REPORT

TO

THE HONORABLE WALTER H. REYNOLDS

Mayor of the City of Providence

on the

CLASSICAL HIGH SCHOOL PROBLEM

Providence, Rhode Island

DECEMBER 1959

CHARLES A. MAGUIRE & ASSOCIATES

ENGINEERS

Providence, Rhode Island

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PARTNERS
GRANT H. POTTER
FREDERICK H. PAULSON
MILTON E. NELSON
HOWARD W. HOLMES
CONSULTANTS
WENDELL S. BROWN
EDWARD O GREENE

ASSOCIATES
GORDON BRONSON
ERIC REEVES
HAROLD BATESON
PETER V. CIPOLLA
THOMAS C. MURPHY
ROBERT L. PARE
FRANCIS C. PIERCE

ELEVENTH FLOOR - TURKS HEAD BUILDING
PROVIDENCE 3, RHODE ISLAND
TELEPHONE GASPEE 1-2051

SIXTH FLOOR - FOURTEEN COURT SQUARE
BOSTON 8, MASSACHUSETTS
TELEPHONE RICHMOND 2-0355

REPLY TO: Providence

December 21, 1959

The Honorable Walter H. Reynolds
Mayor of the City of Providence
City Hall
Providence, Rhode Island

Dear Mr. Mayor:

Pursuant with your request and authorization, we have made a study of the various ramifications entering into the Classical High School Problem and take pleasure in submitting herewith our report.

This report concerns particularly what disposition should be made of the existing physical structure and plant in the light of its educational and economic capabilities, and also as affected by any city redevelopment and traffic plans for the future of the area in question.

An attempt has been made to consider the many and various factors individually and collectively, having in mind present and long-range planning for the reasonably foreseeable future.

We appreciate the opportunity afforded us to undertake this study, and gratefully acknowledge the able cooperation and unfailing courtesy extended to us throughout the course of the work by the various commissions, departments and officials.

Very truly yours,

CHARLES A. MAGUIRE & ASSOCIATES

Wendell S. Brown

Wendell S. Brown

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PART I

FOREWORD

It goes without saying that excellence of educational facilities is the prime goal toward which all considerations of this report should be directed.

Certain other qualities, like structural stability and the proper integration and use of utilities and other facilities, are fundamental as a means to an end and usually taken for granted.

Still others, more difficult of evaluation or perhaps even controversial and based somewhat upon individual preferences and opinions, may be more or less desirable and provide an area for sound judgment.

And the widespread interest among hundreds of younger and older graduates concerning the fate of this school should be welcomed as a valuable factor and urge toward obtaining the optimum in ultimate utility.

Only by a careful evaluation of existing resources and conditions, in the light of analyses of academic requirements to be met in the reasonably foreseeable future, can the proper balance and perspective resulting in a correct answer, be obtained.

PART II

STATEMENT OF THE PROBLEM

Classical High School is an academic entity which for years has been recognized as one of the particularly valuable assets of the school system of the City of Providence.

The physical structure now housing this high school is in many respects in a generally rundown condition; its facilities are overcrowded and many of them are inadequate.

To continue on the present basis is unthinkable!

But the problem of what to do with the physical structure itself is not one to be answered by a simple decision involving merely repair or rehabilitation.

The question rather is what is the optimum procedure to choose, between other feasible solutions, bearing in mind meanwhile, the importance of not unduly disrupting the continuity of, or curtailing the academic activities of the school's curriculum.

And going a step further, really adequate long-range planning should seek out and make possible further advances in, and excellence of educational facilities.

Feasible solutions which present themselves include:

Plan I

Repairing, rehabilitating, remodeling and modernizing within the walls of the present building so as to conform as nearly as possible to desirable educational standards, even at the expense of reducing, if necessary, the existing number of students now enrolled.

PLAN 2

Similar to Plan I above, but with additional space provided in an adjacent structure so as to better accommodate the present enrollment.

Plan 3

The construction of an entirely new school building, whether near the present site or elsewhere.

Plan 4

Moving Classical High School into some other adequate and conveniently located suitable building, which may be available and economically adapted.

Factors to be carefully considered in a study of any of these solutions include, but are not limited to:

(a) Possible excellence of educational facilities.

(b) Comparative initial cost.

(c) Comparative operating and maintenance expenses, including tax situation on property to be condemned or sacrificed.

(d) City redevelopment plans for the area in question.

(e) City traffic plans for the area in question.

(f) Possible assistance obtainable from State or Federal agencies.

(g) Disposition of present building - value for other purposes.

PART III

SURVEY OF EXISTING BUILDING AND FACILITIES - DEFICIENCIES

A careful examination of the existing school plant by various member specialists of our organization reveals the following:

BUILDING STRUCTURE

The physical structure of this building erected 62 years ago (in 1897) is basically sound and good for many more years of useful life.

It is of masonry wall-bearing joisted floor construction.

The exterior walls are of yellow brick with stone trim in generally good condition. The window frames and sash are of wood. While approaching the renewal stage, they are reasonably sound.

The roof on the flats is of copper. It has been patched and repatched but at present seems to be in fair condition of maintenance. The steeper slopes of the roof are of slate showing considerable evidence of breakage and patching; also the original wire snow guards have largely corroded and disappeared, making the adjacent sidewalks below hazardous during the winter months when roofs are burdened with snow and ice.

Copper flashings, gutters and downspouts, while not examined in detail, doubtless need considerable attention.

Interior walls in general are of masonry carried through from the basement foundations to the lower and upper stories. In certain cases, however, cast-iron columns have been substituted in the lower stories for wall bearings.

Trim and doors are of wood. Painting is needed on walls and wainscoting and plastered walls.

Finish floors in general are of wood supported on wood intermediate floors and wood joists on masonry walls, or in some cases on non-fireproofed steel beams. Basement floors are wood directly on the ground. Practically all areas of top flooring need repair or replacement.

Ceilings are plastered on wood lath and require extensive renewal.

The structural portion of the roof is generally of wood upon wood rafters and purlins and beams. An exception, however, is that there are five steel trusses of the modified scissors type, supporting the ceiling of the auditorium.

General: While the roof and other structures have not been examined in detail, no evidence has been found that would make questionable the structural integrity of the floors, walls or roof.

HEATING AND VENTILATING

This system needs repairs, renewals, maintenance and some augmentation and modification before it can be considered adequate. It now consists partly of direct steam radiation through pipe coils under classroom windows, etc, and of cast-iron radiators in miscellaneous other places.

Steam is supplied from a detached central heating plant.

There is also a central blower system for heating and ventilating. This operates from one large motor-driven fan in the basement taking air through stack heating, also in basement, and delivering same through ducts and grilles at ceiling heights in the classrooms. Air from the classrooms is discharged to grilles near floor levels, thence to outdoors through ducts and exhaust stacks above roof level. Smoke detectors and shut-down safety devices to prevent spread of smoke and fumes in case of fire, are lacking in the duct system.

We are informed that the fresh air ducts have recently been cleaned since the two fires, and are in good condition.

FIRE PROTECTION AND MEANS OF EGRESS

A standard modern automatic sprinkler system with local alarms was recently installed, at an expense of at least $35,000. It embraces the roof and other air spaces. A few small areas should be provided with protection. Controls are arranged in a basement room, kept locked, and also connected through a master detective system to the Providence Fire Department. It is inspected periodically and apparently is in excellent condition. There is also ample manual fire alarm service.

There are two main stairways - one at each end of the building and serving basement and all floors - protected by enclosures designed to limit the spread of fire and smoke. The stairways are well located.

There is also a double fire escape at the rear of the building leading down to the service yard. This is of limited capacity with inadequately protected adjacent window openings.

In addition to the two main stairways and fire escapes, there are other exits as follows:

> First floor: Main Pond Street entrance - two sets of widely separated double doors leading to outside steps.
>
> Basement: Two emergency exits to the rear of the building service yard and two - that is, one from each of the cafeterias - which exit to the Pond Street side of the building.

Although the existence of automatic sprinkler protection in the school provides considerable assurance against the loss of, or full use of an exit facility, we are of the opinion that the possibility of one main stairway being unusable should be provided for.

Therefore, as elaborated upon in Part IV following, we have shown and included in Plan I and Plan 2 an entirely new wide centrally located stairway to serve as regular and/or emergency means of egress for the first, second and third floors and basement.

This occupies the space now taken by the general offices in the basement, first and second floors.

The existing two main stairways are also to be replaced with enclosed steel stairways having a 2-hour rating.

PLUMBING

The plumbing is antiquated, in poor condition and needs a high percentage of replacement. At present, all toilets for students are in the basement. Modernization calls for proper distribution to each floor, and this has been arranged under Plan I as shown in Illustration I for the remodeled existing building.

LIGHTING AND ELECTRICAL SYSTEM

The lighting is inadequate according to present-day standards. It should be replaced throughout and modernized. This goes also for the entire electrical system of distribution.

Also very desirable is an electric elevator to be installed in the existing non-used elevator well after the latter is properly fireproofed from top to bottom. This is for the use of persons with a heart condition.

DEFICIENCIES IN EDUCATIONAL FACILITIES AS AFFECTED BY PHYSICAL LAYOUT

Deficiencies in educational facilities as effected by physical layout are many and apparent, and are due in general to obsolescense and/or overcrowding.

They include, but are not limited to, the following examples:

(a) Chemistry, physics and other laboratories are inadequate, outmoded and now necessarily used at times also for study rooms.

(b) The present use of the main auditorium as a study room is inefficient to say the least.

(c) The cafeteria arrangement is grossly inadequate and inefficiently broken up into small areas with poor access to kitchen and serving layouts.

(d) Student toilet facilities are concentrated in the basement as compared with modern requirements calling for distribution on each floor.

(e) The library is overcrowded.

(f) The administrative offices and guidance facilities are inefficiently arranged and generally inadequate.

(g) The standard room layout, consisting of adjacent sets of larger and smaller classrooms (six sets on each floor), the comparative capacity of each being in the approximate ratio of two to one, may not be the optimum arrangement. The smaller rooms, some of which are now used as home rooms, were obviously originally intended as recitation rooms for approximately half of the students in the adjacent larger classrooms. However, on account of the building construction, it is not practical or economically feasible to change this arrangement.

PART IV

ELABORATION OF SEVERAL FEASIBLE SOLUTIONS UNDER CONSIDERATION

Part II, "Statement of the Problem" lists four feasible solutions which present themselves. These are elaborated upon as follows for the purpose of analysis and choice.

PLAN I

Plan I consists of repairing, rehabilitating, remodeling and modernizing within the walls of the present building, so as to conform as nearly as possible with desirable educational standards, even at the expense of reducing, if foundadvisable, the number of students now enrolled.

Based upon our understanding of the School Department memorandum dated September 22, 1959 listing the requirements as shown under "Schedule A", a preliminary layout has been prepared by floors according to Illustration Nos. 1-2, 1-b, 1-c and 1-d attached, in which the attempt has been made to obtain said requirements, as far as possible, or those of most consequence, within the walls of the existing structure.

In the first place, there has been included in this rehabilitation program the correction of the various physical deficiencies noted under Part III of this report, requiring the necessary repairs to the structure and improvements to the heating and ventilating system, the fire safety system, drastic changes in the plumbing, and a new lighting and electrical system, and elevator.

That is, in more detail, the following items are included.

Structure Itself

New aluminum sash and frames throughout.

Necessary repairs to roof, flashings, gutters and downspouts.

New plaster walls, doors and frames throughout. New chalkboard, tackboard and plaster partitions where necessary - practically throughout.

New finish floors of vinyl asbestos laid over magnesite.

New ceilings on third floor and practically throughout, of incombustible acoustical tile.

Any uncovered steel beams are to be fireproofed.

Fire Protection and Means of Egress

Additional automatic sprinkler system requirements for the revised layout. Add new main central stairway as shown, and replace the present two main end stairways with improved enclosed steel construction having a 2-hour rating.

Heating and Ventilating

Utilize existing fresh air ducts, supply fan and drive. Replace existing stack blast coils with fin coil heaters. Install new fresh air intake louvers, dampers, air filters and steam humidifiers.

Existing direct steam radiation by means of pipe coils is to be replaced throughout with fin radiation and covers.

Central blower duct system to be rehabilitated and modernized with the necessary safety devices and modern supply and return air registers and dampers. In general, all rooms are to be individually thermostatically controlled. Replace supply valves, air compressors, fresh air exhaust dampers and control.

Provide additional air supply and direct heat as required for new rooms, kitchen and toilet ventilation.

Renew supply and return piping and insulation.

Plumbing

The existing plumbing system will be practically eliminated and new installed, including fixtures, partitions and piping.

Lighting and Electrical System

The lighting and electrical system will be replaced and made adequate according to present-day standards, including new fixtures, elevator and arrangement for TV.

The deficiencies in the educational facilities, as effected by the physical layout, have also been corrected in considerable measure and to the extent shown in Table III.

This table shows for comparison the individual areas and student capacities, and total capacities of first, the school as now occupied; second, the desired capacities as given under School Department "Schedule A" in the memorandum noted: and third, modernization with the walls of the present building, the latter as per Plan I and Illustration Nos. 1-a to 1-d following.

The following items are worthy of note:

(a) Two large student dining halls, each with a capacity of 260 persons, enabling the entire student body to be fed in two lunch periods.

(b) Kitchen with outside access for service, also storage rooms, dishwashing room and help's lockers and toilets.

(c) Teachers' dining and toilets, lockers and work rooms.

(d) Ample toilet facilities each floor for boys and girls.

(e) Utility rooms.

(f) Circulation pattern to lunch rooms - down new central stairway, return via two end stairways.

(g) New administrative suite - consisting of Principal's office, general and guidance offices, waiting areas, records vault and supply room.

(h) The third floor assembly hall has been broken up into three science rooms, corridor and toilets. This would not be necessary if 9th graders were to be excluded from Classical High School.

COMPARISON OF PLANS

		ROOM DESIGNATION	EXISTING OVERCROWDED CONDITIONS						PROVIDENCE SCHOOL DEPARTMENT REQUESTED DESIGN CAPACITIES						CHARLES A. MAGUIRE & ASSOCIATES PLAN NO. 1.						CHARLES A. MAGUIRE & ASSOCIATES PLAN NO. 2.					
			NO. OF ROOMS	SIZE SQ. FT.	TOTAL CAPACITY	AREA SQ. FT.	ACCESS. AREA	TOTAL AREA	NO. OF ROOMS	SIZE SQ. FT.	TOTAL CAPACITY	AREA SQ. FT.	ACCESS. AREA.	TOTAL AREA	NO. OF ROOMS	SIZE SQ. FT.	TOTAL CAPACITY	AREA SQ. FT.	ACCESS. AREA	TOTAL AREA	NO. OF ROOMS	SIZE SQ. FT.	TOTAL CAPACITY	AREA SQ. FT.	ACCESS. AREA	TOTAL AREA
GEN. PURPOSE RMS.	1.	ART	—	—	—	—	—	—	1	850	25	850	250	1100	—	—	—	—	—	—	1	850	25	850	—	850
	2.	MUSIC	—	—	—	—	—	—	1	1000	35	1000	250	1250	—	—	—	—	—	—	1	1184	35	1184	100	1284
	3.	GEN. CL. RM.	20	896	—	17,920	—	17,920	20	850	700	17,000	—	17,000	18	896	630	16,128	—	16,128	18	896	630	16,128	—	16,128
	4.	GEN. CL. RM.	18	441	—	7938	—	7938	10	500	250	5000	—	5000	18	441	324	7938	—	7938	18	441	324	7938	—	7938
	5.	SCIENCE	—	—	—	—	—	—	3	850	105	2550	—	2550	2	1000	70	2000	—	2000	3	848	105	2544	—	2544
	6.	SUB TOTAL "A"	38	—	1105	25,858	—	25,858	35	—	1115	26,400	500	26,900	38	—	1024	26,066	—	26,066	41	—	1119	28,644	100	28,744
SPECIAL PURPOSE ROOMS	7.	SC. COMB. LAB.	—	—	—	—	—	—	1	1000	30	1000	500	1500	1	1100	30	1100	—	1100	1	1100	30	1100	—	1100
	8.	STAGE	1	304	—	304	—	304	1	1500	—	1500	—	1500	—	—	—	—	—	—	—	—	—	—	—	—
	9.	LIBRARY	1	1290	—	1290	—	1290	1	2500	100	2500	600	3100	1	2600	100	2600	—	2600	1	2600	100	2600	—	2600
	10.	STUDY HALL	1	5000	—	5000	—	5000	1	3000	120	3000	—	3000	—	—	—	—	—	—	1	3000	120	3000	—	3000
	11.	CAFETERIA / CAFETORIUM	1	1792	—	1792	—	1792	1	5000	600	5000	—	5000	2	2900	580	5800	—	5800	2	2900	580	5800	—	5800
	12.	KITCHEN	1	440	—	440	—	440	1	1000	—	1000	500	1500	1	1100	—	1100	—	1100	1	1100	—	1100	—	1100
	13.	CAFETERIA, TEACHERS'	2	441	—	882	—	882	1	800	20	800	—	800	1	441	20	441	—	441	1	441	20	441	—	441
	14.	ADMINISTRATION	5	—	—	1320	—	1320	5	—	—	1800	—	1800	4	—	—	1610	—	1610	5	—	—	1810	—	1810
	15.	GUIDANCE	—	—	—	—	—	—	5	—	—	1500	—	1500	1	240	—	240	—	240	5	—	—	1500	—	1500
	16.	TEACHERS' LOUNGE	3	—	—	803	—	803	2	500	—	1000	—	1000	2	256	—	512	—	512	2	256	—	512	—	512
	17.	TEACHERS' WORK	—	—	—	—	—	—	2	500	—	1000	—	1000	2	264	—	528	—	528	2	264	—	528	—	528
	18.	DEPT. HEADS	—	—	—	—	—	—	5	150	—	750	—	750	—	—	—	—	—	—	5	150	—	750	—	750
	19.	S.A.O.	—	—	—	—	—	—	1	600	—	600	—	600	—	—	—	—	—	—	1	600	—	600	—	600
	20.	TOILETS, PUPIL	2	—	—	1280	—	1280	—	—	—	3000	—	3000	8	—	—	2500	—	2500	8	—	—	2500	—	2500
	21.	TOILETS, TEACHER	3	—	—	697	—	697	7	100	—	700	—	700	7	—	—	810	—	810	7	—	—	810	—	810
	22.	BOOKS	—	—	—	—	—	—	1	500	—	500	—	500	—	—	—	—	—	—	—	—	—	—	—	—
	23.	CUSTODIAN	1	338	—	338	—	338	—	—	—	1000	—	1000	—	—	—	—	—	—	—	—	—	—	—	—
	24.	STAIRS, ETC.	—	—	—	32,432	—	32,432	—	—	—	20,000	—	20,000	—	—	—	29,129	—	29,129	—	—	—	23,051	—	23,051
	25.	SUB TOTAL "B"	—	—	—	46,578	—	46,578	—	—	—	46,650	1600	48,250	—	—	—	46,370	—	46,370	—	—	—	52,856	—	52,856
	26.	GRAND TOTAL	—	—	—	72,436	—	72,436	—	—	—	73,050	2100	75,150	—	—	—	72,436	—	72,436	—	—	—	81,500	100	81,600

TABLE III

CLASSICAL HIGH SCHOOL

From Table III a comparison of the results under Plan I (that is, modernization within the walls of the present building), with the desired capacities given under the Providence School Department's "Schedule A" (as listed under Plan 3 in Table III) indicates the possible advisability (for optimum results) of considering decreasing the present enrollment. One way would be to eliminate the 9th graders - some 350 in number.

Under the present setup any student from junior high or other schools, with a complete 8th grade record, is eligible for admission to the Classical High School 9th grade. This has the result that there is often a large unwieldy freshman or 9th grade class, and an excessive number of failures and repeaters as indicated in Figure I and Table I following.

Classical is the only senior high school in the city that includes the 9th grade. Three hundred forty-four of its 1,105 students this September (1959) were in the 9th grade. If these 344 students were distributed among the eight junior high schools, the crowding problem at Classical would be greatly lessened, if not solved, and the enrollment system would then conform to the other high schools.

The curriculums in the other senior high schools embrace solely the three upper grades, namely 10th, 11th and 12th, which include courses taught for college preparation, and which are immediately preceded by junior high school grades, concluding with the 9th grade. In other words, all Providence 9th graders would then be required to remain in or attend the equivalent of one of the eight excellent junior high schools, none of which are crowded. In fact, many of these schools have experienced for some time a period of stagnation or decreasing enrollment, and are operating at less than half capacity.

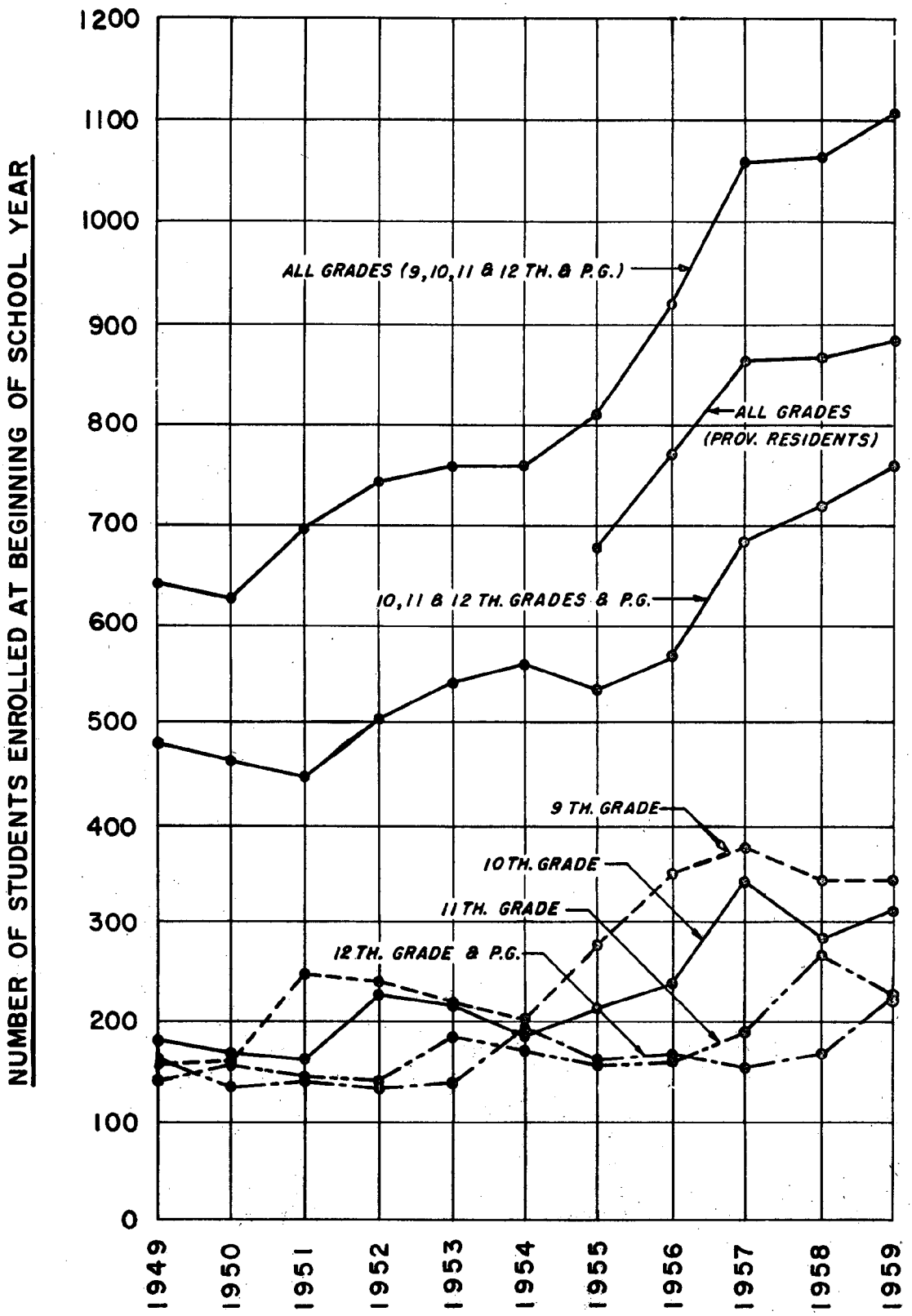


FIG. I

CLASSICAL HIGH SCHOOL

NUMBER OF STUDENTS ENROLLED AT BEGINNING OF SCHOOL YEAR											
	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
9TH. GRADE	159	161	248	240	218	202	278	350	376	345	344
10TH. GRADE	181	170	163	227	216	192	212	238	344	283	311
11TH. GRADE	140	158	148	140	185	172	158	161	187	267	227
12TH. GRADE	156	134	140	132	130	178	158	145	143	165	218
POST GRADUATE = P.G.	4	2	0	3	10	16	5	23	10	3	5
TOTAL 9,10,11 & 12TH. GRADES & P.G. PROV. RESIDENTS & NON-RES.	640	625	696	742	759	760	811	917	1060	1063	1105
TOTAL 9,10,11 & 12TH. GRADES & P.G. PROV. RESIDENTS ONLY		NOT TABULATED					676	768	864	866	883
TOTAL 10,11 & 12TH. GRADES & P.G. PROV. RESIDENTS & NON-RES.	481	464	448	502	541	558	533	567	684	718	761

PUPIL STATIONS: OPTIMUM = 1020 ; MAXIMUM = 1216

TABLE I.

CLASSICAL HIGH SCHOOL

Another possible way of cutting down to some degree the enrollment at Classical High School has been suggested, but not favored or recommended. This is to the extent of approximately 200 non-resident tuition pupils, some of which come from as far off as Westerly. However, it seems to be generally agreed that the presence of such college-bound young people from other communities is stimulating and contributes to the morale of the school.

Figure II and Table II, following, show the comparative enrollment in the four senior high schools for the past eleven years.

SCHOOL	PUPIL STATIONS	
	OPTIMUM	MAXIMUM
CLASSICAL	1020	1216
CENTRAL *	—	—
HOPE	1820	2276
MT. PLEASANT	1660	2132

* INCLUDES ANNEX A & B.

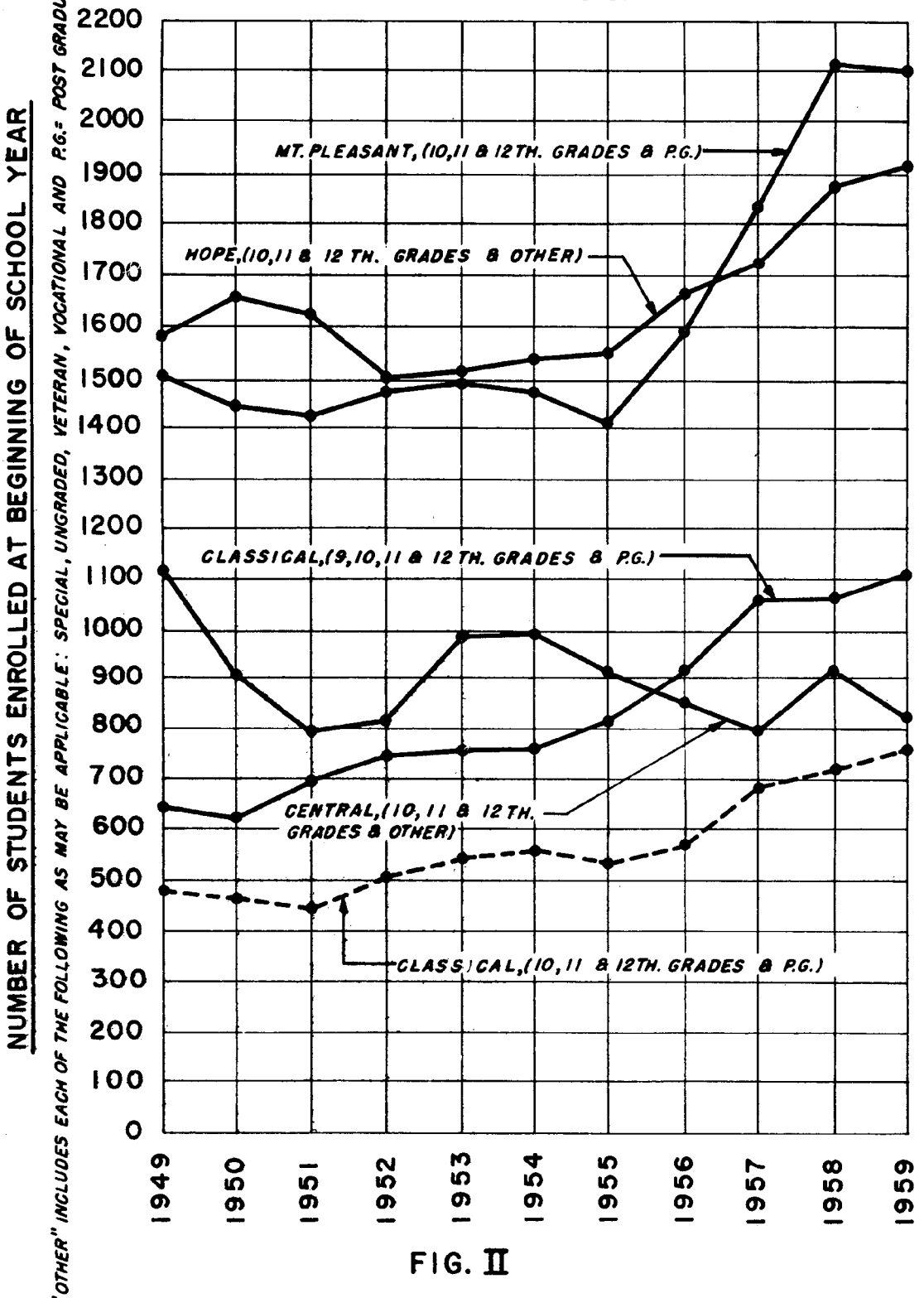


FIG. II

PROVIDENCE SENIOR HIGH SCHOOLS

"OTHER" INCLUDES EACH OF THE FOLLOWING AS MAY BE APPLICABLE: SPECIAL, UNGRADED, VETERAN, VOCATIONAL AND P.G.= POST GRADUATE.

NUMBER OF STUDENTS ENROLLED AT BEGINNING OF SCHOOL YEAR											
		1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
CLASSICAL	9TH. GRADE	159	161	248	240	218	202	278	350	376	345	344
	10TH. GRADE	181	170	163	227	216	192	212	238	344	283	311
	11TH. GRADE	140	158	148	140	185	172	158	161	187	267	227
	12TH. GRADE	156	134	140	132	130	178	158	145	143	165	218
	POST GRADUATE = P.G.	4	2	0	3	10	16	5	23	10	3	5
	TOTAL(9,10,11 & 12TH. & P.G.)	**640**	**625**	**696**	**742**	**759**	**760**	**811**	**917**	**1060**	**1063**	**1105**
	TOTAL(10,11 & 12TH. & P.G.)	**481**	**464**	**448**	**502**	**541**	**558**	**533**	**567**	**684**	**718**	**761**
CENTRAL	10TH. GRADE	385	362	327	344	323	301	246	235	348	430	358
	11TH. GRADE	255	194	164	184	168	174	148	117	200	231	237
	12TH. GRADE	247	200	158	131	129	117	120	113	124	125	140
	OTHER	229	145	146	159	361	397	399	378	127	132	91
	TOTAL	**1116**	**901**	**795**	**818**	**981**	**989**	**913**	**843**	**799**	**918**	**826**
HOPE	10TH. GRADE	673	685	642	574	669	546	535	645	628	685	653
	11TH. GRADE	519	546	530	447	432	563	483	525	612	625	683
	12TH. GRADE	379	419	446	472	398	424	501	441	452	530	544
	OTHER	13	5	5	9	14	7	31	47	32	37	36
	TOTAL	**1584**	**1655**	**1623**	**1502**	**1513**	**1540**	**1550**	**1667**	**1724**	**1877**	**1916**
MT. PLEASANT	10TH. GRADE	603	638	660	635	629	619	587	817	845	950	870
	11TH. GRADE	484	399	430	489	481	462	447	403	567	684	682
	12TH. GRADE	408	407	339	349	384	379	368	365	410	465	536
	POST GRADUATE	10	4	0	3	3	13	8	4	11	12	12
	TOTAL	**1505**	**1448**	**1429**	**1474**	**1497**	**1473**	**1410**	**1589**	**1833**	**2110**	**2100**
TOTAL OF FOUR SCHOOLS		**4845**	**4629**	**4543**	**4536**	**4750**	**4762**	**4684**	**5016**	**5416**	**5968**	**5949**

TABLE II

PROVIDENCE SENIOR HIGH SCHOOLS

PLAN 2

Plan 2 is a modification of Plan 1 preceding. In Plan 2, certain inherent limitations and shortcomings of Plan 1 have been overcome by the erection of an additional adjacent one story school building without basement, housing four science rooms, an art room and a music room. This leaves the third floor auditorium as now in the main building for assembly or study purposes.

Besides accommodating the present enrollment more efficiently, Plan 2 provides extra facilities over Plan 1 in the form of the old assembly hall, one science room, one art room and one music room.

Illustration No. 2 indicates this additional structure in preliminary block form and shows the basic additional facilities obtained. And a comparison with Table III under Plan 2 indicates that all essential requirements have been met.

The location of this possible new addition is, of course, dependent upon redevelopment plans and any new traffic lanes through this area.

PLAN 3

Plan 3 envisions the construction of an entirely new school building, whether near the present site or elsewhere. It would include all the facilities required under the School Department Memorandum "Schedule A" previously referred to. These would be efficiently arranged within a 2-story building and basement.

PLAN 4

Plan 4 consists of moving Classical High School into some other adequate and conveniently located suitable building which may now be made available and adapted at comparatively little expense.

However, it is outside the scope of this report to make any study or submit recommendations as to what particular school or other structures, if any, might be made available and/or satisfactory at this time.

But we would be remiss without pointing out that there are now eight junior high schools well distributed throughout the city (from near its center to the peripheries), each of which are operating at below their optimum capacity.

Illustration No. 3 shows the location in the city of these junior high schools.

And Table IV following, shows the total enrollment by grades yearly, in September, in the eight Providence public junior high schools for the last 17 years, namely 1943 to 1959 inclusive.

It is noteworthy not only that the total enrollment declined by over 2,000 for the first 6 years (since when it has been practically stagnant), and that with the present total, there are about as many vacant seats as occupied ones, based on the maximum capacity.

NUMBER OF STUDENTS ENROLLED AT BEGINNING OF SCHOOL YEAR					
YEAR	7 TH. GRADE	8TH. GRADE	9TH. GRADE	OTHER	TOTAL
1943	2475	2457	2170	476	7578
1944	2311	2385	2047	552	7295
1945	2084	2199	1934	542	6759
1946	1931	2009	1832	506	6278
1947	1857	1859	1650	535	5901
1948	1751	1832	1520	533	5636
1949	1797	1681	1516	508	5502
1950	1875	1779	1404	487	5545
1951	1812	1819	1393	478	5502
1952	1667	1723	1445	510	5345
1953	1763	1635	1339	531	5268
1954	2025	1751	1351	536	5663
1955	1959	1880	1434	504	5777
1956	1839	1904	1418	464	5625
1957	1738	1737	1449	507	5431
1958	1939	1644	1431	563	5577
1959	2048	1841	1424	505	5818

"OTHER" INCLUDES UNGRADED, SIGHT CONSERVATION, PHYSICALLY DISABLED, CRIPPLED CHILDREN AND EDUCABLE.

ENROLLMENT TOTALS ARE FOR THE FOLLOWING SCHOOLS: (1) NATHAN BISHOP, (2) SAMUEL W. BRIDGHAM, (3) NATHANAEL GREENE, (4) ESEK HOPKINS, (5) OLIVER H. PERRY, (6) GILBERT STUART, (7) GEORGE J. WEST AND (8) ROGER WILLIAMS JUNIOR HIGH SCHOOLS AND HENRY BARNARD SCHOOL (SPECIAL). ENROLLMENT AT THE LATTER, BEGINNING 1953, VARIED FROM A MAXIMUM OF 166 IN 1954 TO A MINIMUM OF 26 IN 1959, AVERAGING 100 FOR THE PERIOD.

TABLE IV

PROVIDENCE JUNIOR HIGH SCHOOLS

And for the last seven years, that is, 1953 to 1959 inclusive, the capacities and yearly enrollment separately in each of the eight junior high schools, has been as follows:

School	Optimum* Capacity Stations	Maximum Capacity Stations	1953	1954	1955	1956	1957	1958	1959
Nathan Bishop	1,354	1,654	760	791	829	798	806	787	811
Samuel W. Bridgham	1,084	1,268	468	480	483	462	447	442	454
Nathanael Greene	1,180	1,468	814	819	759	702	664	714	736
Esek Hopkins	836	1,140	406	437	454	467	445	432	453
Oliver Hazard Perry	1,316	1,588	487	602	652	602	611	685	689
Gilbert Stuart	1,160	1,544	701	763	812	812	816	876	853
George J. West	1,026	1,254	555	626	649	649	636	660	751
Roger Williams	1,126	1,510	924	979	993	988	969	952	1,033
Totals**	9,082	11,426	5,115	5,497	5,631	5,480	5,394	5,548	5,780

* This optimum rating of pupil stations was established by the City Plan Commission in 1950.

** These totals are slighly less than shown in Table IV due to the omission of the Henry Barnard Special School.

The total enrollment in the 43 elementary schools, embracing the lower 6 grades- i.e. 1st grade to 6th grade inclusive (preliminary to the junior high schools) - also special students, pre-primary and kindergarten for the last 17 years, that is feeding the junior high schools, has also been practically stationary or declining as follows:

1943 - 16,004
1944 - 15,904
1945 - 15,641
1946 - 15,631
1947 - 15,927
1948 - 15,460
1949 - 15,640
1950 - 15,458
1951 - 15,691
1952 - 16,359
1953 - 16,562
1954 - 16,699
1955 - 16,377
1956 - 16,421
1957 - 15,963
1958 - 15,664
1959 - 15,527

The optimum capacity of the elementary schools teaching these six grades, etc. is approximately 26,000.

We wish to make it absolutely clear that in presenting the preceding and following information and factual data, no recommendation is being made one way or the other as to moving Classical High School. Plan 4 is mentioned merely as one possible solution for investigation before coming to a final decision.

And we wish to be equally emphatic that no selection should be inferred as to a choice of which junior high school can best be justified.

However, Dr. James L. Hanley, Superintendent of Schools, in his report to the School Committee of 1957, stated his belief at that time was that the Nathanael Greene Junior High School could be vacated and Classical High School transferred to it with more justification than in the case of any other junior high school. He was careful not to make any recommendation, but in his reasons therefor (numbered 1 to 5 inclusive) included the following information:

> "The four junior high schools to which the students could be transferred have plenty of vacant classroom space to accommodate them. The larger enrollments, too, would justify a richer program in those schools.
>
> "The present Nathanael Greene Junior High School is an ideal secondary school plant. Although travel distance is no longer an important consideration in the location of a senior high school, the building is located close to two bus lines and is not over 1-1/2 miles from the center of the City. There is an athletic field directly across the street. The building is set back from the street, has a well kept lawn, and tennis courts adjoining.
>
> "It has a fine library, a beautiful auditorium, boys' and girls' gymnasia, a large counselling room, a home economics suite, special rooms for art and music, and a good cafeteria, with an adequate teachers' dining room. It has 44 classrooms and two large music rooms.".

Possible disadvantages numbered 1 to 3 were also listed by Dr. Hanley in his report of 1957.

We understand that Dr. Hanley, too, very definitely was of the opinion that any decision should not be made if or where to relocate, without further careful study of the respective relative advantages and disadvantages of the several possibilities.

Incidentally, Nathanael Greene Junior High School has not only spare capacity for considerable growth as Classical High School in years to come, but also to accommodate the 9th graders at present as favored by many.

Figure III supported by Table V shows the optimum capacity of this school as 1,180 and its maximum capacity as 1,468, as compared with the present overcrowded enrollment in Classical of 1,105 including the 344 9th graders.

Figure III and Table V, (broken down by grades) give the enrollment of Nathanael Greene Junior High School from 1949 and brought up-to-date (1959) since Dr. Hanley's report of 1957.

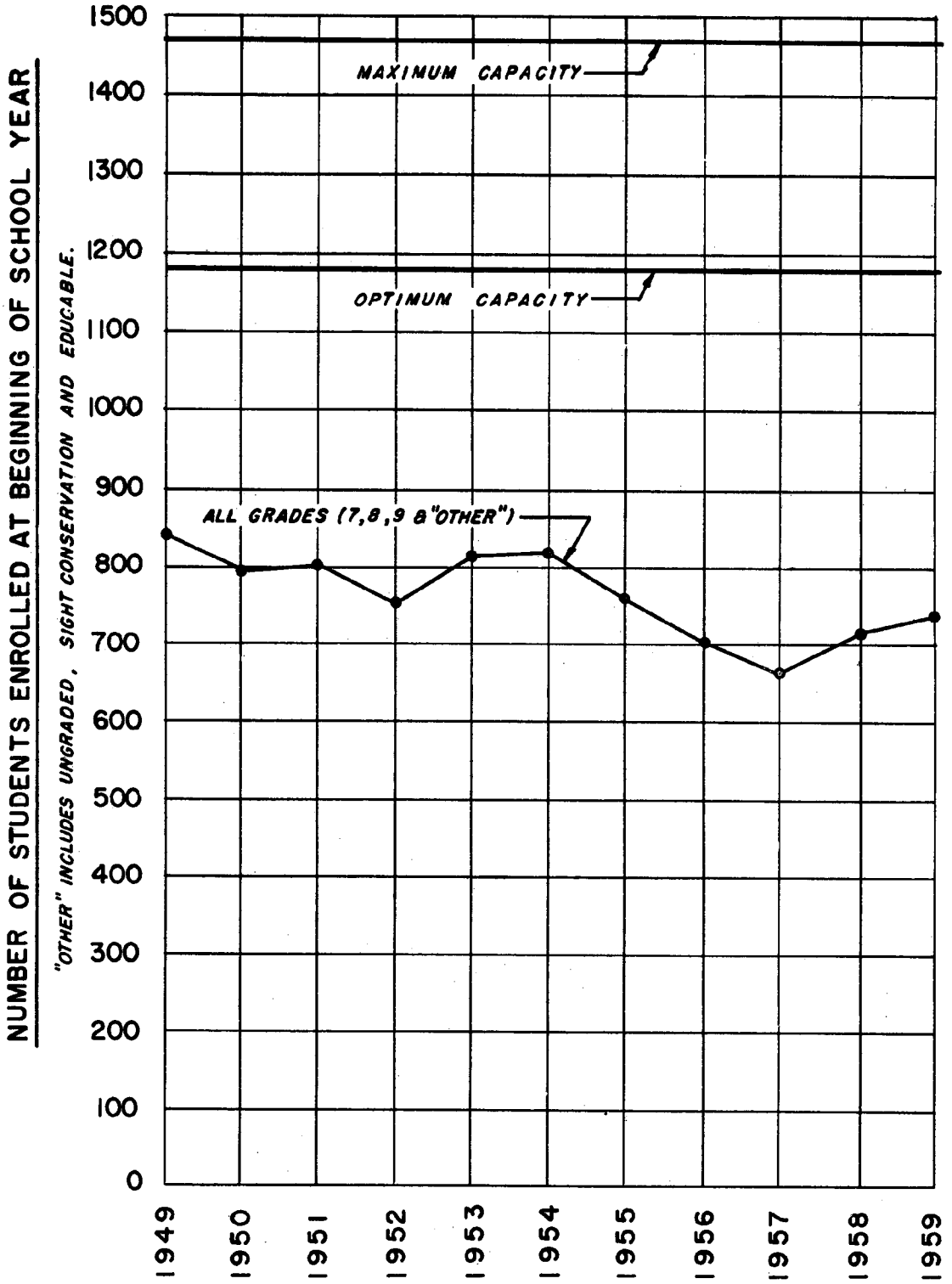


FIG. III

NATHANAEL GREENE JR. HIGH SCHOOL

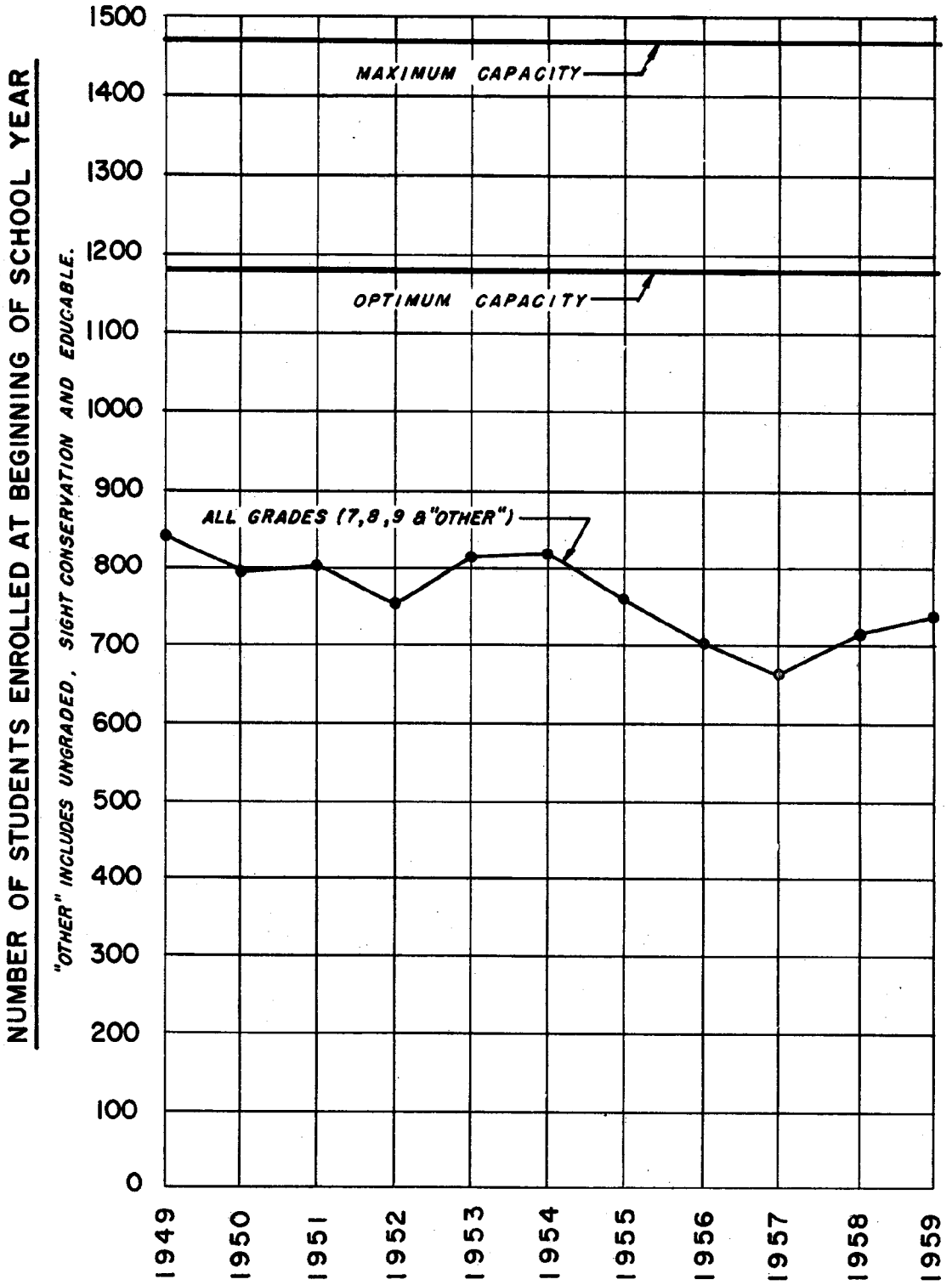


FIG. III

NATHANAEL GREENE JR. HIGH SCHOOL

NUMBER OF STUDENTS ENROLLED AT BEGINNING OF SCHOOL YEAR											
	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
7TH. GRADE	256	230	267	227	232	256	240	211	194	251	199
8TH. GRADE	258	260	230	260	276	280	227	226	198	186	247
9TH. GRADE	244	222	218	192	223	214	218	198	191	193	203
OTHER	82	83	86	73	83	69	74	67	81	84	87
TOTAL	840	795	801	752	814	819	759	702	664	714	736

"OTHER" INCLUDES UNGRADED, SIGHT CONSERVATION AND EDUCABLE.

PUPIL STATIONS: OPTIMUM = 1180 — MAXIMUM = 1468 (ESTABLISHED BY CITY PLAN COMMISSION)

TABLE V

NATHANAEL GREENE JUNIOR HIGH SCHOOL

PART V

ESTIMATED RELATIVE INITIAL COSTS

Estimated relative initial costs of the several possible solutions under consideration are submitted as follows:

PLAN 1 REPAIRING AND REMODELING WITHIN THE WALLS OF THE PRESENT BUILDING

1.	Building changes and remodeling (Includes only the following new equipment, i.e. for 3 science rooms, library and kitchen at $73,000.)	$550,000
2.	Additions to automatic sprinkler system	5,000
3.	Heating and ventilating	80,000
4.	Plumbing	60,000
5.	Lighting and electrical work including new elevator and limited TV	125,000
	Total	$820,000

PLAN 2. Similar to Plan 1 but with a new additional adjacent building housing three science rooms, art and music rooms and toilet facilities. (Proper deduction has been made for certain obvious third floor changes not required under Plan 2.) $950,000

PLAN 3. The construction of an entirely new school building near the present site, not elsewhere. $1,500,000

These initial costs are based upon estimated 1960 prices only. They do not include cost of land or engineering. And they do not include the cost of "loose" equipment like desks, chairs and other furniture.

PLAN 4. Moving Classical High School into some other conveniently located suitable building.

A detailed submission on the above is beyond the scope of this report, but for convenience the following items are listed, all being factors to be considered in any further study. There are doubtless many others.

1. Excellence of educational facilities.
2. Cost of moving to the desired building.
3. Cost of structural modifications required, if any, in the desired building.
4. Cost of furnishing and equipment, if any.
5. Room for future expansion.

PART VI

CONCLUSIONS AND RECOMMENDED LINE OF ACTION

Some of the conclusions to be drawn from the preceding graphic and tabular factual data are as follows:

REGARDING THE FOUR SENIOR HIGH SCHOOLS

Regarding the four senior high schools, there is one high school - namely, Classical - which is a 4-year school (that is, essentially grades 9, 10, 11 and 12) which is filled to overflowing. It is intolerably crowded with more than 50 percent in excess of its designed capacity of 750 pupils. This is amply confirmed by a visual inspection.

However, Classical High School would not now be crowded if it were operated on the same basis as the other city senior high schools. That is, if the 9th graders were distributed to the other junior high schools, the registration would be 344 less or only 761, well within its optimum capacity and practically at the original designed capacity.

There are two high schools - namely Hope and Mt. Pleasant - which are 3-year schools (that is essentially grades 10, 11 and 12) which are filled.

There is one high school - namely, Central - which is a 3-year school (that is essentially grades 10, 11 and 12), but which is not filled to optimum capacity; in fact, there are several hundred empty seats.

The total enrollment in the four previously mentioned senior high schools in September 1959 was approximately 5,949 which is close to the combined total optimum capacity.

This total registration during the last few years seems to be leveling off.

REGARDING THE EIGHT JUNIOR HIGH SCHOOLS

These junior high schools act as immediate feeders or on the production line, supplying the senior high schools, and therefore serve as a barometer indicating the expected probable trend of registration there in the near future.

These are 3-year preparatory schools (that is, essentially grades 7, 8 and 9). Most of them are operating at approximately half capacity, which this year resulted in

5,646 empty seats based on maximum capacity,

3,303 empty seats based on optimum capacity.

The total enrollment for these eight schools at present (September 1959) was 5,780

as compared with a maximum capacity of 11,426

and as compared with an optimum capacity of 9,083.

This enrollment, incidentally, has declined from a maximum in 1937 of 11,150

to a figure in 1943 of 7,578

then declining at a slower rate to a figure which has been about static for the last five years, averaging approximately 5,600.

The Nathanael Greene Junior High School is one of the schools now operating at approximately half capacity. That is,

the total enrollment in September 1959 was 736

as compared with a maximum capacity of 1,468

and as compared with an optimum capacity of 1,180

REGARDING THE ELEMENTARY SCHOOLS

These elementary schools act as feeders or suppliers to the junior high schools, and their enrollment makes possible, therefor, longer-range predictions as to the probable trend of registration in the senior high schools in the more distant future. These schools (some 43 in number) are essentially 6-year schools, teaching grades 1, 2, 3, 4, 5 and 6, and also a certain amount of pre-primary and kindergarten.

Their enrollment (September 1959) was 15,527
as compared with an optimum capacity of approximately 22,000.

Their enrollment in 1922 (at that time comprising 73 elementary schools) was 26,344.

Based upon optimum capacity, there are now, therefor, in these schools 6,473
empty seats.

The enrollment in the elementary schools has been declining over the past six years, and for the previous eleven years before that, was practically static, all as indicated in preceding Part IV of this report.

The above factual data seems to indicate that the Providence public schools are now in a period approaching static enrollment. There may be even a further decline before any marked resurgence sets in.

This being the case, it would be extremely difficult to justify the capital expenditure of $1,500,000 for a new senior high school called for under Plan 3 and involving all the fixed charges and other extra expenses which go with it.

In like manner, it would seem almost as futile to try to justify the expenditure of approximately two-thirds of this amount (when land is included) under Plan 2, which provides an additional structure on land which must be obtained and cleared to better accommodate the present enrollment.

Now, reference is made to Plan 1, that is, rehabilitation within the walls of the present school building at an estimated expense of $820,000, and probably involving the elimination of the existing 9th graders.

This, too, is a substantial capital outlay of public funds, and although, in our opinion, it is to be preferred to either Plan 2 or Plan 3, we do not recommend it for the time being.

That is, we are of the opinion that Plan 1 should not be effectuated unless and until a careful study and analysis has been made of other feasible alternatives and they have been eliminated.

As to what line of action to take at present, we recommend an immediate consideration and thorough study to cover not only all essential pertinent physical factors, but also any intangibles and/or controversial factors of consequence involved under Plan 4.

This plan covers transferring Classical High School to some other adequate and conveniently located suitable building.

From preliminary and incomplete data available to us at the present time, such a study should not be passed over. It promises to be worthwhile and possibly rewarding. In fact, multiple opportunities to take advantage of are worth investigation in a selection - for instance, like one of the larger half full junior high schools.

But, we wish to make it absolutely clear that it is not in our province nor do we have sufficient information to advise which school building is the optimum choice, if Classical is to be transferred.

Such possible benefits worth investigating from the choice of one of them are:

1. Substantial saving in capital outlay (approaching $1,000,000 when all factors, like play fields, are taken into account).

2. Some consolidation of half empty schools resulting in enriching programs in the remaining units (as noted under Part VII following).

3. The possible use of the existing valuable Classical High School building as a much needed unified administration building to take the place of the existing scattered departments (as noted under Part VII following).

4. Considerable saving in annual operating and teaching expense, due to eliminating one junior high school from the school system (as noted under Part VII following).

5. Room for the future expansion of Classical High School in the new location, when and if desirable.

6. Possibility of expediting action so as to be ready for receiving Classical students by next September 1960.

PART VII

GENERAL REMARKS

It should be emphasized that Illustrations 1 and 2 are preliminary studies only to indicate the general possibilities as concerns Plans 1 and 2 respectively. They do not pretend to be finished layouts which cannot be improved upon.

Illustrations 1-a to 1-d inclusive, giving a possible layout under Plan 1 (covering remodeling and modernizing with the walls of the present building) show no change in the six pairs of large and small classrooms on each of the first, second and third floors.

There remains the original total of 18 sets of such rooms - that is, 18 of the smaller units normally called "R" rooms, and 18 of the larger adjoining "home" rooms.

The smaller rooms in each case have been labeled as having a capacity of 18 students each, and the "home" rooms a capacity of 35 students each. These capacities are not maximum capacities, but they may be called optimum capacities. They are (as noted on the individual floors) figured at 25 square feet per student in spite of the fact that, we understand, in some cases these rooms have been actually occupied on the basis of nearer only 15 square feet per student - that is, 30 and 60 pupils respectively.

On the basis of fixed desks, it would seem that the "R" rooms should be rated perhaps at a maximum of 20 students, and the "home" rooms at 42 students. This would give a maximum student seating capacity for these six pairs of classrooms per floor of 372 students each, or for the three floors of 1,116 students. And for the "home" rooms only, there would be a maximum seating capacity of 252 per floor or a total of 756 for the three floors.

Of course, it goes without saying that the optimum capacity is usually considerably less than the seating capacity or the maximum capacity. Capacity terms have to be used and interpreted with extreme care and with a knowledge of the special conditions involved. For example, spare seats in a senior classroom obviously are of no use to a crowded freshman classroom.

****

Regarding Part V, setting forth the estimated relative initial costs of Plans 1 to 3 inclusive, it should be noted that there may be opportunities for possible reductions in these estimates based upon further study.

For example; the estimate,as stated, includes new aluminum sash and window frames throughout. However, whether these windows should be renewed now or maintained for a while, is a matter of further checking, perhaps judgment, and depends upon the expected service life and plans for the school.

The total estimate of $820,000 includes $50,000 for these new aluminum windows, removing the existing wood frames and sash, and preparing the openings for the new frames. This initial cost, together with fixed charges on same, could probably be saved not, however, without some offsetting expense of annual maintenance and repair charges on the existing sash.

****

Just what weight or importance to give to possible city traffic control plans and for redevelopment in the vicinity of Classical High School is difficult at this time to appraise. But, we are inclined to wait until such time as these plans are more crystallized which, of course, in turn may depend upon what decision is made as to Classical High School, the two being perhaps interdependent.

****

Regarding the possible disposition of the present valuable Classical High School building, we are inclined to favor a suggestion made by School Committee member, Mr. Raymond F. Fricker, September 1959, that the structure be investigated for possible modernization as a much needed building for unified administration purposes.

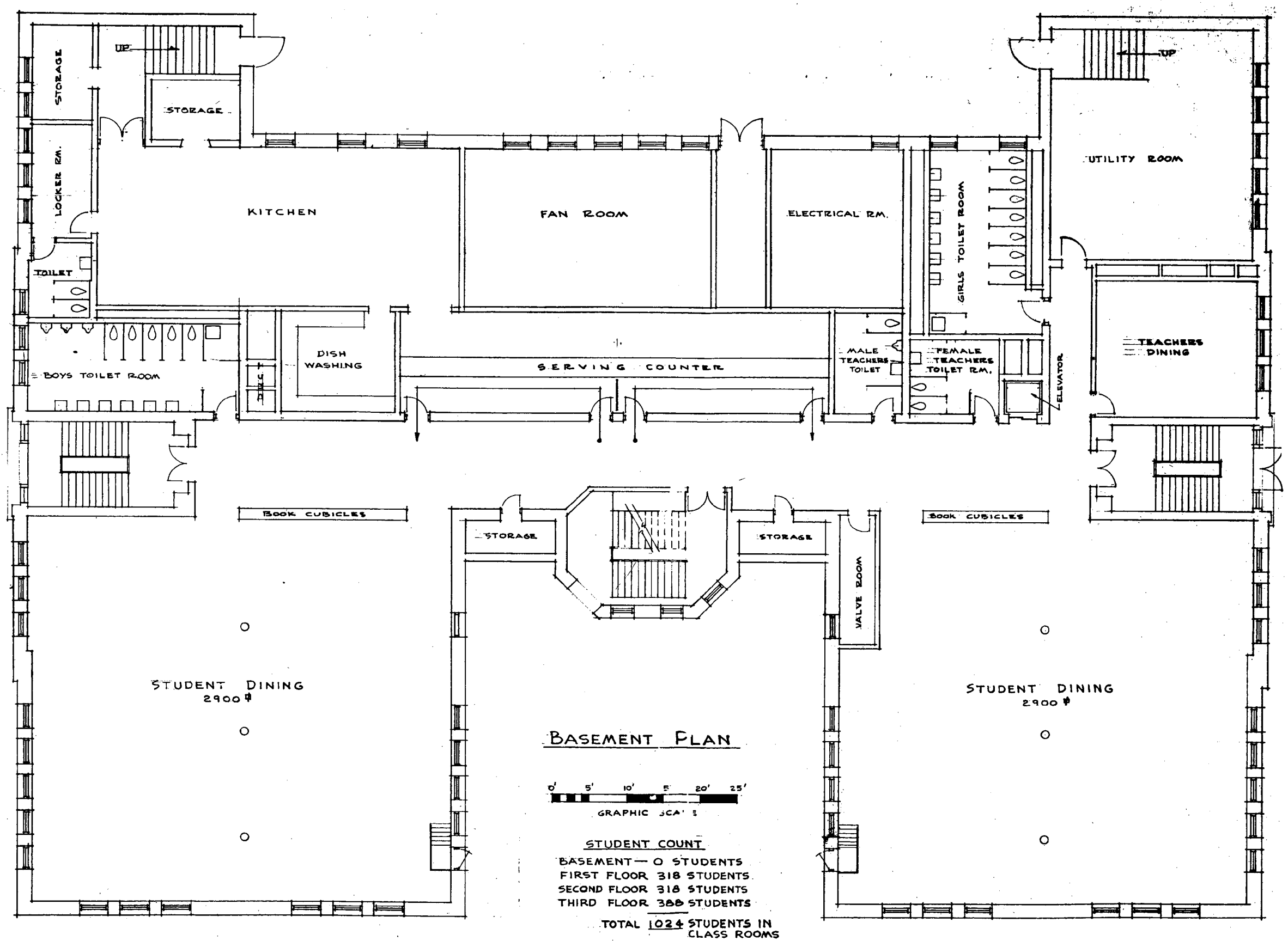
****

With reference to the very substantial under-enrollment of the various junior high schools, it has been suggested by the Assistant Superintendent, James H. Foley, that these figures point toward consolidation of some of them. Besides resulting in a possible enrichment of the programs in the remaining then more largely attended schools, there would be obtained very substantial annual savings amounting to thousands of dollars on account of eliminating the expense and salaries of a principal, a librarian, clerks, custodians, cleaning women, and of reducing maintenance, fuel and utilities costs.

Transferring Classical High School, its faculty and staff and other personnel to one of them would help effectuate this consolidation and save correspondingly.

Respectfully submitted,
CHARLES A. MAGUIRE & ASSOCIATES

Wendell S. Brown



BASEMENT PLAN

0' 5' 10' 5' 20' 25'

GRAPHIC SCALE

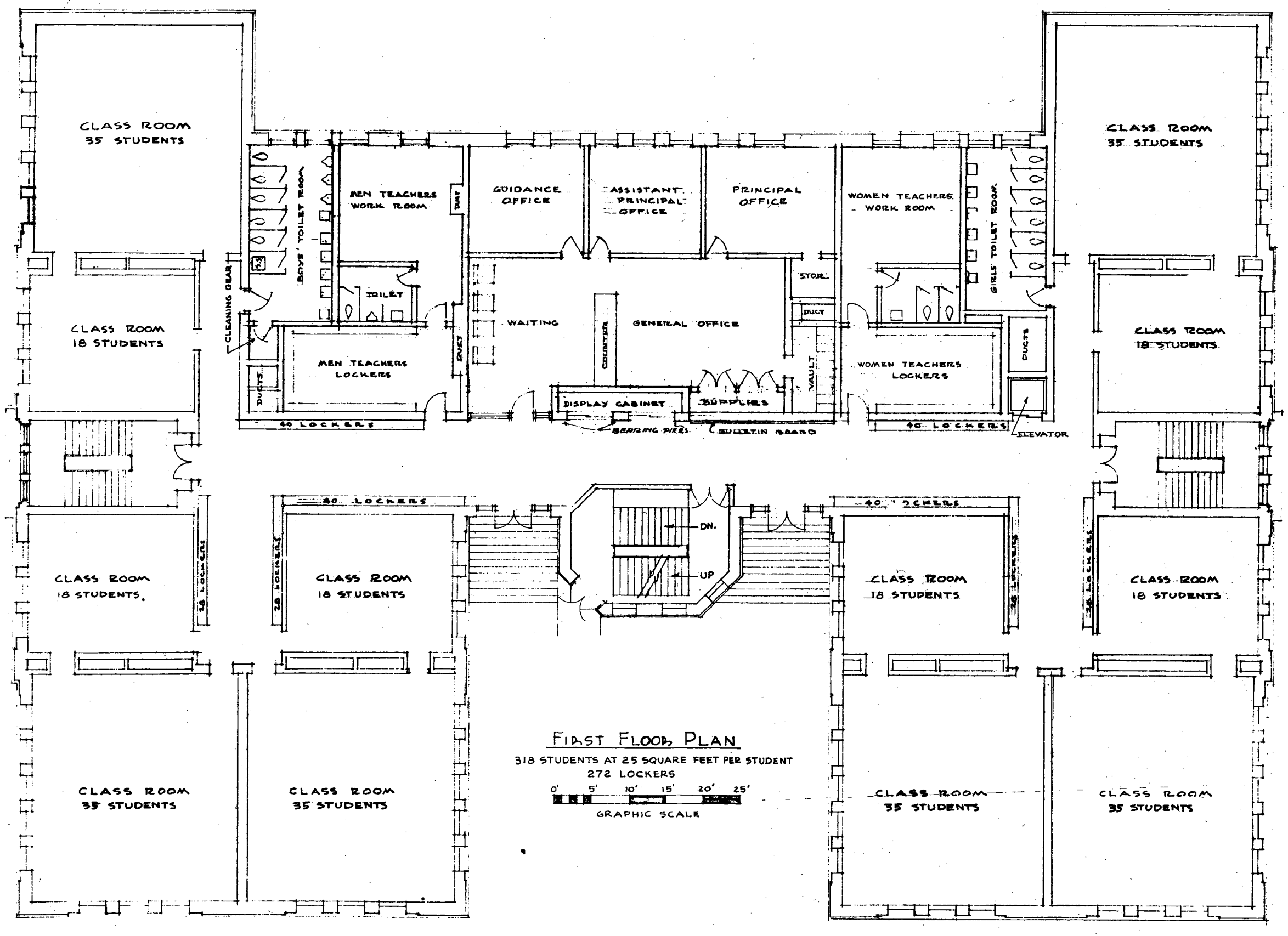
STUDENT COUNT

BASEMENT — 0 STUDENTS
FIRST FLOOR 318 STUDENTS
SECOND FLOOR 318 STUDENTS
THIRD FLOOR 388 STUDENTS

TOTAL 1024 STUDENTS IN CLASS ROOMS

934 TOTAL NUMBER OF LOCKERS

ILLUSTRATION 1-A

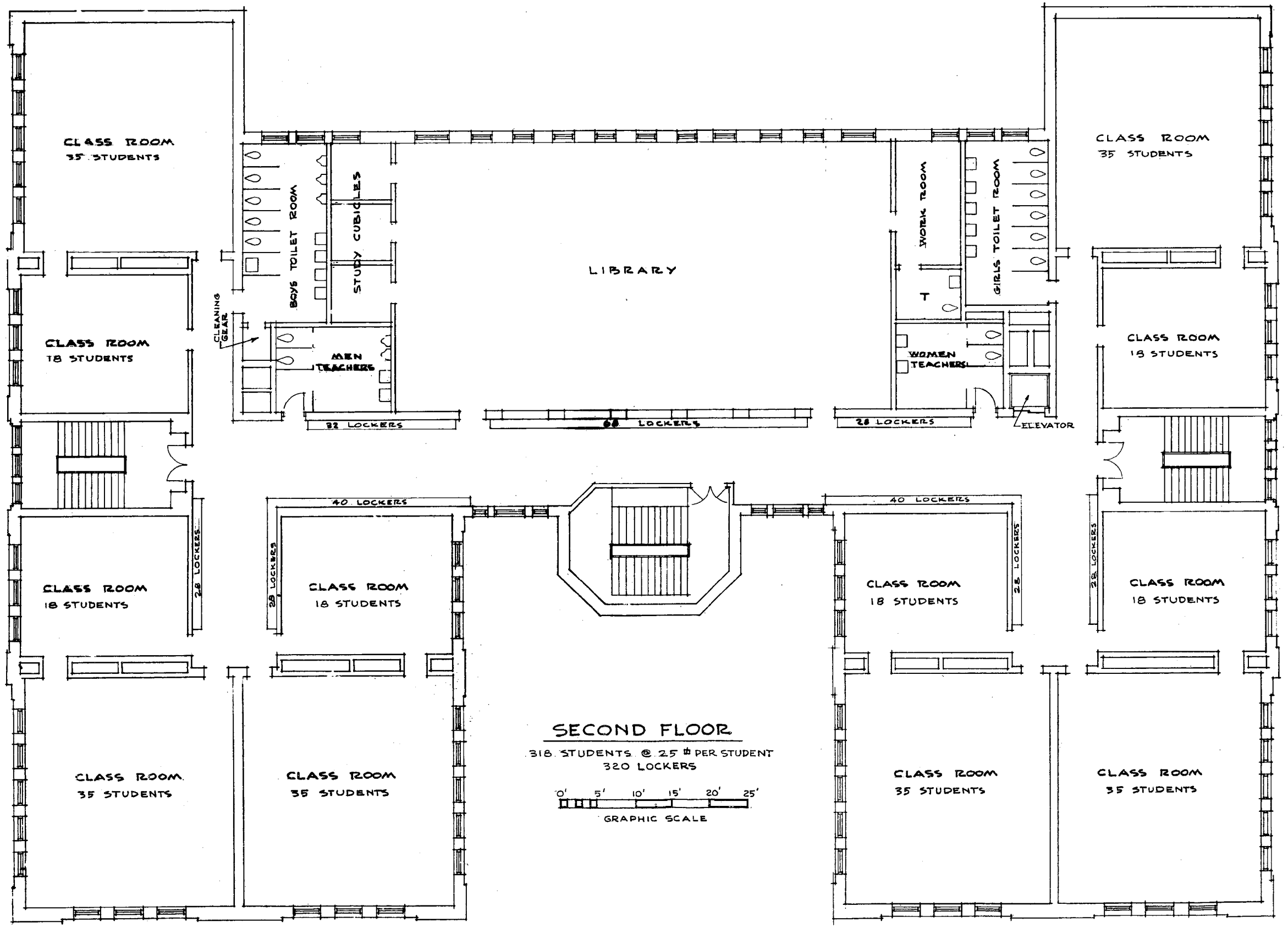


FIRST FLOOR PLAN

318 STUDENTS AT 25 SQUARE FEET PER STUDENT
272 LOCKERS

0' 5' 10' 15' 20' 25'
GRAPHIC SCALE

ILLUSTRATION 1-B



SECOND FLOOR

318 STUDENTS @ 25 # PER STUDENT
320 LOCKERS

0' 5' 10' 15' 20' 25'
GRAPHIC SCALE

ILLUSTRATION 1-C

CLASS ROOM
35 STUDENTS

CLASS ROOM
18 STUDENTS

BOYS TOILET ROOM

CLEANING GEAR

STORAGE

18 LOCKERS

SCIENCE
CLASS ROOM
35 STUDENTS

36 LOCKERS

COMBINATION SCIENCE
LABORATORY

40 LOCKERS

SCIENCE
CLASS ROOM
35 STUDENTS

36 LOCKERS

GIRLS TOILET ROOM

STORAGE

ELEVATOR

CLASS ROOM
35 STUDENTS

CLASS ROOM
18 STUDENTS

CLASS ROOM
18 STUDENTS

28 LOCKERS

40 LOCKERS

28 LOCKERS

CLASS ROOM
18 STUDENTS

CLASS ROOM
35 STUDENTS

CLASS ROOM
35 STUDENTS

40 LOCKERS

28 LOCKERS

CLASS ROOM
18 STUDENTS

CLASS ROOM
35 STUDENTS

CLASS ROOM
35 STUDENTS

28 LOCKERS

CLASS ROOM
18 STUDENTS

SUMMER STREET

THIRD FLOOR

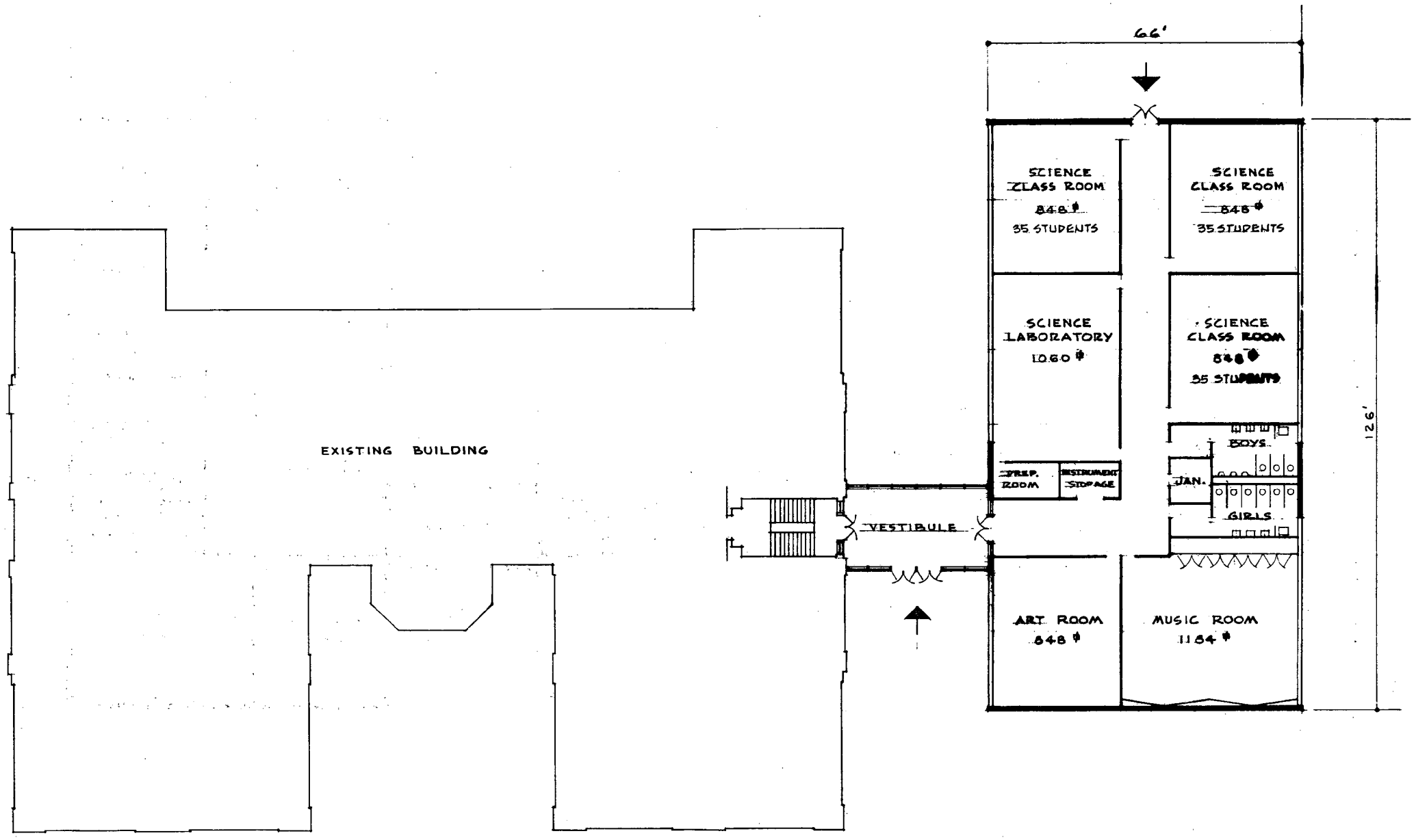
388 STUDENTS AT 25 SQUARE FEET PER STUDENT
342 LOCKERS

0' 5' 10' 15' 20' 25'

GRAPHIC SCALE

POND STREET

ILLUSTRATION 1-D



CLASSICAL HIGH SCHOOL

PLAN OF ART · MUSIC · AND SCIENCE WING ADDITION

0' 5' 10' 20' 30' 40' 50' 60'

ILLUSTRATION 2

FILED

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