Capital Construction**

School District: Reading Public Schools District Code: 02460000

Proposed Project: Reading Memorial High School Grade Range: 9-12 Acreage: 45

Provide a brief description:

Classroom, Offices, Cafeteria, Media Center and other space will be added to the existing high school, connecting two individual structures of the existing facility. The addition / renovation will provide new space for performing arts programs, replace undersized and outdated classroom space, resolve address Title IX issues with the Physical Education program, address accessibility issues throughout the school, and replace building systems which are beyond their useful life. Fire protection systems will be installed throughout the addition and renovated portions of the existing school. Significant portions of the existing school will be demolished after completion construction work. The site will be developed to provide more parking and better athletic facilities.

For a New School Construction Project, please explain in detail why the need can not be met

- by renovating an existing building -

- through the acquisition of an existing structure

- through a lease, tuition arrangement, redrawing of attendance districts or otherwise, in order to use existing buildings

- Provide a cost comparison between these alternatives and the proposed new construction. Include a description of any building being taken out of commission or any demolition of school building.

For an Addition and/or Renovation School Construction Project, *please attach*

- a cost analysis to demonstrate the cost effectiveness of your proposal
- a preliminary scope of work for this project (Reno List)
- a description of any planned demolition of a school building

- For an Acquisition Project, please explain why the need can not be met
 - by renovating an existing building

- through a lease, tuition arrangement, redrawing attendance districts or otherwise, in order to use existing buildings

- Provide a cost comparison between the above alternatives and the proposed acquisition to demonstrate the cost effectiveness of your proposal.

- Provide the preliminary scope of work for this project (Reno List)

- For an Alternative to Construction Project, please explain and provide a cost comparison between a capital construction, acquisition or renovation project and the proposed alternative.

We hereby certify that we have fully explored all potentially available facilities, considered costs of renovation, acquisition and operation, as well as other solutions to meet our needs. As a result of exploring all options, we recommend proceeding with planning for this project:

 Superintendent of Schools

 Chairperson, School Committee

 Chairperson, School Building Committee

Date: _____

Attach Additional Sheets as

Commonwealth of Massachusetts
DEPARTMENT OF EDUCATION
School Building Assistance

Inventory of Existing School Space Under The Jurisdiction
Of The Local School Committee

The information provided on this sheet will be used for priority ranking of capital school project applications for School Building Assistance. All complete applications submitted to the Department during a given fiscal year between July 1 and June 1 will be ranked for possible approval in the next following fiscal year. It is important to provide accurate information on all existing buildings housing school children so that we may calculate your rank correctly.

Complete one form for each school building currently in use or available for use as a schoolhouse. Please indicate which space is less than 7'6" headroom with an (*). Include a separate sheet for modular or lease spaces. *Please provide a photo of the outside of your building.*

School District Reading Public Schools Code 02460000

School Building Reading Memorial High School Code 02460505

Date of Construction 1952 Date(s) of Addition or Renovation (s) 1969

Building Capacity 1299 Current Enrollment 1225 Type of Construction _____

Grade Levels **NOW** served in **THIS** building (circle all that apply):

PreK K 1 2 3 4 5 6 7 8 9 10 11 12



Modular ____ Lease ____ (please use separate sheet for these spaces)

I. Gross Square Footage Use all <u>OUTSIDE</u> dimensions of school building to determine the following information:			
	A. Gross Square Feet	B. Education Square Feet	Efficiency Factor B/A 56%
! Basement (below grade level)	161,650	87,080	
! Ground Floor	118,250	45,679	
! All Upper Floors	60,100	58,650	
TOTAL	340,000	191,409	

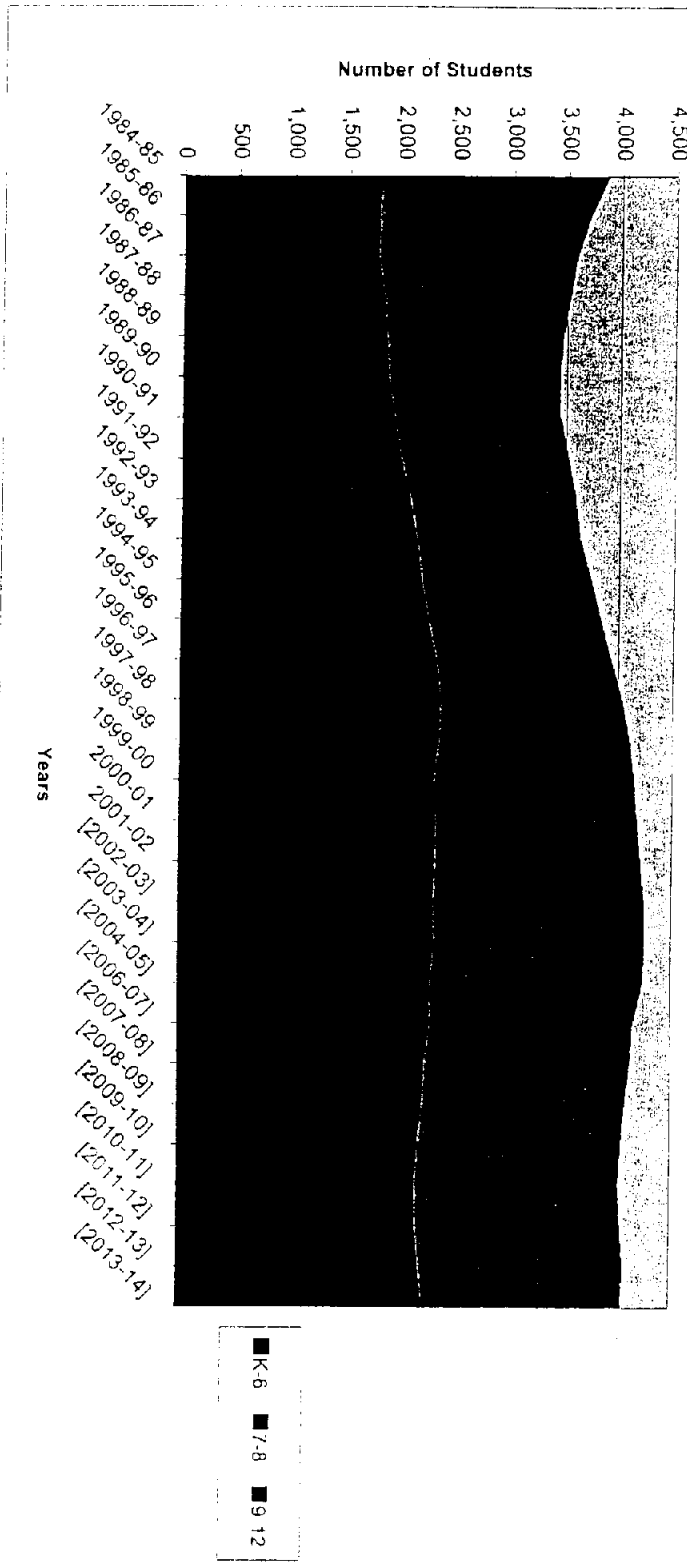
Person Completing Form: Robert Peirce
Title: Architect, Flansburgh Associates, Inc. Phone 617.303.1454

II. Inventory of Educational Spaces

For each of the educational spaces listed, calculate the gross square footage using the INSIDE dimensions of each area. Include any self-contained bathrooms, supply space, and teacher/staff space in each space listed. In Column "C" insert the letter that applies for each space: **B = Basement; G = Ground Floor; U = Upper Floors.**

	A	B	C	D
DESCRIPTION	NUMBER	SQUARE FEET	B G U	Date of Recent Work
Pre Kindergarten/Kindergarten	6	4,860	B	
General Classrooms	56	42,104	B,G,U	
Computer Laboratory	5	5,840	B,U	
Science Laboratories	14	17,116	B,G,U	
Chapter 74 Vocational	--	--	--	
Arts and Crafts	4	4,897	B	
Music	1	1,543	G	
Special Education	11	5,310	B,G,U	
Remedial	--	--	--	
Bilingual Education	--	--	--	
Physical Education	4	44,717	B,G	
Collaborative	--	--	--	
Library/Media Center	1	11,010	B,U	
Other				
Total - Basic Educational Space		<u>142,338</u> sq.ft		
DESCRIPTION	NUMBER	SQUARE FEET	B G U	Recent Work
Cafeteria/ Cafetorium/Stage	1	10,405	G	
Kitchen	1	4,767	G	
Auditorium/Stage	1	9,161	G	
Health Suite	1	1,006	G	
Guidance Suite	1	2,652	G	
Administration	4	9,369	B,G,U	
Teacher Planning/Dining	1	637	G	
Phys.Ed. Lockers/Showers	3	11,074	B,G	
Other				
Total Misc Educational Space		<u>49,071</u> sq.ft.		
Total Educational Space-Bldg.		<u>191,409</u> sq.ft.		

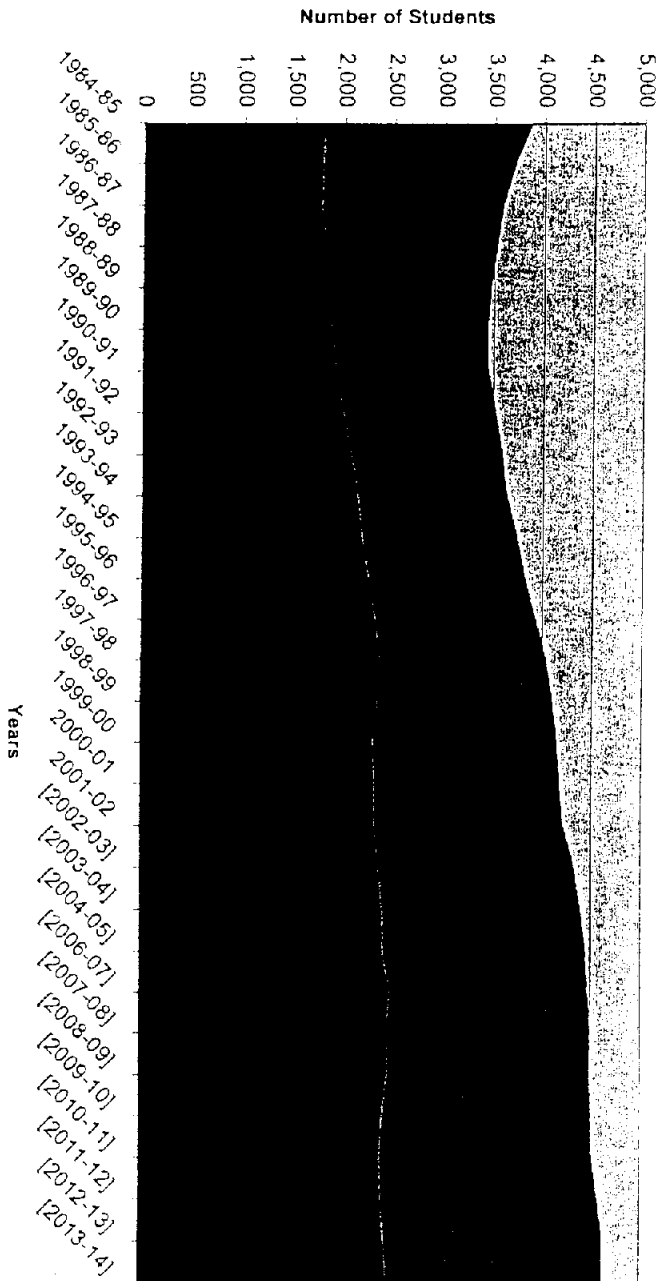
Low Forecast of Local Enrollments, Reading
 (Migration rate set one standard deviation below base forecast)



	K	1	2	3	4	5	6	7	8	9	10	11	12 TOTAL	
1984-85	248	256	265	248	274	261	258	307	352	348	344	336	349	3846
1985-86	247	262	246	261	245	272	256	261	302	321	345	349	315	3682
1986-87	252	266	245	245	271	240	265	263	259	286	333	328	312	3565
1987-88	251	287	276	247	250	277	246	262	257	230	286	322	315	3506
1988-89	251	295	274	273	250	246	278	245	262	243	229	283	314	3443
1989-90	274	276	278	288	267	258	244	281	243	260	252	223	274	3416
1990-91	308	281	276	279	279	269	256	251	281	222	261	243	221	3421
1991-92	290	325	291	282	279	277	270	259	248	267	228	253	232	3501
1992-93	313	327	323	296	289	280	267	273	246	238	254	209	253	3568
1993-94	313	335	323	328	295	289	275	260	274	232	242	252	196	3614
1994-95	313	335	342	330	330	303	279	280	263	264	232	232	243	3720
1995-96	291	331	342	342	333	329	298	281	285	257	256	225	226	3803
1996-97	324	307	307	342	333	333	324	296	278	266	250	246	223	3903
1997-98	315	365	313	341	355	360	325	296	288	255	268	225	235	4011
1998-99	322	352	372	314	343	340	358	330	288	286	256	260	243	4083
1999-00	281	359	353	366	321	328	343	326	334	328	286	251	257	4130
2000-01	274	311	351	356	366	328	331	357	326	303	316	266	242	4161
2001-02	341	302	308	353	347	365	331	335	352	324	299	297	268	4192
	306	365	303	305	355	346	365	327	332	324	299	297		
[2002-03]	337	336	363	301	305	354	342	362	323	315	318	287	289	4232
[2003-04]	320	370	333	361	300	304	351	339	358	306	309	305	279	4235
[2004-05]	299	351	367	331	356	300	302	348	335	339	300	296	297	4222
[2006-07]	285	308	325	346	343	329	356	294	295	325	311	318	280	4135
[2007-08]	289	313	306	323	345	362	326	352	291	279	319	298	310	4112
[2008-09]	292	317	311	304	322	344	359	323	348	275	274	305	290	4063
[2009-10]	296	320	314	308	303	321	341	356	319	329	270	262	297	4037
[2010-11]	299	324	318	312	307	303	318	338	351	302	323	258	255	4009
[2011-12]	307	328	322	316	311	307	300	315	334	333	296	309	252	4028
[2012-13]	310	336	326	319	315	311	304	297	311	316	326	284	301	4056
[2013-14]	314	340	334	323	318	314	308	301	293	295	310	312	276	4039

	Graph				Total
	K-6	7-8	9-12		
1984-85	1810	659	1377	3846	
1985-86	1789	563	1330	3682	
1986-87	1784	522	1259	3565	
1987-88	1834	519	1153	3506	
1988-89	1867	507	1069	3443	
1989-90	1883	524	1009	3416	
1990-91	1942	532	947	3421	
1991-92	2014	507	980	3501	
1992-93	2095	519	954	3568	
1993-94	2158	534	922	3614	
1994-95	2206	543	971	3720	
1995-96	2273	566	964	3803	
1996-97	2346	572	985	3903	
1997-98	2388	618	1005	4011	
1998-99	2378	660	1045	4083	
1999-00	2329	683	1118	4130	
2000-01	2347	687	1127	4161	
2001-02	2345	659	1188	4192	
2002-03	2385	694	1224	4302	
2003-04	2430	714	1230	4374	
2004-05	2437	709	1279	4425	
2006-07	2508	627	1314	4449	
2007-08	2484	693	1299	4476	
2008-09	2489	732	1249	4470	
2009-10	2438	766	1280	4484	
2010-11	2412	806	1274	4492	
2011-12	2420	758	1368	4546	
2012-13	2454	711	1441	4606	
2013-14	2488	695	1427	4610	

High Forecast of Local Enrollments, Reading
 (Migration rate set one standard deviation above base forecast)



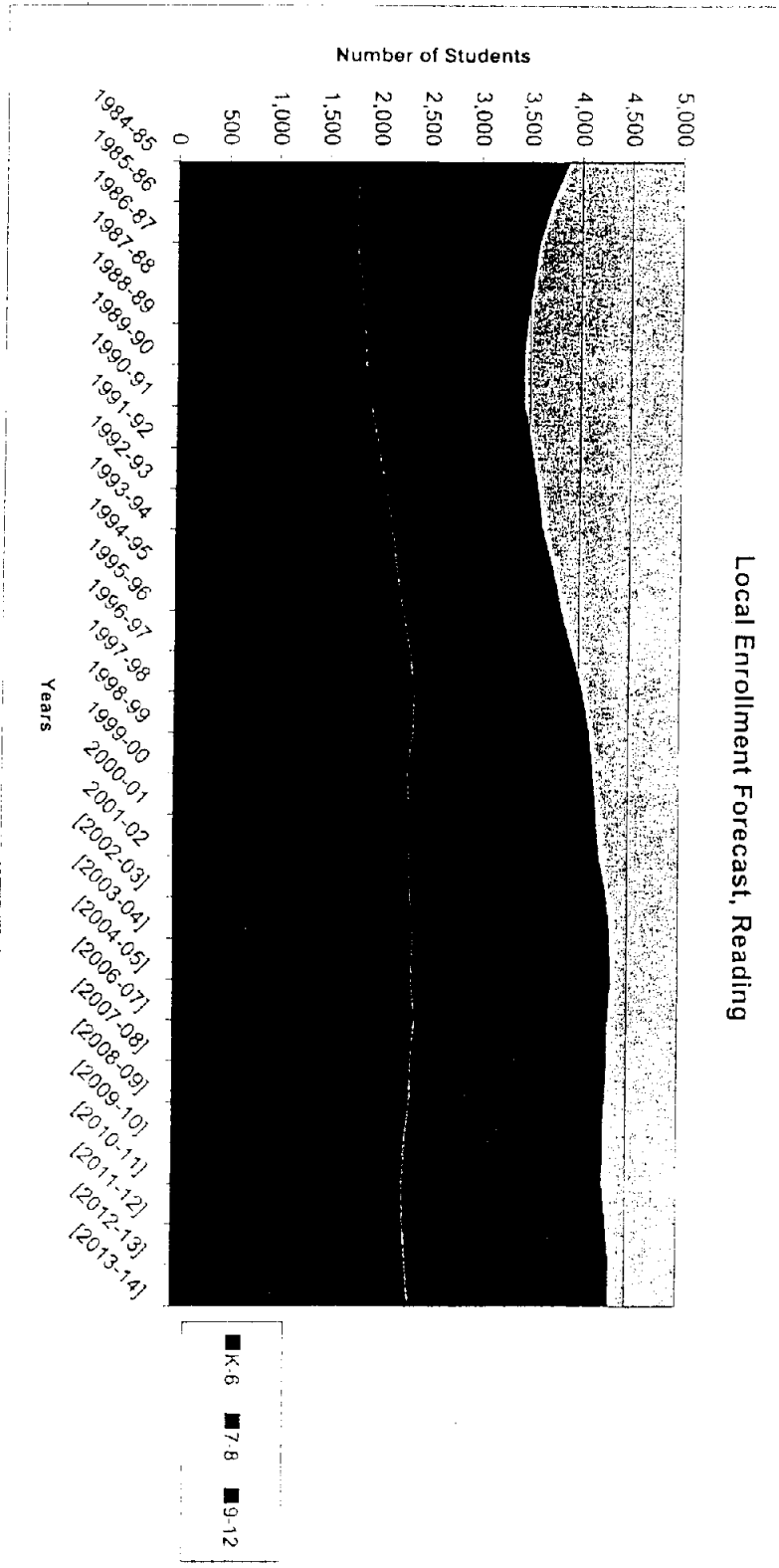
■ K-6 ■ 7-8 ■ 9-12

YEAR	Adjusted Births	YEAR	PAST ENROLLMENT FOR READING FOR GRADES K-12, PUBLIC SCHOOLS (LOCAL)												TOTAL	
			K													
			1	2	3	4	5	6	7	8	9	10	11	12		
1988-89	260.3	1984-85	248	256	265	248	274	261	258	307	352	348	344	336	349	3,846
1988-90	274.2	1985-86	247	262	246	261	245	272	256	261	302	321	345	349	315	3,682
1989-91	298.2	1986-87	252	266	245	245	271	240	265	263	259	286	333	328	312	3,585
1990-91	297.1	1987-88	251	287	276	247	250	277	246	262	257	230	286	322	315	3,506
1991-92	275.9	1988-89	251	295	274	273	250	246	278	245	262	243	229	283	314	3,443
1992-93	275.6	1989-90	274	276	270	286	267	258	244	281	243	260	252	223	274	3,416
1993-94	310.5	1990-91	308	276	276	273	279	279	256	251	281	222	261	243	221	3,421
1994-95	325.0	1991-92	290	325	281	282	279	277	270	259	248	228	254	209	232	3,501
1995-96	312.8	1992-93	313	335	323	296	289	280	275	260	246	238	254	209	232	3,568
1996-97	339.2	1993-94	313	331	342	328	295	289	267	273	274	248	242	252	232	3,614
1997-98		1994-95	324	307	342	342	330	303	279	260	263	264	232	232	243	3,720
		1995-96	315	365	313	341	355	333	329	296	285	257	256	225	226	3,903
		1996-97	322	352	372	314	343	360	325	330	276	266	250	246	223	4,011
		1997-98	281	359	353	366	321	340	358	326	288	255	268	260	235	4,083
		2000-01	274	311	351	356	366	328	343	334	334	286	256	251	257	4,130
		2001-02	341	302	308	353	347	355	331	335	352	328	282	266	242	4,161
			306	365	303	305	355	346	365	327	332	299	297	268		4,192
FORECASTED ENROLLMENT FOR READING FOR GRADES K-12, PUBLIC SCHOOLS, HIGH GROWTH SCENARIO																
			K													
			1	2	3	4	5	6	7	8	9	10	11	12		
1998-99	323.3	[2002-03]	359	340	368	305	309	359	347	367	327	319	322	291	293	4,302
1999-00	305.4	[2003-04]	341	398	342	370	308	312	360	367	367	314	316	313	287	4,374
2000-01	286.6	[2004-05]	318	378	400	344	373	311	313	361	348	352	312	307	308	4,425
[2001-02]	290.30	[2005-06]	300	353	380	402	347	377	312	361	361	333	349	302	303	4,433
[2002-03]	293.81	[2006-07]	304	333	355	382	406	350	379	313	314	346	331	339	298	4,449
[2003-04]	297.37	[2007-08]	308	337	334	357	386	411	352	313	313	301	343	321	334	4,476
[2004-05]	300.97	[2008-09]	311	341	339	336	360	390	412	353	380	300	299	333	317	4,470
[2005-06]	304.62	[2009-10]	315	345	343	341	339	364	391	353	353	304	298	290	329	4,484
[2007-08]	312.03	[2010-11]	319	349	347	349	344	343	365	362	362	338	361	289	286	4,484
[2008-09]	315.79	[2011-12]	326	354	351	349	348	348	344	349	332	336	336	285	285	4,546
[2009-10]	319.61	[2012-13]	330	362	355	353	352	352	349	345	366	393	336	350	346	4,606
[2010-11]	323.46	[2013-14]	334	367	364	357	356	356	353	350	345	351	374	382	321	4,610

Graph
K-6 7-8 9-12 Total

1984-85	1810	659	1377	3846
1985-86	1789	563	1330	3582
1986-87	1784	522	1259	3565
1987-88	1834	519	1153	3506
1988-89	1867	507	1069	3443
1989-90	1883	524	1009	3416
1990-91	1842	532	947	3421
1991-92	2014	507	980	3501
1992-93	2095	519	954	3568
1993-94	2158	534	922	3614
1994-95	2206	543	971	3720
1995-96	2273	566	964	3803
1996-97	2346	572	985	3903
1997-98	2388	618	1005	4011
1998-99	2378	660	1045	4083
1999-00	2329	683	1118	4130
2000-01	2347	687	1127	4181
2001-02	2345	659	1188	4192
[2002-03]	2361	689	1216	4267
[2003-04]	2384	706	1214	4304
[2004-05]	2372	695	1255	4322
[2006-07]	2409	608	1273	4290
[2007-08]	2372	667	1252	4290
[2008-09]	2366	701	1196	4262
[2009-10]	2318	719	1218	4255
[2010-11]	2294	745	1205	4244
[2011-12]	2302	702	1276	4280
[2012-13]	2335	658	1330	4322
[2013-14]	2367	643	1305	4315

Local Enrollment Forecast, Reading



	Graph				Total
	K-6	7-8	9-12		
1984-85	1810	659	1377	3846	
1985-86	1789	563	1330	3682	
1986-87	1784	522	1259	3565	
1987-88	1834	519	1153	3506	
1988-89	1867	507	1069	3443	
1989-90	1883	524	1009	3416	
1990-91	1942	532	947	3421	
1991-92	2014	507	980	3501	
1992-93	2095	519	954	3568	
1993-94	2158	534	922	3614	
1994-95	2206	543	971	3720	
1995-96	2273	566	964	3803	
1996-97	2346	572	985	3903	
1997-98	2388	618	1005	4011	
1998-99	2378	660	1045	4083	
1999-00	2329	683	1118	4130	
2000-01	2347	687	1127	4161	
2001-02	2345	659	1188	4192	
[2002-03]	2338	685	1209	4232	
[2003-04]	2339	697	1199	4235	
[2004-05]	2308	683	1232	4222	
[2006-07]	2313	589	1294	4135	
[2007-08]	2264	643	1205	4112	
[2008-09]	2248	671	1144	4063	
[2009-10]	2204	675	1159	4037	
[2010-11]	2182	689	1139	4009	
[2011-12]	2190	649	1190	4028	
[2012-13]	2221	608	1227	4056	
[2013-14]	2252	594	1193	4039	

FLANSBURGH ASSOCIATES

Reading Memorial High School Study
 Project Cost Breakdown
 FAI Project Number 2204.00
 October 1, 2002

Projected Enrollment 1320 Students

COST OF CONSTRUCTION Item	Option 1			Option 2			Option 3		
	Unit	S.F.	Cost	Unit	S.F.	Cost	Unit	S.F.	Cost
Construction									
New Construction	\$145	0	\$0	\$145	19,093	\$2,768,485	\$145	120,000	\$17,400,000
Basic Renovation	\$70	170,109	\$11,907,630	\$70	170,834	\$11,958,380	\$70	79,588	\$5,571,160
Extensive Renovation	\$90	114,761	\$10,328,490	\$90	95,907	\$8,631,630	\$90	41,471	\$3,732,390
Major Renovation (Total Size)	\$120	49,554	\$5,946,480	\$120	38,517	\$4,622,040	\$120	31,493	\$3,779,160
		334,424			324,351			272,552	
Phased Construction Cost			\$400,000			\$160,000			
Temporary Facilities			\$2,000,000			\$1,500,000			
Sitework: Fields, Parking, & Landscape			\$5,100,000			\$5,100,000			\$5,100,000
Site Utilities			\$500,000			\$500,000			\$800,000
Building Demolition			\$276,000			\$576,000			\$1,988,000
Hazardous Materials Abatement			\$405,000			\$350,000			\$100,000
Design Contingency			\$0			\$0			\$0
Total			\$36,863,600			\$36,166,535			\$38,470,710
Contingencies									
Estimating Contingency (10%)			\$3,686,360			\$3,616,654			\$3,847,071
Construction Contingency/ New 5%			\$0			\$138,424			\$870,000
Construction/Renovation 10%			\$2,818,260			\$2,521,205			\$1,308,271
Owner's Contingency/1%			\$368,636			\$361,665			\$384,707
A/E Services Contingency @ 5% Fee			\$175,102			\$171,791			\$173,118
Total			\$7,048,358			\$6,809,739			\$6,583,167
Design and Engineering Fees									
Architect Fee			\$3,502,042			\$3,435,821			\$3,462,364
Total			\$3,502,042			\$3,435,821			\$3,462,364
Furniture and Equipment									
Furniture Acquisition @ 1000/student			\$1,320,000			\$1,320,000			\$1,320,000
Fees and Expenses			\$132,000			\$132,000			\$132,000
Total			\$1,452,000			\$1,452,000			\$1,452,000
Computer Technology: Infrastructure & Equipment									
Equipment @ 1200/student			\$1,584,000			\$1,584,000			\$1,584,000
Infrastructure			\$668,848			\$648,702			\$545,104
Fees and Expenses			\$158,400			\$158,400			\$158,400
Total			\$2,411,248			\$2,391,102			\$2,287,504
Additional Project Costs									
1 Surveying			\$35,000			\$35,000			\$35,000
2 Geotech. Cons. + Testing			\$20,000			\$20,000			\$20,000
3 Civil Engineering/Landscape			\$200,000			\$200,000			\$200,000
4 Food Service			\$40,000			\$40,000			\$40,000
5 Acoustics			\$12,000			\$12,000			\$12,000
6 Cost Estimating			\$80,000			\$80,000			\$80,000
7 Graphics			\$0			\$0			\$0
8 Testing and Monitoring at Construction			\$200,000			\$200,000			\$200,000
9 Bidding Printing, Adendum & Distribution			\$100,000			\$100,000			\$100,000
10 Legal			\$50,000			\$50,000			\$50,000
11 Not Used			\$0			\$0			\$0
12 Construction Manager			\$800,000			\$760,000			\$680,000
13 Security Consultants			\$15,000			\$15,000			\$15,000
14 Environmental Testing			\$10,000			\$10,000			\$10,000
15 Environmental Impact Report			\$0			\$0			\$0
18 Utility Costs			\$10,000			\$10,000			\$10,000
19 Model / Rendering			\$25,000			\$25,000			\$25,000
20 Traffic Consultant			\$25,000			\$25,000			\$25,000
21 Asbestos Report and Monitoring Services			\$65,000			\$65,000			\$65,000
22 Budget / Auditing Services			\$0			\$0			\$0
23 Building Commissioning			\$50,000			\$50,000			\$50,000
24 Auditorium/Studio Consultant			\$25,000			\$25,000			\$25,000
Total: Additional Project Costs			\$1,782,000			\$1,742,000			\$1,662,000
Total Project Cost			\$53,059,248			\$51,997,197			\$53,917,745
Estimated SBA Reimbursement Percentage			60.11%			59.81%			58.05%
Estimated Amount Reimbursed			\$31,893,914			\$31,099,524			\$31,299,251
COST TO TOWN			\$21,165,333			\$20,897,673			\$22,618,494