

# A CONSULTANT STUDY for





NORTH LAWRENCE COMMUNITY SCHOOLS

Bedford, Indiana

A CONSULTANT STUDY OF THE  
NORTH LAWRENCE COMMUNITY SCHOOLS

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Leonard Gregory  
William R. Wilkerson  
Odlie, Burke, Yearwood & Johnson, Architects, Inc.

School of Education  
Indiana University  
Bloomington, Indiana

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## FOREWARD

Boards of School Trustees are continuously confronted with problems of many complexities and varieties. Attempts to solve problems often touch a vital community nerve. Reactions are then evoked among persons who hold varying views on problems. Emotions may run rampant among people, while others, not tuned to these problems may appear apathetic and disinterested.

In April of 1980, the Board of School Trustees engaged a consultant team to conduct a comprehensive school survey. The charge to this consultant team was (1) look at the current student population and projected population; (2) study the current grade organization pattern; (3) assess facility needs on the basis of students to be served and their capacity as educational centers; (4) school transportation; and (5) analyze the financial capability in terms of facility needs recommended.

The decision of the Board of School Trustees to engage in this study is evidence that there is an awareness of the need to study some issues of the school corporation. The consultant team is most appreciative of the valuable assistance furnished by members of the school staff and community. Data obtained from these sources were utilized by the team with only one goal in mind--how to provide the best possible educational program for the children of the North Lawrence Community School. It is hoped that the observations and recommendations included in this study will significantly assist school officials in reaching that goal.

D.F.B.  
C.W.D.  
L.G.  
OBYJ  
WRW

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# CHAPTER 1

## ENROLLMENT PROJECTIONS FOR GRADES K-12

This section of the report is devoted to the matter of projected enrollments for the North Lawrence Community Schools.

In projecting enrollments, certain assumptions were taken into account, various demographic data were reviewed for purposes of establishing trends and a continuation factor was determined for K-12 enrollments.

Several assumptions were made regarding conditions which would affect enrollments if certain practices or conditions were significantly altered. The principal assumptions are as follows:

1. The entering age for the public schools will remain unchanged.
2. The enrollment percentages for those enrolled in private and parochial schools will remain at the present level.
3. The enrollment increase/decrease from 1980-85 will be equivalent in terms of annual intervals.
4. The school district will not reach saturation by 1985.
5. Children will progress through the elementary grades at about the same retention rate as at present.

### The Continuation Factor In Projecting Enrollments

Retardation and acceleration of pupils directly affect enrollment data in the schools. One can determine a ratio between grade levels to provide a basis for projecting enrollments. This is often referred to as a continuation factor. These ratios represent the proportion of pupils enrolled in a particular grade who are in a higher grade during the succeeding year. For instance, there were 476 pupils in the fifth grade in 1978-79 and in 1979-80, there were 430 pupils in the sixth grade. Thus, the continuation factor is .90. For whatever reason, only 90% of the number of the 1978-79 fifth graders succeeded to the sixth grade in 1979-80. Such ratios show enrollments as increasing, decreasing or remaining stable. If the factor is about .99, it reflects stability; if less than .99, it reveals a decreasing enrollment; and if in excess of 1.00, it indicates an increasing enrollment due to in-migration. Continuation factors are computed on the basis of aggregate numbers of pupils per grade over a period of time. This is one of a number of considerations used in estimating future enrollments and is a basic factor used in many of the computations.

Table 1 reveals the K-12 enrollment history from 1975-76 through 1979-80. This data was used to compute continuation factors as indicated. The averaged continuation factor for grades K-12 is .98. This indicates some persistent loss in enrollment over the past five years.

TABLE 1. Enrollment For The North Lawrence Community Schools,  
1975-76 through 1979-80.

	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>	<u>1978-79</u>	<u>1979-80</u>
K	465	537	457	479	459
1	497	531	542	513	504
2	491	472	482	508	455
3	471	500	466	493	501
4	520	470	458	453	470
5	526	505	461	476	452
6	531	516	488	450	430
7	520	531	526	504	457
8	536	521	525	513	498
9	534	533	526	514	498
10	506	501	498	492	489
11	419	426	406	422	426
12	399	419	427	422	407
K-12					
TOTAL	6,415	6,462	6,262	6,239	6,046
Spe. Ed./					
Voc. Ed.	341	362	398	359	415
GRAND					
TOTAL	6,756	6,824	6,660	6,598	6,461

Using the above data, the averaged continuation factors for the 1975-76 through 1979-80 period are as follows:

K-1	1.08	3-4	.96	6-7	1.02	9-10	.94
1-2	.92	4-5	1.00	7-8	.99	10-11	.84
2-3	1.01	5-6	.96	8-9	.99	11-12	1.00

The averaged continuation factor, K-12, is .98.



When computing projected school enrollments, a number of factors must be taken into account. Following are listed several considerations which illustrate the factors bearing on subsequent enrollments:

1. The reduction in family size means fewer school-age children per family than heretofore has been the case. The best current estimate for the number of children per family is 1.8. Assuming equal intervals in age distribution, there would be 1.05 school age children per residence. Thus, the addition of 100 single family residences would yield 105 enrollees in the schools - some of whom may attend private/parochial schools.
2. Thus, this is further complicated by the nature of housing. For instance, mobile homes yield less children per unit than the conventional single family residences and those children are more likely to be younger. An apartment complex of one bedroom units will provide a different yield than three bedroom apartments. Zoning requirements, availability of utilities and access to the satisfaction of personal and professional needs are illustrative of other factors which impact on potential housing.

3. Obviously, the factors of energy and interest rates have and are inhibiting residential construction. This is borne out in reviewing the housing permits in Bedford. These have been at a modest level during the past six years with a decided drop during 1979-80. There are no indicators that housing starts will initiate a reversal in the enrollment decline.

The information base is sketchy in terms of the area outside of Bedford due to the lack of systematic zoning and planning. It is almost impossible to get accurate data in terms of housing starts on the economic impact of same. Inspection does reveal an increase in the number of mobile homes and these tend to have a more pronounced impact on elementary enrollments than is true at the secondary level.

One caution, however, is that construction of housing units does not necessarily mean a net gain of students. It may represent replacement, relocation or residences without school age children.

There is the probability of low cost apartment units being constructed and several housing developments have been planned. Nothing of any magnitude has been actually

started, thus there is considerable lead time before the schools would need to respond. It is quite evident that growth of any consequence will be located west and north of the City. State Road 37 provides a corridor of appealing building sites and easy access for those who commute elsewhere for employment.

4. The accommodation of the 1-12 enrollment, aside from the normal decline, is compounded by a somewhat erratic distribution of those enrolled. There are no doubt reasons for the uneven distribution, but they are not controllable by the school officials. For instance, in 1979-80 there were 504 in the first grade; 455 in the second grade; 501 in the third grade and 430 in the sixth grade. The point is that these peaks and valleys will not be evened out but will progress through the succeeding years.
5. The North Lawrence Community Schools are experiencing a normal decline in enrollment consistent with school corporations with similar characteristics. Demographers suggest that we will begin to see a reversal of the decline at the elementary level in three or four years.

## Computing School Enrollments

There are several methods of computing future enrollments and, although each is subject to some degree of speculation, a defensible rationale can be offered for each.

- A. One method is to presume a continuation of the enrollments based on the past five years. Using that basis of determination, the K-12 enrollments would approximate the following:

1980 - 5,925

1981 - 5,805

1982 - 5,690

1983 - 5,575

1984 - 5,465

- B. Another method is to project on the basis of the grade by grade progression through high school completion. This accounts for the variance in grade enrollments. Assuming an average kindergarten enrollment of 480, the enrollments would be as follows:

1980 - 5,975

1981 - 5,885

1982 - 5,815

1983 - 5,775

1984 - 5,735

- C. Let us assume a net gain of 20 housing units per year for the next five years and a continuation factor of .98.

The resultant enrollment would approximate the following:

1980 - 5,945

1981 - 5,830

1982 - 5,710

1983 - 5,600

1984 - 5,485

- D. Let us further assume that, due to in-migration, the decline was reduced by 1% for each year. The enrollments would be :

1980 - 6,000

1981 - 5,945

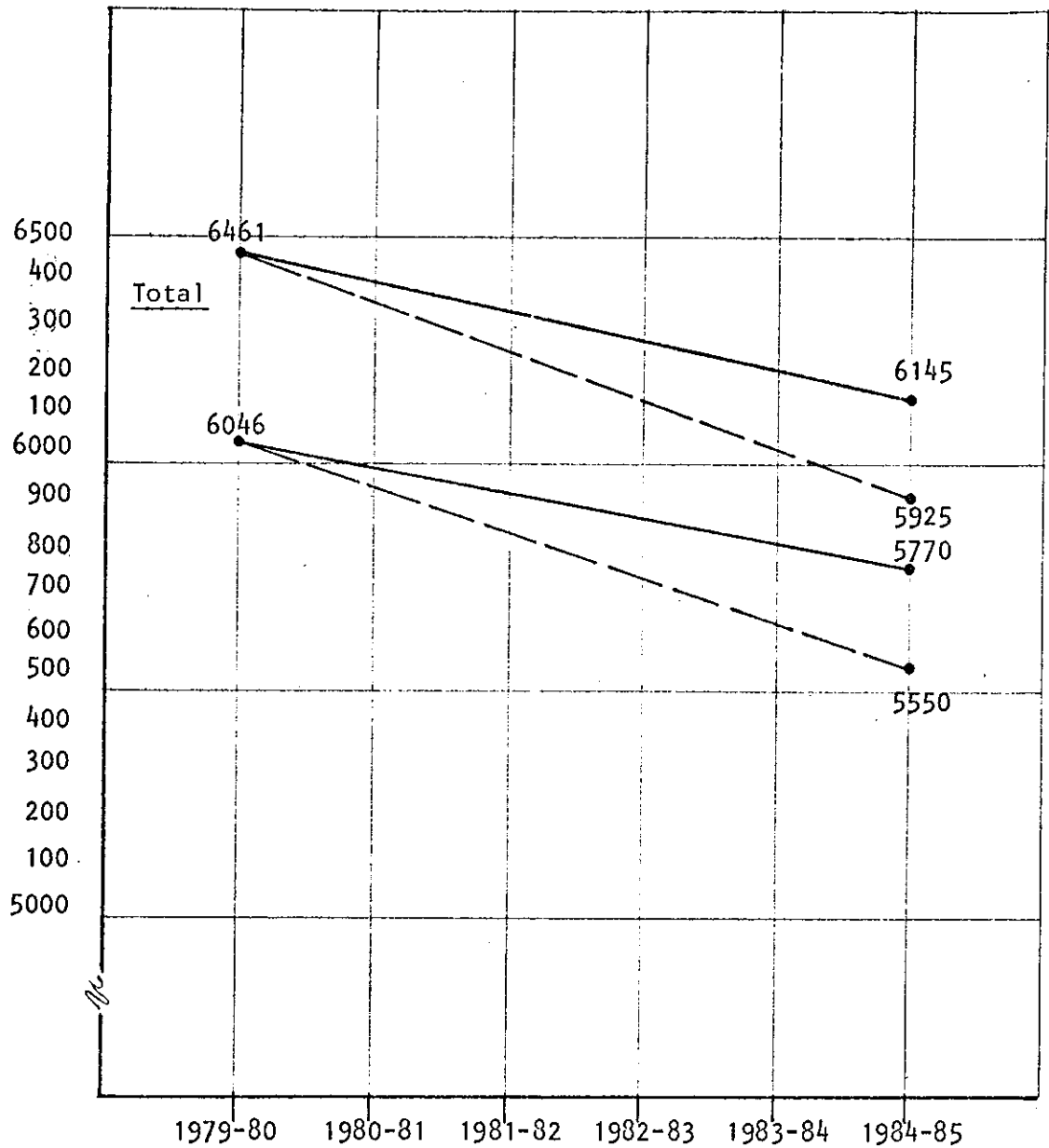
1982 - 5,883

1983 - 5,825

1984 - 5,770

From these estimates, an enrollment range becomes evident. Chart 1 indicates a range for the total enrollment (K-12 plus special education and vocational education) and the K-12 enrollment. In reality, the year to year totals will not be equivalent, but for purposes of these projections, the focus is on the total enrollments projected five years hence.

Chart 1. Projected range for K-12 and to  
Enrollments, 1980-81 through 1984-85



For purpose of estimating enrollments on the basis of various grade organization options, the following represent the averaged proportionate enrollments based on K-12 enrollment:

K - .08%  
 1-6 - 46%  
 1-5 - 42%  
 6-8 - 24.2%  
 9-12 - 29.6%



## CHAPTER II

### PATTERNS OF GRADE ORGANIZATION

Many school districts today are concerned with providing the appropriate grade organization pattern for their students. The focal point of this concern has been the adolescent pupils, who usually are in grades six through nine. Should 11-year old pupils be grouped with those 13 years old, or is it more appropriate to house 12-year old students with those who are 14 years old? The intent of this chapter is to provide background information on various patterns of grade organization so that a sound rationale can be developed for a recommended pattern for the North Lawrence Community Schools. This chapter will focus upon educational, social, and psychological considerations which have influenced patterns of grade organization for other school districts. Admittedly, among the factors which must be influential in determining grade organization are the status of existing school facilities and the financial capability of a district to construct additional buildings. These factors will be dealt with later in the study.

From its inception at the beginning of the twentieth century, the reason for being of the junior high school has been to intervene in the educative process between childhood and adolescence and serve the special intellectual, social, physical and emotional needs of pre-adolescent and early adolescent pupils. In recent years, however, controversy has arisen germane to the alleged failure of junior high schools to achieve aims and functions proposed for them. Criticisms of dysfunctional processes of the junior high school have centered mainly around the similarity of

the junior high program to that of the senior high school and the inadequacy of its instructional personnel. Primary among such criticisms are the junior high schools' departmentalization of subject matter, interscholastic athletics, sophisticated social events, over emphasis upon academic subjects at the expense of the fine arts and humanities and inadequately prepared teaching staff. Furthermore, discord has been directed at the junior high school's grade level organization and age levels served. Evidence on child growth and development has been offered indicating that children are physically, socially and psychologically more mature than children in previous years; therefore, the conventional grade seven through nine or seven through eight grade level organization has been challenged by proposals to include grades five and/or six in schools for the middle years. Claims and counter-claims regarding the position of the ninth grade have further obfuscated the grade level reorganization controversy.

Out of the controversy over claimed dysfunctional processes of the junior high school and the structure of its grade level organization has developed the middle school concept as an educational alternative for the middle years of schooling. The concept of the middle school arouses among educators a certain amount of disagreement on detail. A middle school, may be defined as a school that stands, academically, between elementary and high school, is housed separately (ideally, in a building designed for the purpose), and offers at least three years of schooling beginning with either grade 5 or grade 6.

The statement of functions for the junior high school which was drafted by Gruhn and Douglass in 1947 reflected the evolutionary transformation of the junior high's basic purposes over the years and remains still highly significant today. The six functions they presented were:

1. Integration--Providing learning, situations in which students may utilize previously acquired skills, attitudes, ideals, interests and understandings that will become integrated into wholesome and effective student behavior (general education for all students).
2. Exploration--Leading students to discover and explore their specialized interests, aptitudes and ability as a determinant for decisions concerning educational opportunities and future vocational decisions. Stimulating and providing opportunities for students to develop an expanding range of cultural, social, civic and recreational interests.
3. Guidance--Educational and Vocational--Assisting students in making their own decisions and making satisfactory mental, emotional and social adjustment in growth toward wholesome, well-rounded personalities.
4. Differentiation--Providing for individual differences.
5. Socialization--Providing learning experiences to prepare students for effective and satisfying participation in our complex social order.
6. Articulation--To provide a gradual transition from pre-adolescent education to an educational program suited to the needs and interests of adolescent boys and girls.<sup>1</sup>

Although arguments have been presented for 6-3-3, 6-2-4, 5-4-3, 5-3-4 and 4-4-4 classifications, no one has completed substantial research to prove that one type of organization is better than another.

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<sup>1</sup> Gruhn, W. T., and Douglass, H.R., The Modern Junior High School, p. 60.

Indeed, if one applies to the middle school Gruhn and Douglass' definition of a junior high school as "an educational program which is designed particularly to meet the needs, the interests and the abilities of boys and girls during early adolescent,"<sup>2</sup> then there is no ideal grouping of grades, other than the limitations imposed by early adolescence.

In the planning stages of an intermediate school, student characteristics must be evaluated in order that student needs can be achieved. The school has the responsibility of meeting not only individual academic needs, but also social and economic problems. The following kinds of student characteristics should be surveyed by current grade groups when contemplating the establishment of a middle unit school:

1. The economic level of students.
2. The family means of livelihood (skilled, semi-skilled, unskilled).
3. Environment of students
4. Student neighborhood
5. Minority groups (ethnic and racial)
6. Physical motivation of students
7. Psychological and emotional characteristics of students
8. Academic abilities of students
9. Academic achievement of students
10. Institutionalized students
11. Handicapped students
12. Individual and creative talents

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<sup>2</sup>Ibid, p. 4.

The differentiated function--hence, the paramount goal--of education at this level should intervene protectively in the learning process which was begun in the elementary school, mediate between the human conditions at the onset of adolescence and the pressures of culture, and continue the general education of early adolescents with a curriculum applied in a psychosocial environment which is functional for learning at this stage of socialization.<sup>3</sup>

The following points should be considered in developing a philosophy upon which to build the grade organization, faculty and program of an intermediate level school. This school should:

1. Provide for a gradual transition from elementary to secondary school and logically reflect the elementary and secondary school arrangement of the school district.
2. Be made by program and organization for each student to become well known by at least one teacher.
3. Exist as a distinct, very flexible and unique organization tailored to the special needs of pre-adolescent and early adolescent youths. Thus, this new organization should not be construed to be either an elementary school or high school.
4. Provide an environment where the child, not the program, is most important and where the opportunity to succeed exists in practice--not just theory.

Controversy concerning grade level reorganization has been made somewhat nebulous by research evidence in the general field of child growth and development which counters middle school claims for including grades five and/or six in, and eliminating grade nine from, the conventional junior high school.<sup>4</sup> Until more

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<sup>3</sup>Popper, Samuel H., The American Middle School, Waltham, Massachusetts: Blaisdell Publishing Company, 1967.

<sup>4</sup>Ibid., p. 293.

conclusive evidence on pupil maturation is available, debate over competing grade number combinations must necessarily maintain a neutral status.

Numerous types of organization have been adopted by school systems, by accident or design. Various combinations of grades or age groups are established by communities either temporarily or for long periods. Several of the more popular grade groupings are the 8-4 plan, 5-3-4 plan, 6-3-3 plan and the 6-2-4 plan. While recognizing that not all plans of organization are feasible for the North Lawrence Community Schools certain aspects of each plan are described and discussed.

### Eight-Four Plan

#### Development of the 8-4 Plan

The 8-4 plan was the traditional way of organizing grades in the United States and until approximately 1910, this plan was prevalent. Since that time it has lost ground at varying rates depending upon the growth of the middle school or junior high school concept. In more recent years the 8-4 plan has continued strongest in the rural areas, where a more conservative approach to education has been found.

#### Advantages of the 8-4 Plan

There has been support recently for the 8-4 plan on the basis of the belief that under this plan the 13 and 14-year old student does not need to mature socially too rapidly. Proponents argue



that the seventh grader is too young to be in a junior high school. It is also contended that the junior high school curriculum is too departmentalized. The 8-4 organization provides an opportunity for a continuation of teaching the basic skills at the seventh and eighth grade levels, rather than developing a curriculum oriented toward subject centered specialization and promotion.

#### Limitations of the 8-4 Plan

Many authorities believe the seventh and eighth grade students need to be exposed to a more varied program and one less repetitious of the elementary subjects. They argue that it is not economical to provide facilities for industrial arts, home economics, agriculture, and physical education at the elementary level. An organization structure which provide a separate unit at the intermediate level. An organization structure which provides a separate unit at the intermediate level is thus more economically feasible and educationally proper.

### Six-Three-Three Plan

#### Development of the 6-3-3 Plan

This plan has been the most widespread throughout the nation. The 6-3-3 plan developed in the urban areas during the 1920's and 1930's. The junior high school at that time included grades seven, eight and nine and was usually physically separated from the elementary and senior high school. However, the basic philosophy of the junior high school as a part and parcel of the secondary school remained unchanged.

### Advantages of the 6-3-3 Plan

The 6-3-3 plan was devised as a more practical and efficient arrangement than the 8-4 plan. The argument was based upon the fact that there was little articulation between elementary and secondary schools of the 8-4 plan due to abrupt changes of curricular, instructional and administrative patterns and practices. Some of the advantages were:

1. Enriched provisions for seventh and eighth grade students.
2. A junior secondary school of adequate length to develop a good guidance program.
3. Opportunity for ninth-graders to develop leadership capacity.
4. Opportunity to develop a program related to the needs of this age group as a result of being freed from the traditional patterns of the elementary and senior high schools.

### Disadvantages of the 6-3-3 Plan

There have been many criticisms leveled at some of this organizational unit. Some include:

1. The junior high school represents a downward extension of the high school with all of its characteristics associated through full departmentalization, promotion by subjects, electives and units of credit. These conditions have impugned orientation of the junior high program to the special and unique needs of early adolescents.
2. Seventh and ninth grade children are too far apart in development to be members of the same school.
3. The high school curriculum requires certain subjects to be taken at the ninth grade level. It is impractical to provide facilities such as elaborate science labs, workshops, home economics labs, etc., at a junior high school building site, as well as at the senior high school.

4. Most of the teaching personnel have been prepared for high school teaching positions and therefore articulation with the elementary school is minimal at best.
5. Preoccupation with socialization activities for early adolescents such as parties, social dancing and athletics have caused junior high pupils to be cut off from the exploratory, individual and experimental activities.

### Five-Three-Four Plan

#### Development of the 5-3-4 Plan (Middle School Concept)

An organization of school units with grades 1-5, 6-8 and 9-12 appears to be gaining in popularity. Some of the reasons may be simply attributed to a "bandwagon effect" while others are concerned with physiological, psychological and sociological characteristics of the pre- and early adolescent. Physiologically, the middle school is founded on research and belief that adolescence is reached earlier by today's youth, the period of prepubescence and early adolescence is a time of rapid and uneven growth and development. Closely related to physical growth and maturation characteristics are certain psychological and intellectual changes. The formal operations stage, according to Piaget,<sup>5</sup> is reached by most youth at around the age of eleven. Due to the marked contrast between the preceding concrete operations stage and the formal operations stage, it is important that pupils be administered in separate educational setting so that distinctive programs and instruction may reflect the intellectual maturity of these students.

#### Advantages of 5-3-4 Plan

There are many advantages influencing the middle school concept.

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<sup>5</sup>Flavell, John, The Developmental Psychology of Jean Piaget, Chapter 5.

One of the unique advantages of the 5-3-4 organization is that the plan can provide a more gradual articulation between the elementary school and the senior high school than an 8-4 or 6-2-4 organizational plan. The advantages of including grade six in the three-year junior high school, rather than grade nine, include:

1. Many subjects in grade nine require special facilities, such as labs, which are normally located in the high school and grade nine students are more compatible with older students than they are with the younger students in grades seven and eight.
2. It is easier to provide learning experiences which meet the needs, interests, aptitudes and abilities of the sixth, seventh and eighth grades in one facility than it is to meet the needs of the seventh, eighth and ninth graders.
3. A more exploratory program and guidance services can be afforded the sixth grader.
4. A 5-3-4 organization unit can better utilize elementary trained teachers through grade eight.
5. A 5-3-4 program is adaptable to the development of a program which stresses the basic skills at the intermediate level, rather than competitive, inter-scholastic events.

#### Disadvantages of 5-3-4 Plan

The disadvantages of the three-year junior high school program include:

1. The three-year intermediate school often introduces complete departmentalization at the sixth grade.
2. Sixth grade students are integrated with older students accelerating social sophistication.
3. All the disadvantages of the junior high may be realized in the middle school as well.

## Six-Two-Four Plan

### Development of the 6-2-4 Plan

The 6-2-4 plan is one of the less popular organization plans being used by school districts today. The concept of the two-year junior high school developed in the early part of this century and were primarily operating as grades seven and eight within the framework of the 6-6 plan of organization. Later some school districts physically removed seven and eight from the high school and the 6-2-4 organizational unit became a recognized plan for school organization.

### Advantages of the 6-2-4 Plan

This plan is found in communities where a three-year intermediate plan is unacceptable for some reason. The advantages of a 6-2-4 plan include:

1. The plan calls for a four-year high school which is believed by many to be more economical and offer a better college preparatory or vocational program than three-year senior high schools.
2. Economy can be effected because the two-year school does not need all the special facilities that appear necessary in the three-year intermediate school.
3. Other organizational plans provide too wide a range of ages resulting in undesirable social and academic pressures on students in the seventh and eighth grades.

### Disadvantages of the 6-2-4 Plan

Some of the arguments against the 6-2-4 plan are:

1. A two-year school is often too small to be economical and still have available specialized services and programs.

2. The two-year curriculum is too often a "watered down" senior high school curriculum.
3. The two-year junior high school usually discourages use of elementary trained teachers.
4. The two-year junior high school does not afford a smooth transition from the elementary school into the senior high school since the articulation period is too brief.

Many conflicting claims have been made in recent years germane to the relative advantages and disadvantages of middle schools and junior high schools. A growing amount of literature and research in recent years has been devoted to resolution of central elements of dissidence in the debate. Perhaps the most significant outcome of much of this effort is the realization that the best interests of pre- and early adolescence pupils can be served best by emphasis upon education in the middle years, rather than in just the middle school or junior high school.

Vars has quite pertinently pointed out:

As far as the education of young adolescents is concerned, I believe it really does not matter whether they are in a middle school or a junior high school--provided they have good teachers and a sound curriculum. Although good education can be provided under different organizational arrangements, the question is will it? Is one arrangement more likely than another to attract qualified teachers? Does the pattern of grade organization materially affect the kind of curriculum and instruction provided? On these questions, we have little evidence and much conjecture.

Vars continued:

...schools for this age must, in addition to intellectual development, give particular attention to guidance, exploration and individualization, to cite three of the familiar functions of the junior high school. These goals and functions are appropriate for any institution composed primarily of young, adolescents, whether it is called a junior high school, a middle school, a student center, or something else, or whether it contains grades 5-6-7-8, 6-7-8, 7-8-9, or no



grades at all in some kind of nongraded program. In short, I believe that the goals of education for young adolescents are the same now as they were almost 60 years ago, when the first junior high schools were organized.<sup>6</sup>

Along similar lines of thought, Johnson noted:

The decision as to form of organization will have to be made on practical grounds and on the basis of social and administrative viability. Any pattern is satisfactory that gives identity to youths during early adolescence, includes at least three grades for stability, brackets those grades in which significant number of pupils reach pubescence.

Of the studies which looked at both existing middle schools and junior high schools, the research done by Harris was perhaps most extensive. Harris<sup>8</sup> analyzed and compared the instructional organization, academic programs, teacher class and student load, co-curricular activities, contemplated changes and reasons for any changes in twelve selected junior high schools. From his survey findings, Harris concluded: "The basic programs of the selected middle schools and the selected junior high schools were more alike than they were different."<sup>9</sup>

Constantino<sup>10</sup> studied three Pennsylvania middle schools and three closely located junior high schools of comparable size to determine whether the middle schools differed from the junior high schools in terms of curriculum and selected dimensions of teacher-pupil classroom behavior. The study tested the assumption that

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<sup>6</sup>Vars, G.F., "Junior High School or Middle School? Which Is Best for the Education of Young Adolescents?" High School Journal 49:109-110, December, 1966.

<sup>7</sup>Johnson, Mauritz, "The Magic Numbers of 7-8-9: Is This Structure Really the Best for the Junior High School?" National Education Association Journal 52:50-51, March 1963.

<sup>8</sup>Harris, D.E., A Comparative Study of Selected Middle Schools and Selected Junior High Schools, pp. 7; 52.

<sup>9</sup>Ibid., p. 162.

<sup>10</sup>Constantino, P.S., A Study of Differences Between Middle School and Junior High School Curricula and Teacher-Pupil Classroom Behavior, pp. 614A-615A.

the middle school offers a curriculum and instructional experience that differ from those in the junior high school. It was found that the curricula of the junior highs and middle schools were predominantly subject-matter-centered and generally similar in all respects. The programs of studies included the same subjects at both seventh and eighth grade levels. Furthermore, there was found to be no significant difference between the two school populations in terms of teacher-pupil classroom behavior.

A study by Stuckwisch asked teachers in Indiana to respond to an opinionnaire of thirty-eight statements considered to be functions of the junior high school at some time in its history by various writers in junior high school education. The five functions considered to be the most important functions of the junior high school respondents were:

1. To make provision for a gradual transition from elementary to secondary education.
2. To provide for individual differences through enriched curricular and extra-curricular activities.
3. To discover the aptitudes, interests, and capacities of individual pupils by testing, counseling and exploratory work.
4. To provide experience in sharing, in the acceptance of responsibility, and in self-direction.
5. To provide a unified educational program from the seventh grade through the ninth grade.

Junior high school certified personnel in the Gatewood<sup>12</sup> study chose the second and fourth of these functions as most important

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<sup>11</sup> Stuckwisch, H.J., Functions of the Junior High School as Indicated by Junior High School Teachers, pp. 55-56.

<sup>12</sup> Gatewood, T.E., A Comparative Study of the Function, Organizational Structure and Instructional Process of Selected Junior High Schools and Selected Middle Schools, p. 276.

and unique for their schools. The first, second and fourth functions were chosen by middle school certified personnel.

All other school districts should attempt to match instruction to the potential of individual children at all age levels. One of the primary values of this nation is its commitment to the individual, yet our schools frequently have, in an impersonal manner, squeezed individuals into a common mold. It is quite likely that concern for the individual can be manifested with any of the grade organizations described above and it is also likely that the opposite can be true. The following quotation from a report by the Education Facilities Laboratory sets forth the proper role of the emergent "middle unit" building, whether the grades included in it are 6-8, 5-8, 7-8, or 7-9:

The intermediate school will exist as a school in its own right, free of the image of the senior high school and free to serve as an educational laboratory for the early adolescent. It would serve as a transitional phase between the paternalism of the neighborhood elementary school and the varied, departmentalized environment of the senior high school. The school would depart fundamentally from elements of the present junior high school which contribute to early sophistication and its undesirable by-products. Techniques, programming and curriculum would provide for maximum flexibility of scheduling to provide for varying rates, interests and abilities. Emphasis would be given to an educational program which would provide for the development of individual study skills and their related individual responsibility.

This school is envisioned as a community-oriented educational center which would provide a natural evening meeting place for adults serving their intellectual and social needs in an environment compatible with and related to the educational leadership role of the school and its staff. The concept would flower and mature to the extent that traditional and restrictive conventions such as 'gradeness' are recognized as guidelines to be evaluated, rather than arbitrary dictates to be followed. Provisions for cooperative teaching will be made in the program as well as the plans to house the new school.

The new technology of team teaching, programmed learning and television education will find a natural acceptance in the environment of this facility for the new organization will encourage creativity on the part of administrators, supervisors and teachers.

Howard conducted a study of middle schools and junior high schools in Washington and Oregon. His findings bear out Meyers' point, when he says:

In districts which changed to a middle school pattern because of finance, buildings, or enrollment problems, the middle school strongly resembled either elementary or junior high schools, depending upon what their organization was before conversion. Those districts that planned for middle schools and selected this organizational structure because they felt it to be the best are functioning more nearly in accord with the recommended practices for the revised pattern.

Schonhaut reviewed the available research as it pertained to the grade organization for middle schools and came up with several conclusions. The research on the physical, intellectual, psychological and social growth of pupils seems to indicate that the years of greatest change and difference in pupil development occur in grades 6-8 for girls and grades 7-8 for boys. The grades 7-9 school would include more differences than any other three-year pattern. Schonhaut recommended that where factors of housing and desegregation are not involved and there is currently a 6-3-3 system, then that grade organization should be continued. Where cost is not a determining factor, the 6-3-3 plan is recommended

over the 5-3-4 and the 5-3-4 is recommended over the 4-4-4. Brimm notes this same issue most pointedly when he exclaims:

This current period of controversy--middle school versus junior high school--gives schoolmen an excellent opportunity to play the 'numbers game:' fitting organization to facilities while pretending to make such decisions on psychological, sociological and educational principles.<sup>17</sup>

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<sup>17</sup> Brimm, R.P., "Middle School or Junior High? Background and Rationale," National Association of Secondary School Principals Bulletin, 53:6, March, 1969.

## CHAPTER III

### BUILDING AND SCHOOL IMPROVEMENT STUDY

#### FACILITIES ANALYSIS

Education is a product of the dynamic culture in which we live. Like the changing society in which it thrives, education must continually change in response to the educational demands of our people. School corporations are confronted periodically with the question of whether or not their schools are satisfying the current needs of society, a question that is often difficult to answer.

The educational adequacy of a school can be adversely affected by any deficiency in either the number or size of available teaching spaces. Theoretically, capacity represents the largest number of students that can be instructed in a school building without curtailing the desired educational program.

Ideally the number and type of instructional spaces contained in a school building should be those necessary and sufficient to accommodate the desired educational program for the total number of students enrolled in the school. A properly computed capacity of a school provides a measure of the spatial adequacy of the building in relation to the program housed in it. Consequently, if the capacity of a school is substantially lower than its student en-

rollment, the building is restricting the educational programs in some respects. Under these conditions, often characterized as "overcrowding", it is the quality of the educational experiences that usually suffers.

School buildings which could adequately house the educational program of yesterday may be very inadequate in today's ever-changing society. A school building can no longer be thought of as just a physical structure built to house a particular number of pupils. School buildings should economically and efficiently facilitate the instructional program. They should be homelike in atmosphere, and it should easily be discernible that they are primarily places for children and young adults.

Every school facility study must include a close examination of all features of the school that affect the safety and health of its occupants. Any facility that endangers the safety or health of those using the building should be closed, unless the deficiencies can be corrected.

The collection of information covered in this section was a task requiring many man-hours and should represent valuable information to be utilized in advanced planning. One of these judgments concerns the educational adequacy of a school building. This judg-

ment must take into consideration a number of factors. To mention the most obvious factors, one would list (1) program or curricular requirements and (2) instructional practices and trends. These two factors alone, if not satisfied in a facility, can render that building unacceptable as an educational facility. Of course, these factors alone cannot be the sole determinants of whether a building is used or not. However, the team did keep these factors in mind as they evaluated the buildings.

Each of the schools in the North Lawrence Community Schools was visited by the team and the following summary is presented as the team's comments on the strengths and weaknesses of the physical facilities.



## Englewood Elementary School

The Englewood Elementary School is located on a five acre site. The size of this site is less than the eight (8) acres required by the Division of Accreditation and School Facility Planning for a school this size.

### General Building Appraisal

#### Exterior:

- Stone masonry walls in good condition.
- Hollow metal window frames with single-pane glazing.
- Wood trim fascia and vertical siding at window wall areas.
- Flat built-up roof with minimum insulation and metal gravel stop fascia. Roof material is original on building so is in time frame for requiring reroofing.
- Exterior downspouts in fair condition.
- Aluminum entry canopy supported on pipe columns in fair condition.
- Hollow metal entry doors and frames with single-pane glazing. Sidelights are full light not protected by horizontal mullions.
- Step at building entry violates current handicapped requirements.
- Asphalt drives and gravel parking areas in fair condition.
- Asphalt playground areas in fair condition.
- No provisions for handicapped parking or building access.

#### Interior:

- Structurally the building is laminated wood beams supported on steel columns. Bulb tees with a fiber decking material support the built-up roofing.
- Heating is with a gas boiler and circulating hot water to fin tube radiation and unit heater cabinets with individual room control.
- Air conditioning is provided by individual thru-wall/window units in each classroom.
- Ventilation is accomplished by drawing air through the classrooms to a plenum above the corridor ceiling and exhausting the air to the outside.
- The electrical system is as originally installed with no major changes or updating.
- Building is served by public water system.
- The building is on a septic system, but will tie to new city line in the near future.
- No handicapped provisions in toilet rooms or drinking fountains.

- One flight of stairs leads from the entry level administration and multi-purpose area down to the classroom wing and violates current guidelines for handicapped access.
- Floors are predominantly tile in traffic areas with carpet over the original tile in the classrooms.
- Ceilings are suspended acoustic tile with exposed laminated beams in the classrooms.
- Interior walls are painted concrete block.
- Interior doors are non-labeled hollow metal and do not meet current code requirements for classroom and corridor fire separations.
- Suspended fluorescent fixtures are used in classroom areas.
- Surface-mounted fixtures are in corridors.
- Exit lighting is needed to comply with current guidelines.
- Multi-purpose room is subdivided into teaching spaces with wood paneling on stud walls. Some areas are full height to roof deck walls while others are partial height. There are no rated doors on separations and exiting is thru adjacent spaces not protected corridors.
- Kitchen is adjacent to multi-purpose with no fire separation from adjacent space.

#### Building Summary

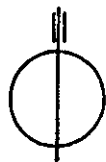
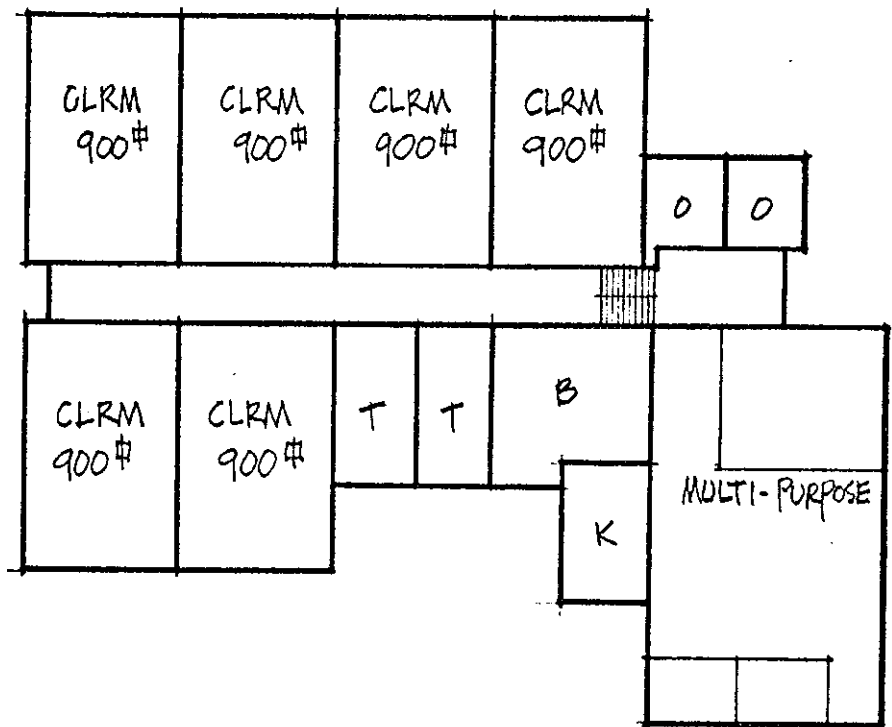
There are 10 areas that are being used for instructional purposes in this building. With the exception of the general purpose classrooms, none of the other spaces meet the minimum space requirements as set forth by Rule B.

This school facility was constructed in 1959 and contains grades K-6 with an enrollment of approximately 210.

There are several deficiencies in this building that tend to hamper a total educational program.

1. Building and programs are not accessible to the handicapped.
2. Inadequate space for indoor physical education.
3. Inadequate space for library.

4. Space for kindergarten, art and music is less than current requirements.
5. Inadequate storage area.
6. No certified physical education instruction.
7. Limited instruction in art, music, speech and hearing and library.



ENGLEWOOD ELEMENTARY

SCALE: 1" = 30'

## Springville Elementary

The Springville Elementary School is located in the community of Springville. The building is located on a 7 acre site which is close to that required by Rule B.

### General Building Appraisal

#### Exterior:

- Stone masonry walls in good condition. East side concrete block with painted surface in fair condition.
- Aluminum window frames with single-pane glazing. Some insulated panel replacement of glass started.
- Wood soffits and trim with painted gutters and downspouts.
- Hollow metal entry doors and frames. Sidelights not protected by horizontal mullions.
- Step at entry violates current handicapped code.
- Flat built-up roof with minimum insulation.
- Playground asphalt areas in fair condition.
- No provisions for handicapped parking or building access.

#### Interior:

- Structurally the original building is masonry wall bearing construction. An I-beam/metal deck system with 1" styrofoam ceiling inserts and recessed lights form the ceiling/roof deck construction supported on the walls. The later addition is structurally steel bar joist and beams on steel columns.
- Colored concrete floors are used throughout the original portion with painted concrete block walls.
- Carpet is used throughout the "open plan" addition area with painted block exterior walls. Ceilings in the area are suspended acoustic tile and surface-mounted fluorescent lights.
- Electric unit heaters and window air conditioners are used in the original building. Combination heating/air conditioners are used in the open plan addition.
- A roof top air conditioner serves the administrative area.
- City water serves the building and a septic system handles waste water.
- Kitchen area is not fire separated from multi-purpose area.
- Hollow metal doors throughout are not rated and corridors do not meet fire separation requirements.
- Toilet rooms are in fair condition. No provision for handicapped toilets or drinking fountains.
- Administration area has wood panel and stud partitions to subdivide original space and form teachers lounge.

### Building Summary

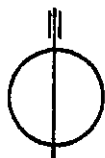
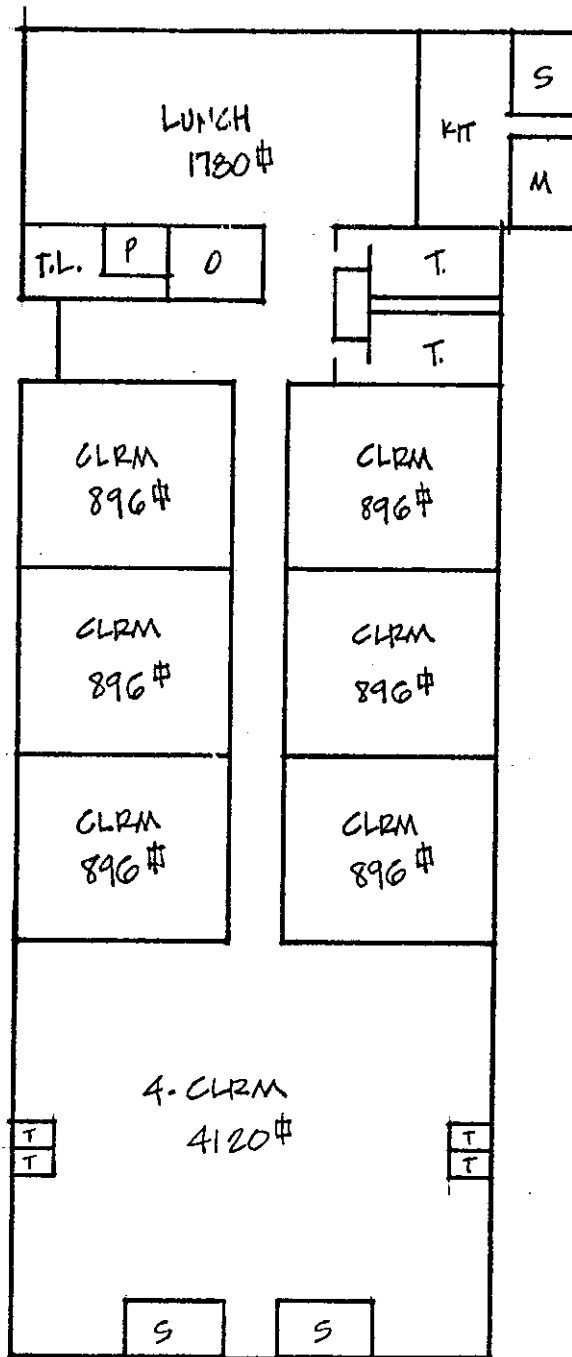
There are 10 instructional areas within this facility. The general purpose classrooms meet or are very close to the minimum requirements set forth by Rule B.

This building was constructed in 1964 with an addition in 1972.

There are approximately 215 students in grades K-6.

There are some additional areas that are needed to make this a complete elementary building.

1. Need indoor physical education area.
2. Need clinic area.
3. Need larger area for library.
4. Space for art and music is less than current requirements.
5. Need additional storage facilities.



SPRINGVILLE ELEMENTARY  
SCALE: 1"=30'

## Dollens Elementary

The Dollens Elementary School is located in the community of Oolitic. The building is located on a 24 acre site which is more than that required by Rule B.

### General Building Appraisal

The building is undergoing a major addition and renovation. Therefore, many of the following deficiencies are expected to be corrected as part of the code compliance requirements associated with a project of this type.

#### Exterior:

- Limestone masonry walls in good condition.
- Aluminum window frames with single-pane glazing. Some window wall areas have glass block above horizontal aluminum frame runs.
- Hollow metal entry frames rusting and need replacement.
- Built-up roof is flat with ponding water problems, minimum insulation and exterior downspouts.
- Asphalt playground in fair condition.
- Building entry is low and storm water runs into building.
- An elaborate concrete ramp system has been constructed to provide pedestrian traffic access across the highway.

#### Interior:

- Structurally the building is a steel bar joist system with metal roof deck.
- Walls are concrete block painted, tile floors in traffic areas and carpet in classrooms.
- Plaster ceilings are attached to bottom chord of bar joist throughout. Acoustic tile is glued direct to plaster in corridor areas. Some areas have suspended acoustic tile ceilings where original plaster was damaged by roof water leaks.
- Non-rated wood doors in metal frames do not provide the code required corridor/classroom fire separation.
- A gas boiler with circulating hot water provides heating and window air conditioners serve to cool the classrooms.
- City water and sewer systems serve the building.
- Boiler room windows and door glazing are single-pane glass. Glazing needs to be up graded to current code safety standards since it faces the playground.
- Building electrical system is original with no major changes.
- Surface-mounted fluorescent lights are used throughout the building.
- Classrooms have folding partition separations and wood built-in storage separations between rooms.



### Building Summary

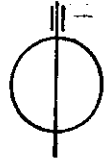
There will be approximately 17 instructional areas within this facility when completed. All instructional spaces should meet or exceed the minimum requirements as outlined in Rule B.

The original portion of this facility was constructed in 1959. The building is currently undergoing a major addition and renovation to the 1959 portion. This complex will house approximately 425 students in grades K through 6.

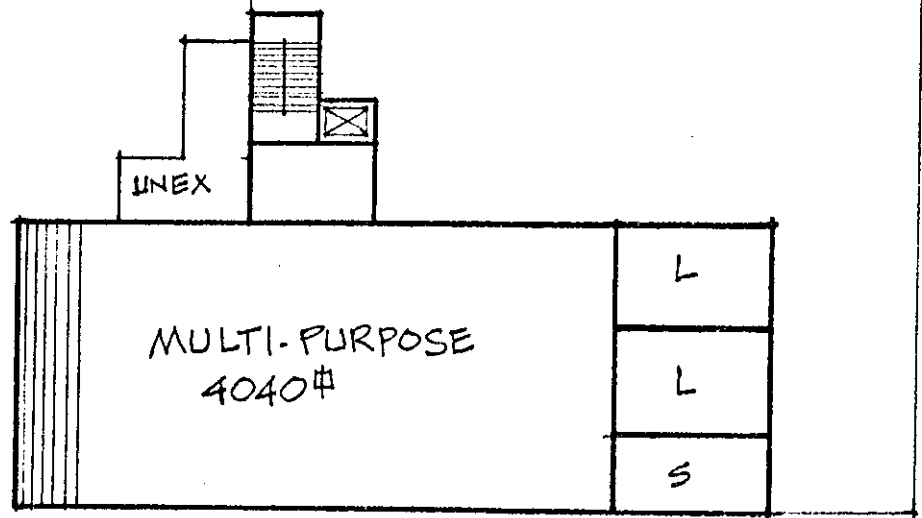
When this building program is completed, there should not be any deficiencies as it relates to Rule B.

LOWER LEVEL  
DOLLENS ELEMENTARY

SCALE: 1"=30'



UNEXCAVATED

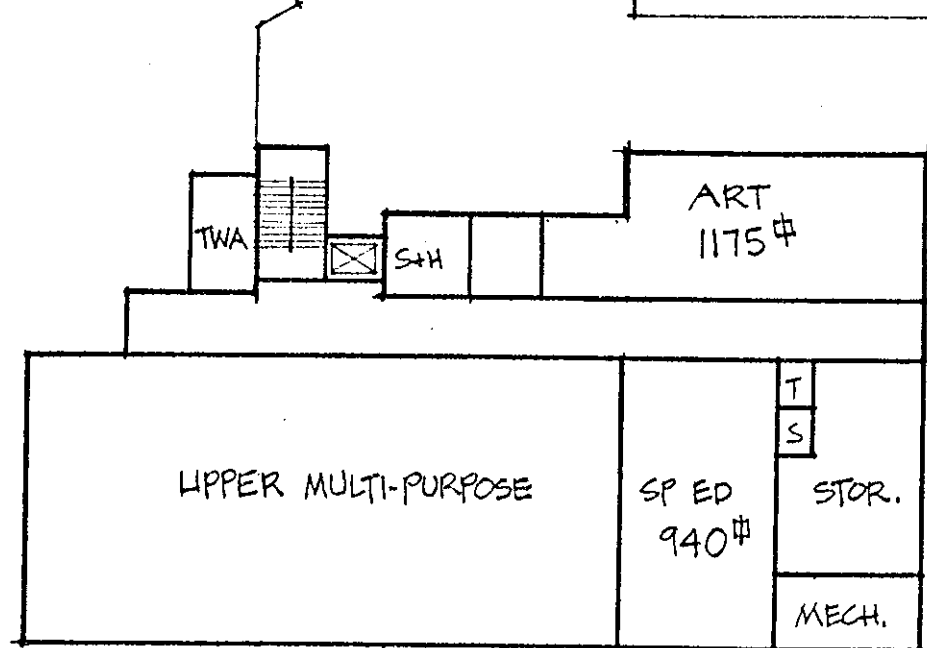


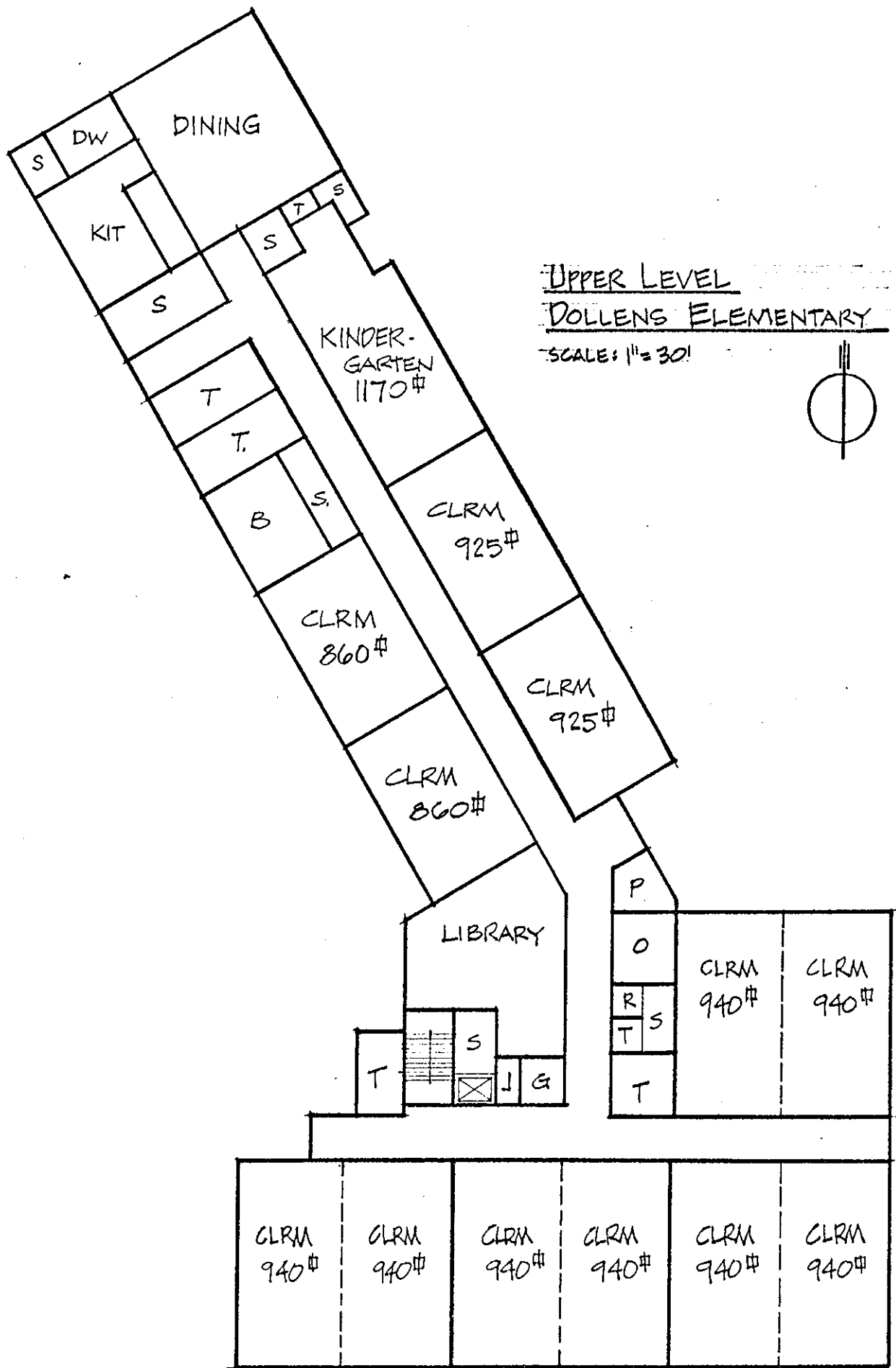
INTERMEDIATE LEVEL  
DOLLENS ELEMENTARY

SCALE: 1" = 30'



UNEXCAVATED





## Oolitic Junior High School

The Oolitic Junior High School is located in the community of Oolitic. The building is located on a one (1) acre site which is considerable less than the 12 acres required for a school this size. There does not appear to be any way, economically, to expand the school site.

### General Building Appraisal

#### 1918 Building:

##### Exterior:

- Limestone masonry construction needs repointing to seal joints.
- Parking and playground asphalt paving in poor condition.
- Exterior gutters and downspouts in fair condition.
- Steps at entries violate current handicap code requirements.
- Aluminum window frames and single-pane glazing are one year old.
- No provisions for handicapped parking or access to buildings.

##### Interior:

- Masonry bearing wall construction with wood floor construction.
- Plaster walls and ceilings, some areas of suspended acoustic tile.
- Stairways are wood construction in poor condition, covered with carpet and open to all four stories in violation of current fire code requirements.
- Gas boiler with oil stand-by system provides steam for original radiators throughout building. Piping is original installation with no major repairs or replacement.
- City water and sewer serve building.
- Window air conditioners serve the classroom areas.
- Wood doors and frames do not meet code requirements for corridor separations.
- No proper exit corridor separations, protection or exit lighting.
- No provisions for handicapped access to various floors, toilet rooms or drinking fountains.

#### Basement:

- Girls gym has painted concrete walls, plaster ceiling which has plaster repair areas and tile floor.
- Girls gym balcony is steel column and beam supported area which is enclosed for cafeteria dining. Walls are wood stud and painted plywood.
- Girls gym stage is wood flooring and exposed wood roof rafters and deck with built-up roofing in poor condition. Wood stage front has been reworked to provide more gym floor space.
- One set of girls gym exit doors swing in wrong direction and violate exit code requirements. Concrete ramp at exit is far too steep and violates exit code requirements.
- Boiler room is located below the girls gym stage and has no outside access in violation of code and is not properly separated. Access is down a long wooden stairway. Room has sump pump and is damp and wet.

#### Second Floor:

- Toilet rooms are on stair landing levels and not accessible to handicapped. Room clearances are not sufficient for handicapped and there is a floor step change up one riser to urinals. Original metal toilet partitions and pipe chases are in poor condition with only one lavatory.
- Metal lockers are in poor condition and are free standing against corridor walls.
- Girls P.E. locker room has shower only, no lockers or toilets.
- Kitchen has no fire protection and is cut off from the rest of the building.
- Dining area is across hall on original girls gym balcony. Walls are painted masonry and plywood with tile floor and plaster ceiling.
- Art has a 2" step up from corridor to wood floor which violates exit and access codes.

#### Third Floor:

- Corridors are carpet over original wood floors, plaster walls and suspended acoustic tile ceilings with surface-mounted fluorescent lights.
- Free standing lockers in poor condition are lined up along walls.
- Classrooms are plaster walls, acoustic tile ceilings, wood and tile over wood floors. Chalkboards are original equipment and in poor condition.
- Sewing room is in original corridor space separated by wood stud and paneling partition. The space also provides access to two classrooms.
- Science room poorly equipped with work tables.
- Home economics room cabinetry in fair condition.
- Administration is redecorated area with wood stud and paneling room separations, carpet and suspended acoustic tile ceiling.

#### Fourth Floor:

- Classroom areas are similar to second floor.
- Library area has carpet, plaster walls, suspended acoustic tile ceiling and lights.
- Continuation of stairways up a half run to other spaces violates exit code guidelines.

#### 1936 Building:

Building was originally a train depot moved to the school site in 1936 and connected to the 1918 building and 1937 gym building.

#### Exterior:

- Limestone masonry veneer over original depot wood siding needs repointing.
- Original shingle roof in poor condition.
- Wood windows are original frames.
- Gutters and downspouts in poor condition.
- No access for handicapped.

#### Basement:

- Stone foundation walls leak water and are in poor condition.
- Shop area in poor condition. Floor trench drain is installed to catch water running in through basement walls.
- Lighting in area is poor.
- No proper exit corridors from area.

#### First Floor:

- Music room wood floor and walls, tile ceiling and surface-mounted fixtures.
- Instrument storage cabinets in poor condition.
- Ceiling hung gas fired unit heater.

#### 1937 Building

#### Exterior:

- Limestone masonry in need of repointing.
- Gutter and downspouts in poor condition.
- Flat built-up roof.
- Metal window frames in poor condition in clear story area of boys gym.
- Steps up to entry violate current handicapped codes.
- Aluminum window frames with single-pane glazing and window air conditioners are recent installations in classroom areas. Some opaque insulated panels have been used in lieu of glass.
- Play ground area asphalt in poor condition.
- No accessibility for handicapped.

#### Interior:

- Cast-in-place concrete walls with skim coat of plaster painted.
- Cast-in-place concrete floor.
- Boys gym steel truss roof framing with wood roof deck.
- Corridors are not one-hour protection with wood doors and frames to classroom areas.
- Steam radiators in building are sub-fed off steam from 1918 building boiler.

#### Lower Level:

- Boys gym wood floor is in fair condition.
- Wood bleachers on wood framing on each side of gym in poor condition.
- Mercury vapor lighting in gym.
- Industrial arts drafting room under bleachers and connected to shop area under depot by a tunnel. Ceiling area exposed wood framing supporting bleachers, no fire protection. Concrete floor and walls.
- Storage area under bleachers, no fire protection.
- Girls toilet room in poor condition. Concrete floor, metal toilet partitions with painted plywood doors and only one lavatory.
- Some corridor carpet over concrete floor.
- Boys locker rooms concrete floor with plastic faced suspended tile ceiling. Free standing metal lockers in poor condition.
- Boys athletic equipment/office storage area wood stud and paneling separation from locker room entry area.
- Concrete floor in boys shower/drying area with one water closet and urinal.
- Boys locker room wood frame/tile bulkhead in need of repair. Vandalism damage partially torn down.

#### Intermediate and Upper Level:

- Incandescent hall lighting, no proper exit lighting.
- Classrooms wood floors, plaster wall surfaces, suspended fluorescent lights.
- Corridor carpeting in fair condition.



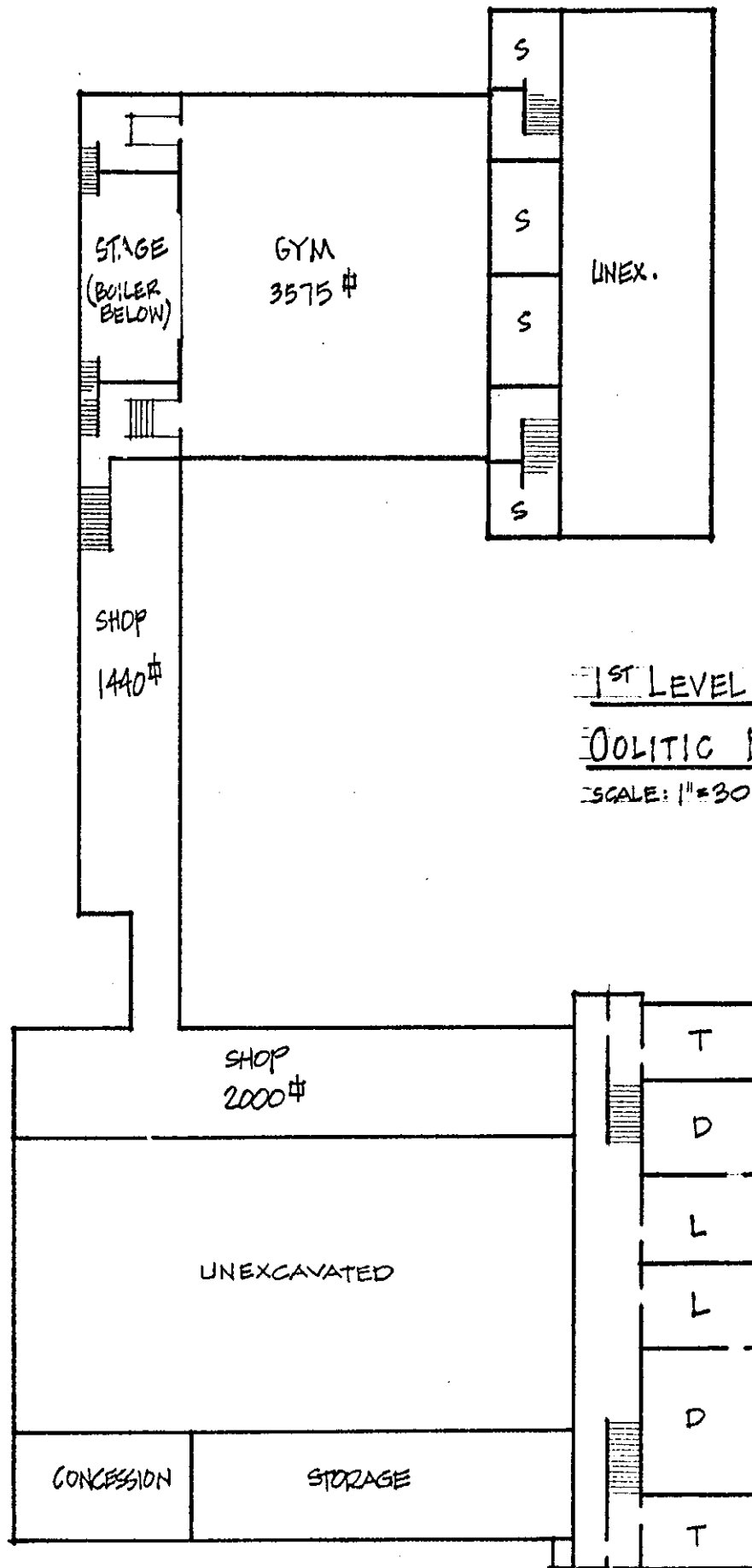
## Building Summary

There are 25 potential instructional areas in this facility. The gymnasium and shop areas are the only instructional areas that contain the minimum amount of square footage currently required by Rule B.

This facility was constructed in 1918, 1936 and 1937. The building will contain grades 7 and 8 and approximately 250 students. The location of this complex makes it very difficult to enlarge the size of the site. Access to the buildings by the handicapped is most difficult. Bringing this facility up to current code will be very expensive.

There are many deficiencies in this building that tend to hamper the educational programs that are offered or should be offered.

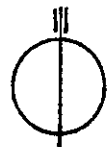
1. Tri-level with classes located below and above grade.
2. All of the general classrooms are below Rule B standards.
3. Inadequate art, music, home economics and industrial art space.
4. Inadequate kitchen and dining space.
5. Science, industrial art and home economics equipment should be upgraded.
6. The learning environment (thermal, acoustical, visual, furniture and equipment) is very poor.
7. Library should be expanded.
8. See general building appraisal for additional code deficiencies.

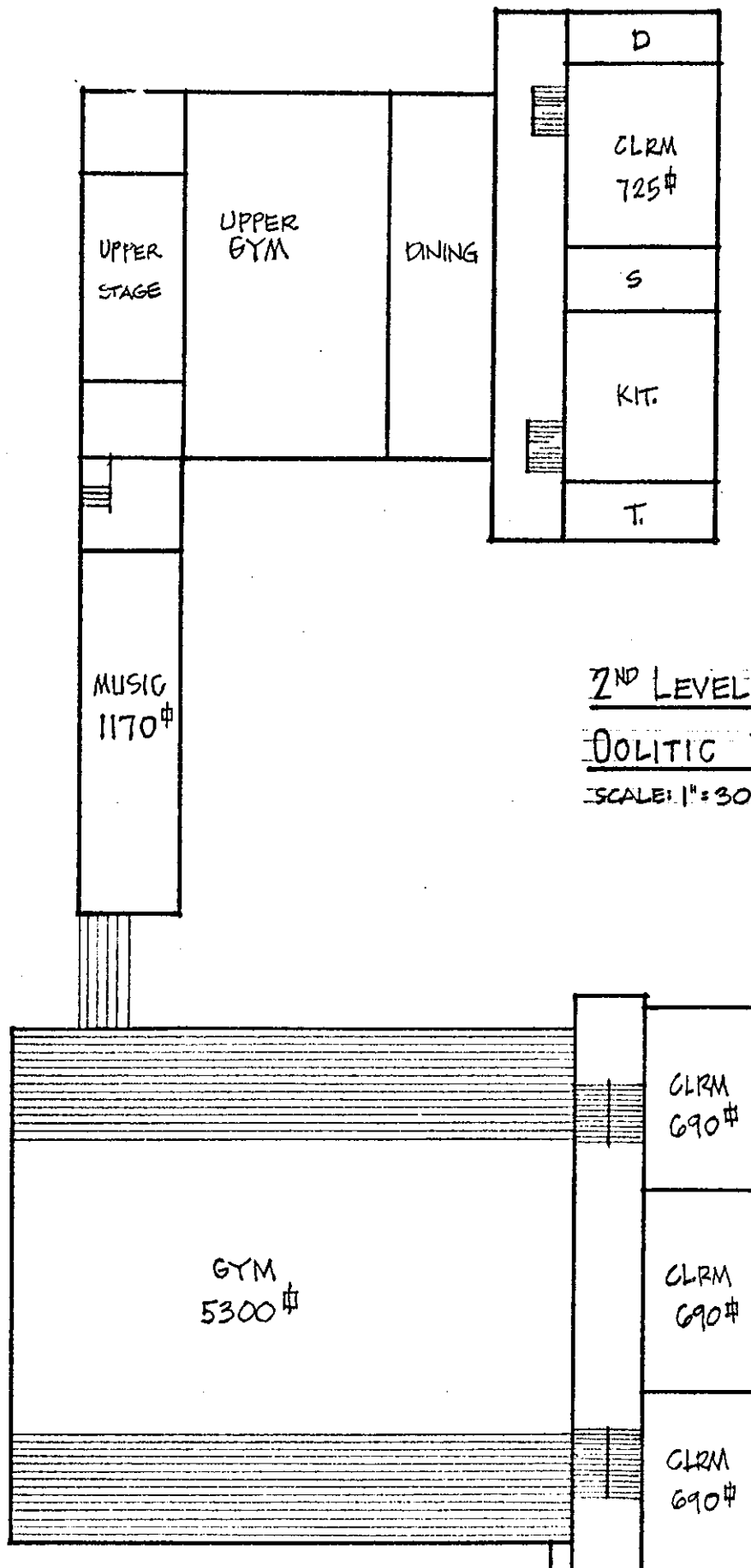


1ST LEVEL

00LITIC ELEM/JR HIGH

SCALE: 1"=30'



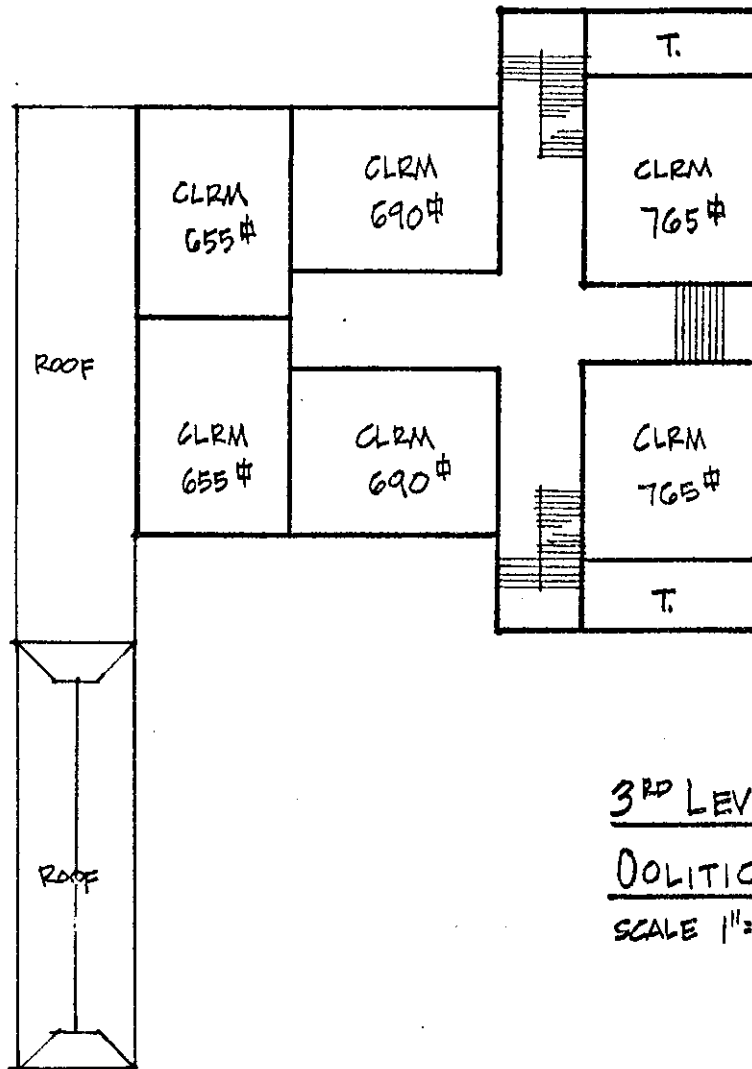


2<sup>ND</sup> LEVEL

POLITIC ELEM/JR HIGH

SCALE: 1" = 30'

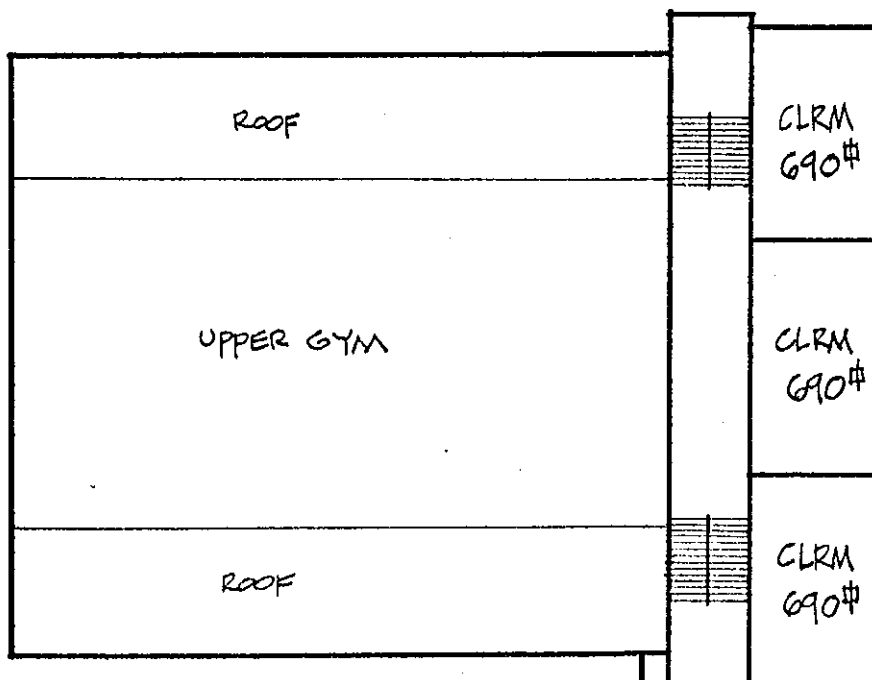
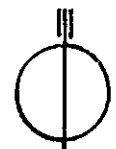


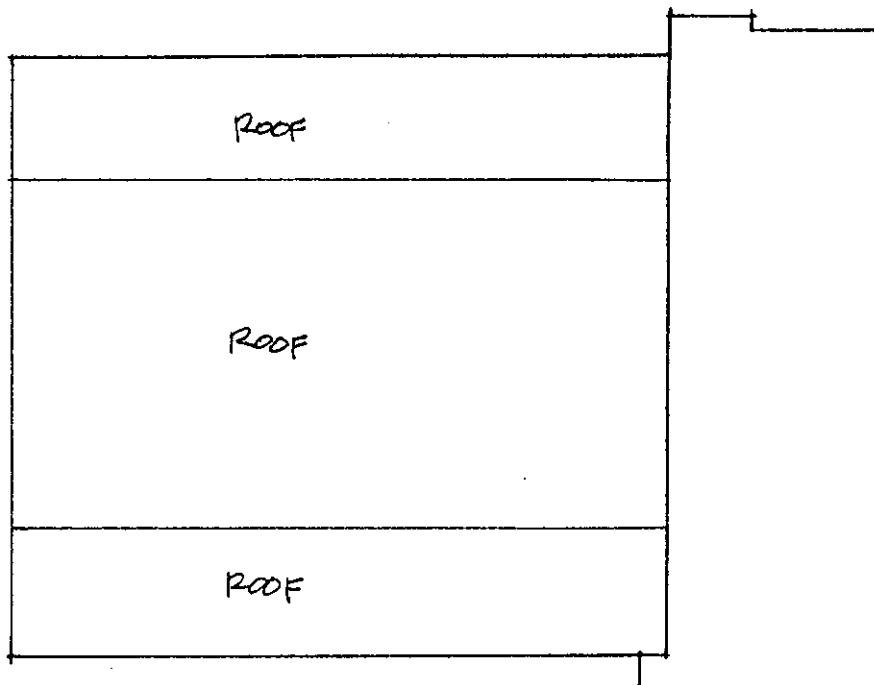
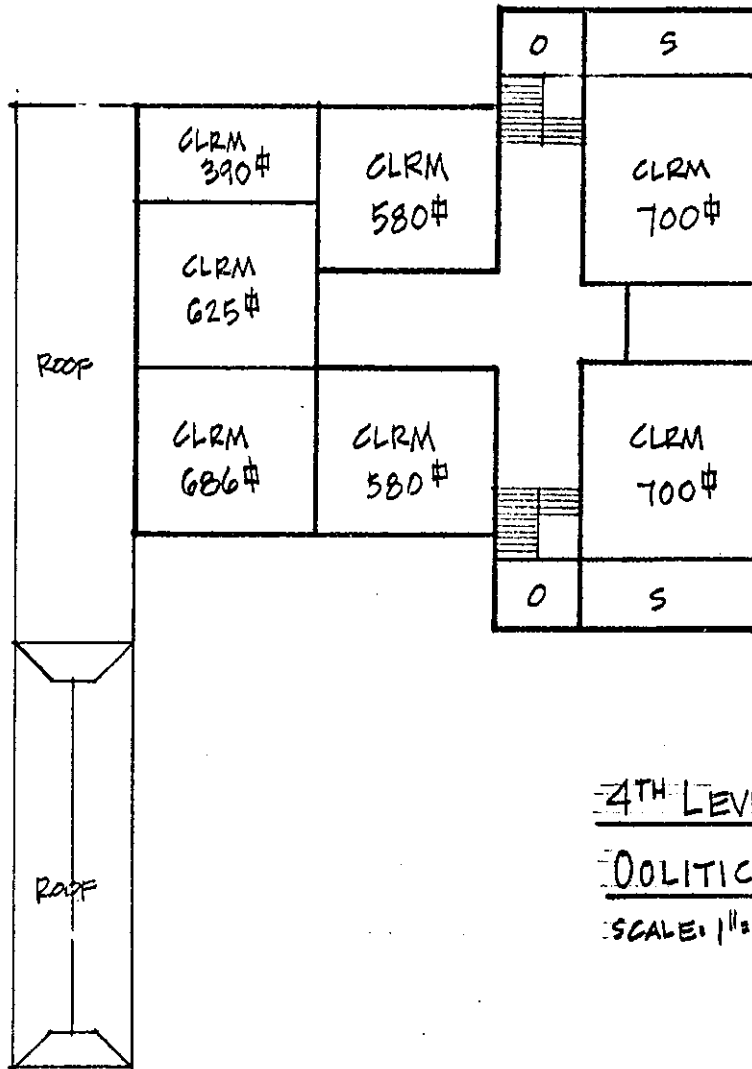


3<sup>RD</sup> LEVEL

DOLITIC ELEM/JR HIGH

SCALE 1"=30'





## Heltonville Elementary School

This school plant is located on a five acre site in the community of Heltonville. The size of this site is less than the minimum seven (7) acres required by Rule B.

### General Building Appraisal

#### Original 1910, 1936 and 1950 Additions

##### Exterior:

- Stone masonry walls classroom area, brick at boiler room and block at gymnasium.
- Flat roof with built-up roofing.
- Steps up to entry violate handicapped code.
- No designated handicapped parking.
- Parking lot and drive in poor condition.
- Hollow metal doors and frames.
- Gutters and downspouts in poor condition.
- Play ground area in poor condition.

##### Interior:

- Classroom area has concrete roof beams and deck bearing on masonry walls.
- Gym has masonry walls, steel truss roof members with wood rafters and wood deck.
- Concrete stairs and ramps for some level changes.
- Metal window frames with single-pane glass in poor condition.
- Window type air conditioners.
- Building rewired in 1974-75.
- Solid core rated wood doors meet code requirements for corridor; however, swing out into corridor traffic.
- Oil-fired boiler with steam heat to unit heater cabinets.
- Steps in various areas prohibit access by handicapped to all areas.

##### Lower Level:

- Kindergarten - carpeted floor, acoustic tile ceiling, surface mounted fluorescent fixtures.
- Kitchen and dining area are in same room, no separation, violate code. Seamless flooring, masonry walls.
- Boiler room has evidence of water seeping through exterior walls.
- Exposed piping and conduit runs throughout building.
- Gym - wood bleachers with storage below. Wood stage built free standing in gym with wood walls.

#### Upper Level:

- Classrooms - carpet floors, painted masonry walls, suspended fluorescent fixtures.
- Teacher lounge steps up from corridor.
- Administration separated into areas by wood studs and panel walls, carpeted floors.
- Toilet rooms have concrete block walls, metal toilet partitions in poor condition.
- Library is in old corridor area. Plaster walls, concrete ceiling, carpeted floor, some stud and paneling wall separations from rest of corridor.

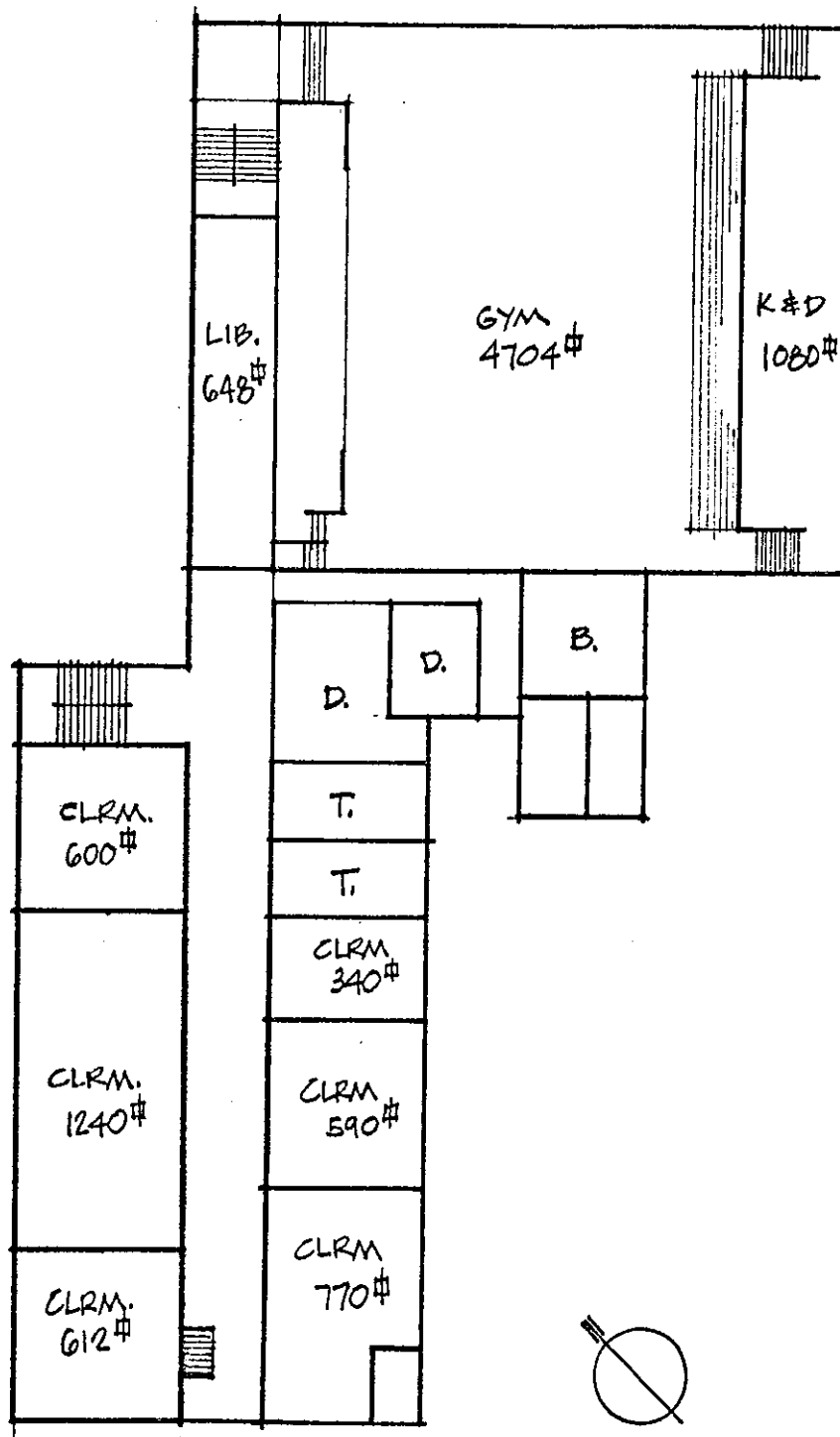
#### Building Summary

There are approximately 12 instructional areas within this educational complex. With the exception of the gymnasium, none of the spaces meet the minimum requirements as set forth by Rule B.

This facility was constructed in 1910 with an addition in 1936 and 1950. The building contains grades K through 6 with an enrollment of approximately 200.

This attendance center has served the community well but there are several deficiencies that interfere with the educational program.

1. None of the general classrooms meet current Rule B requirements.
2. Space for music, art, kindergarten and library is inadequate.
3. Programs and building are not accessible to the handicapped.
4. Inadequate space for speech and hearing and other support areas.
5. Inadequate storage space.
6. See general building appraisal for other code deficiencies.

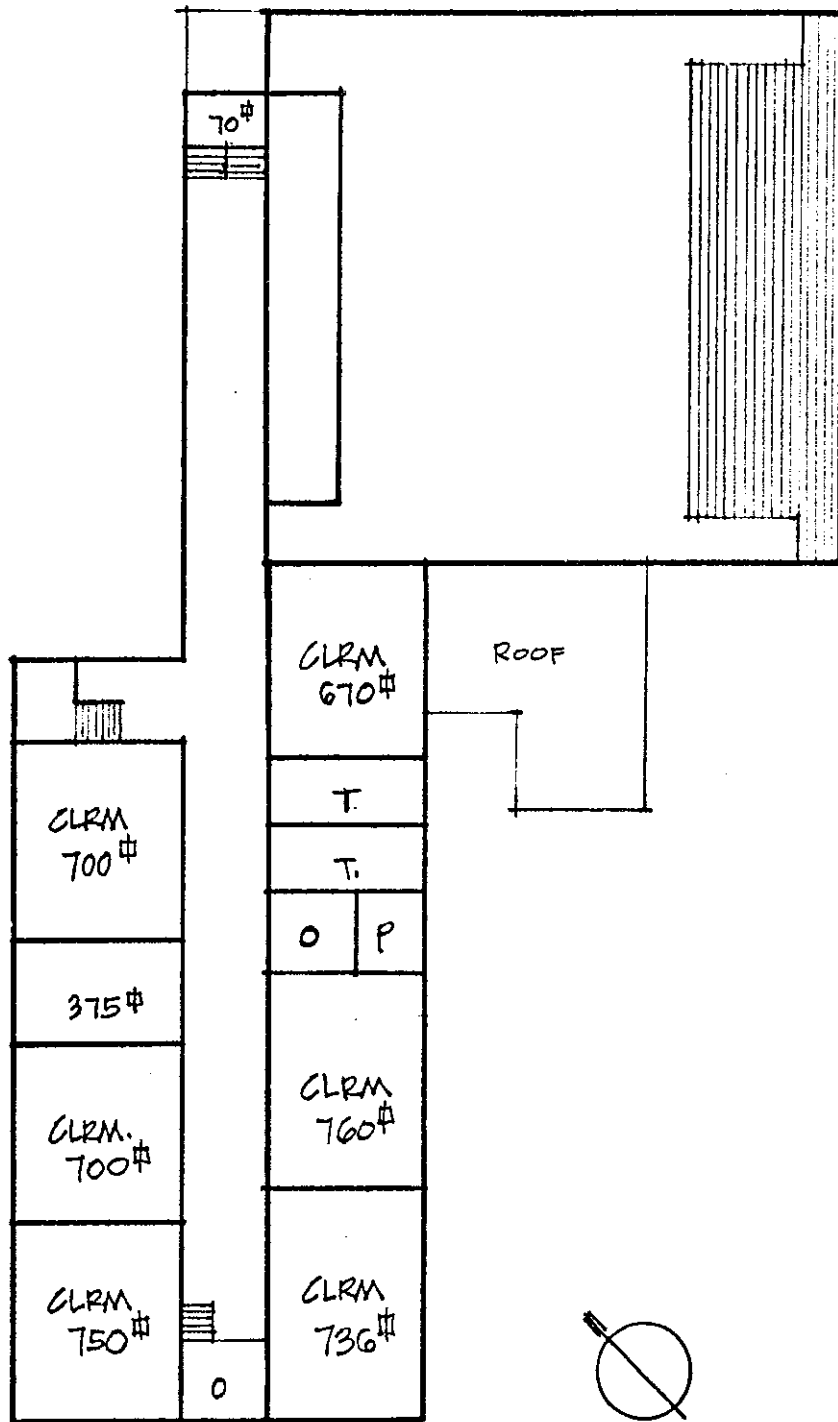


LOWER LEVEL

HELTONVILLE ELEMENTARY

SCALE: 1" = 30'





UPPER LEVEL

HELTONVILLE ELEMENTARY

SCALE: 1" = 30'

## Shawswick Elementary/Junior High School

The Shawswick Elementary and Junior High School is located on a twenty acre site. This site is excellent for a school of this size.

### General Building Appraisal

#### Elementary - Original Building - 1925

##### Exterior:

- Brick masonry walls need some repointing.
- New aluminum window frames with single-pane glazing and new aluminum entry doors and frames.
- Recently rewired to bring up to current code.
- Built-up roofing.
- Steps at entry prevent handicap access.
- Metal frames and single-pane glass in gymnasium.
- Parking and drive asphalt in poor condition.
- New athletic track under construction.
- No handicapped parking areas designated.

##### Interior:

- Gas boilers with oil back-up standby and low pressure steam to radiators. Reworked system to provide condensate return separate from steam.
- Public water system and building septic system.
- Classroom air conditioners.
- Wood doors in corridors do not meet current code separation requirements.
- Wood floor joist on masonry walls.
- Wood stairs open to all floor levels do not meet code requirements.
- No handicapped toilets designated or access to all areas of building provided.

##### Lower Level:

- Toilet rooms concrete floor, acoustic tile, ceiling and surface-mounted fluorescent fixtures. Metal partitions in poor condition.
- Classrooms concrete floors acoustic tile and plaster ceilings masonry walls with plaster.

#### Intermediate Level:

- Gym with wood floor, masonry walls, gypsum board ceiling with damaged areas.
- Gym balcony wood floor supported with steel beams. Wood stud separation wall below to provide storage area.
- Free standing lockers in gym area.
- Classroom wood floors in poor condition, plaster walls, acoustic ceilings with suspended fluorescent fixtures. Original chalkboards in poor condition.
- Wood floors in poor condition.
- Plaster ceiling areas show patching work.
- Built-in wood coat closets in poor condition used for storage in corridors.

#### Upper Level:

- Classrooms same as intermediate level.
- Ceilings show evidence of water damage.
- Library tile floors, plaster ceilings and surface-mounted fluorescent fixtures. Water leaking through ceiling around skylights. Corridor stair which accesses library work area does not comply with landing or handrail code requirements.

#### Jr. High Building - 1936

##### Interior:

- Concrete structural frame and floors.
- Brick painted walls.
- Non-rated wood doors do not comply with current code.
- Steps in corridor do not comply with code.
- Metal pan stairs with concrete treads in good condition.
- Toilets located on lower level.

##### Lower Level:

- Classrooms have concrete floor, masonry walls and acoustic tile ceilings.
- Exposed piping and conduit throughout level.
- Toilet rooms have metal partitions and are in poor condition.
- Math and science rooms in older, remodeled area and have corrugated metal ceiling. Science equipment in fair condition.
- Exterior fiberglass wall and roof panel connecting passage to gym, building is in fair condition. Steps prevent proper access between buildings for handicapped.

##### Intermediate Level:

- Administration - carpet floors, stud and panel walls to separate areas, plaster ceiling.
- Classrooms - wood floors, plaster walls and ceilings, suspended fluorescent fixtures and original chalkboards.

#### Intermediate Level:

- Gym with wood floor, masonry walls, gypsum board ceiling with damaged areas.
- Gym balcony wood floor supported with steel beams. Wood stud separation wall below to provide storage area.
- Free standing lockers in gym area.
- Classroom wood floors in poor condition, plaster walls, acoustic ceilings with suspended fluorescent fixtures. Original chalkboards in poor condition.
- Wood floors in poor condition.
- Plaster ceiling areas show patching work.
- Built-in wood coat closets in poor condition used for storage in corridors.

#### Upper Level:

- Classrooms same as intermediate level.
- Ceilings show evidence of water damage.
- Library tile floors, plaster ceilings and surface-mounted fluorescent fixtures. Water leaking through ceiling around skylights. Corridor stair which accesses library work area does not comply with landing or handrail code requirements.

#### Jr. High Building - 1936

##### Interior:

- Concrete structural frame and floors.
- Brick painted walls.
- Non-rated wood doors do not comply with current code.
- Steps in corridor do not comply with code.
- Metal pan stairs with concrete treads in good condition.
- Toilets located on lower level.

##### Lower Level:

- Classrooms have concrete floor, masonry walls and acoustic tile ceilings.
- Exposed piping and conduit throughout level.
- Toilet rooms have metal partitions and are in poor condition.
- Math and science rooms in older, remodeled area and have corrugated metal ceiling. Science equipment in fair condition.
- Exterior fiberglass wall and roof panel connecting passage to gym, building is in fair condition. Steps prevent proper access between buildings for handicapped.

##### Intermediate Level:

- Administration - carpet floors, stud and panel walls to separate areas, plaster ceiling.
- Classrooms - wood floors, plaster walls and ceilings, suspended fluorescent fixtures and original chalkboards.

#### Upper Level:

- Classrooms same as intermediate level.
- Free standing lockers in corridors.
- Home Economics - wood floors in poor condition, cabinetry in fair condition, water damaged wall and ceiling areas.
- Some special classroom areas subdivided with studs and wood paneling walls.

#### Gym Building - 1963

##### Exterior:

- Gutters and downspouts in poor condition.
- Metal windows are single-pane glass.

##### Interior:

- Masonry walls, steel trusses/bar joist roof frame with metal deck.
- Suspended fluorescent fixtures.
- Hollow metal doors and frames non-rated.

##### Lower Level:

- Outside access to interior concrete steps down to dining room under bleachers above. No provisions for handicapped.
- Kitchen and dishwasher areas are not separated from dining and violate code.
- Industrial Arts similar to dining area. Only one exit out up stairway. Second exit through storage room, violates code.
- Unprotected fin tube radiation along walls.
- Wood stair non-compliance with code down to locker room.
- Locker room lockers in poor condition.

##### Upper Level:

- Wood gym floor and bleachers.
- Wood stage area with wood wall storage areas each side.

#### Gym Building Addition:

##### Interior:

- Electric heating this addition only.
- Electric panel for addition and heating sub-fed from original building system.
- Athletic storage area has block walls and concrete floor.
- Music has tile floor, plaster ceiling, concrete block and acoustic tile on walls in fair condition.
- Practice rooms are block and acoustic wall tiles.
- Suspended fluorescent light fixtures.
- Steps in some corridor areas violate code.
- Settlement cracks in masonry walls.
- Art has tile floor, block walls and plaster ceiling.

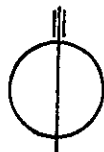
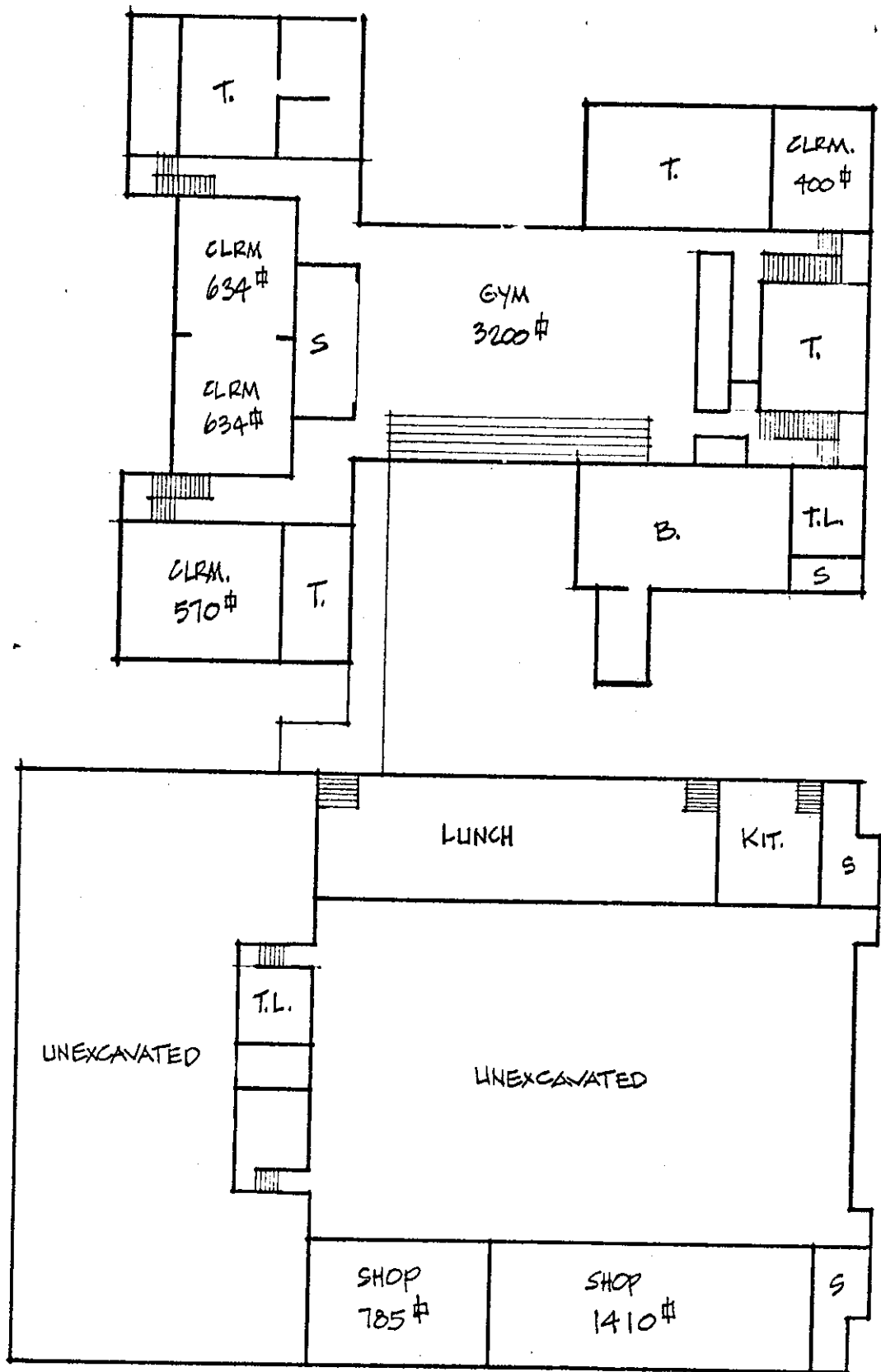
### Building Summary

There are approximately 30 instructional spaces within this complex. The gymnasium, shop and music facilities are the only spaces that meet the current Rule B requirements.

This facility was constructed in 1925 with additions in 1936, 1949 and 1963. The building currently houses grades 1-8 with an enrollment of approximately 520 students.

There are many deficiencies, within this facility that get in the way of current program offerings.

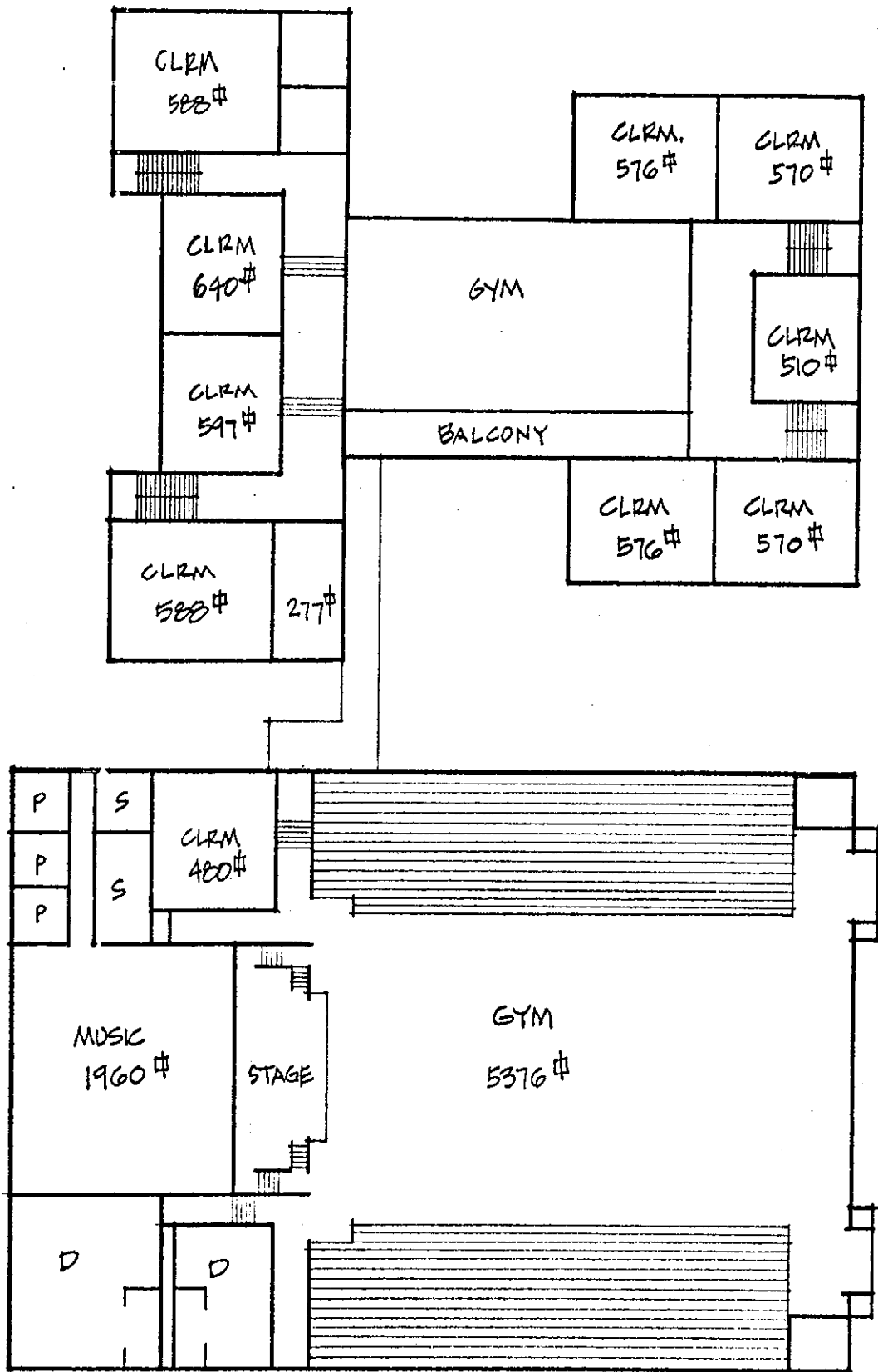
1. Of the 30 instructional spaces, 27 are below Rule B requirements.
2. See general building appraisal for various code deficiencies.
3. Programs and building are not accessible to the handicapped.
4. Building is over crowded.



LOWER LEVEL

SHAWSWICK ELEM/JR-HI

SCALE: 1"=30'

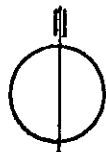
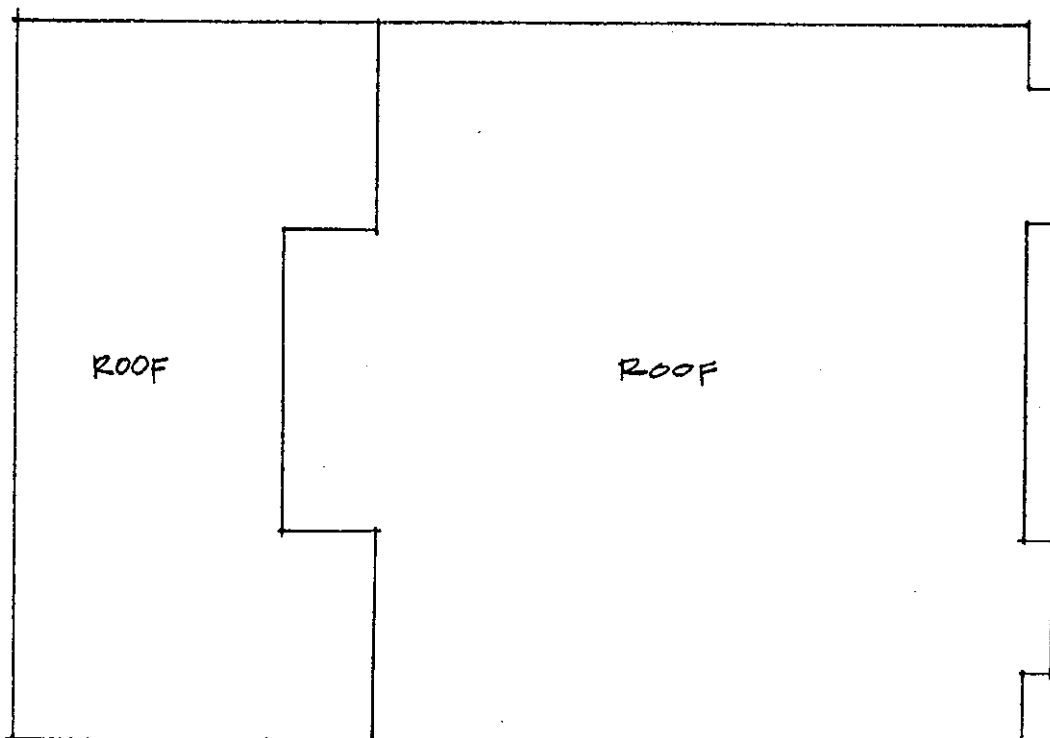
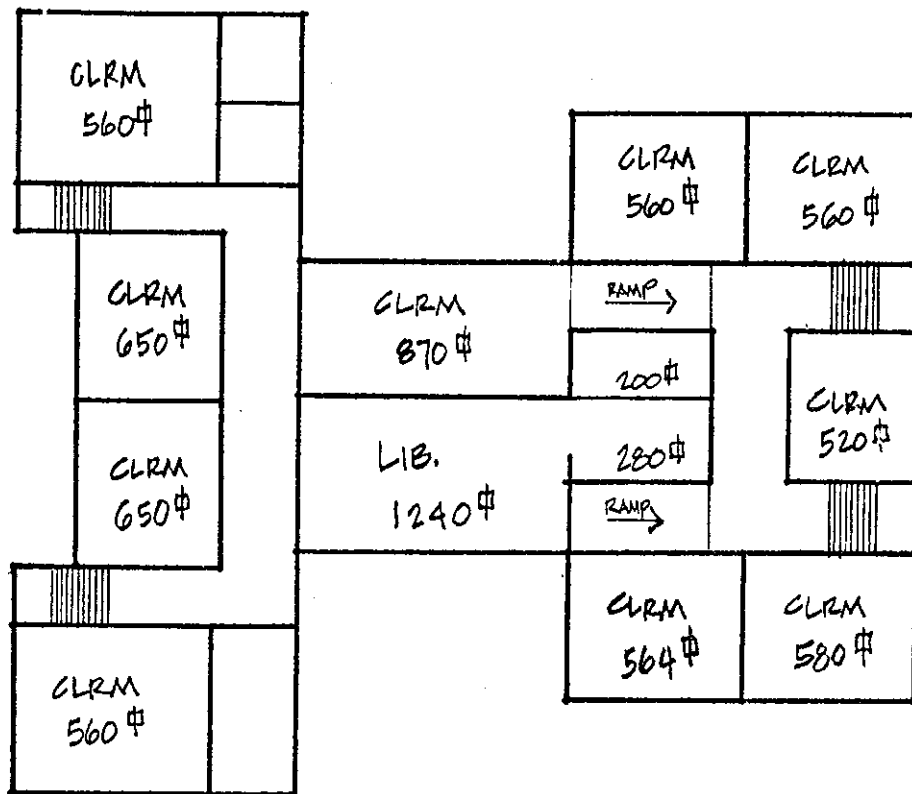


INTERMEDIATE LEVEL

SHAWSWICK ELEM/JR. HI.

SCALE: 1" = 30'





UPPER LEVEL  
SHAWSWICK ELEM/JR. HI  
 SCALE: 1"=30'

## Tunnelton Elementary School

The Tunnelton Elementary is located on a six (6) acre site in the Tunnelton Community. Bule B states that for a school this size the site should be seven (7) acres.

### General Building Appraisal

#### Original 1910 Building and First Addition:

##### Exterior:

- Brick masonry walls need repairs and repointing.
- Sloped metal roof on original and built-up roof over addition.
- Gutters and downspouts in poor condition.
- Wood windows with storms and hollow metal window frames, single-pane glazing in poor condition.
- Hollow metal doors and frames. Sidelights not up to current safety glazing standards.
- No parking or access for handicapped at building.
- Asphalt, dirt and stone drives and parking in poor condition.

##### Interior:

- Wood floor framing bearing on masonry walls.
- Wood stairways and corridor floors in poor condition. Stairways open to all floors, wood construction and handrails do not meet current codes.
- Oil-fired boilers with low pressure steam to radiators. Original boiler in poor condition, repair parts no longer available. No outside exit from boiler room, violates code.
- Electrical system is original with numerous modifications. Building service is 200 amp with over heating and outage problems. System is below current acceptable standards.
- No exit lighting to meet current code requirements.
- City water service and building septic system.
- No alarm or emergency lighting per current code.
- Classrooms are masonry plaster walls and ceilings, tile and carpet over uneven wood floors in poor condition and suspended flourescent fixtures. Chalkboards are original and in poor condition.
- Corridors are non-rated construction, wood doors and frames and do not meet current codes.

Lower Level:

- Boiler room has masonry walls, plaster ceiling and concrete floor. Access through teacher work area.
- Teacher work area access down a non-rated wooden stairway. Only one access violates code. Concrete floor, masonry/wood stud and paneling walls. Exposed wood floor joist ceiling violates code.

Intermediate Level:

- Building entry has no handicapped access to entry or other building floor levels.
- Girls toilet room is in poor condition, wood partitions, fixtures are in poor condition and inadequate ventilation. No provisions for handicapped.

Upper Level:

- Administration has paneling and wood stud separation of areas and carpeted floor.
- Wood floors uneven and in poor condition.
- Library has acoustic tile ceiling, tile over uneven subflooring. No office or work room space.

1930 Addition

Exterior:

- Brick masonry wall bearing construction in poor condition. Needs repointing and repair work.
- Metal window frames with single-pane glazing in poor condition.
- Hollow metal doors and frames in poor condition.
- Wood canopy over rear multi-purpose room exit doors in poor condition.

Interior:

- Wood floor joists and floors. Floors sagged, warped, uneven and in very poor condition.
- Classrooms are plaster walls, suspended fluorescent fixtures and have original chalkboards. Rooms in poor condition.
- Wood doors and frames do not meet codes.
- Interior stairs prevent use by handicapped and violate code.

Lower Level:

- Multi-purpose room painted masonry walls, exposed steel beams and wood floor joist for floor above. Concrete and tile floor areas. Boiler chimney exhaust runs across room with induced draft fan.

Intermediate Level:

- Boys toilet room in poor condition similar to girls in original building.
- Stairs down to multi-purpose room exceed run length for landings. Railings do not meet code and there is no exit hardware at bottom of stairway exit at rear of building.

Upper Level:

- Ceilings and walls have damage from roof flashing leaks.

Gym Building 1956:

Exterior:

- Concrete block painted in poor condition.
- Hollow metal doors and frames in fair condition.
- Metal windows with single-pane glazing in poor condition.
- Built-up roofing.
- Low step up to entry stoop area. No level handicapped access per code.
- Play areas in poor condition. Low areas for ponding water at playground.

Interior:

- Steel truss, bar joist, barrel vault roof system.
- Precast concrete floor units.
- Suspended unit heaters with steam coil sub-fed from boiler room in adjacent classroom building.
- Stairs lead to dead end landings and have toilet room accesses off of landings.
- No provisions for handicapped access in building or toilet facilities.

Lower Level:

- Dressing rooms have concrete block walls, concrete floors, precast concrete ceiling and minimum toilet fixtures. Boys dressing room has free standing lockers in poor condition.
- Walls show some areas of water damage.
- Old shop area serves as access to lunch room area and kitchen.
- Kitchen area not used.

Upper Level:

- Concrete block walls are unpainted, concrete floor surrounding wood gym floor area.
- Open wooden bleachers in fair condition.
- Wood stage built-up at one end of gym.

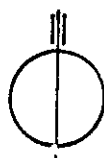
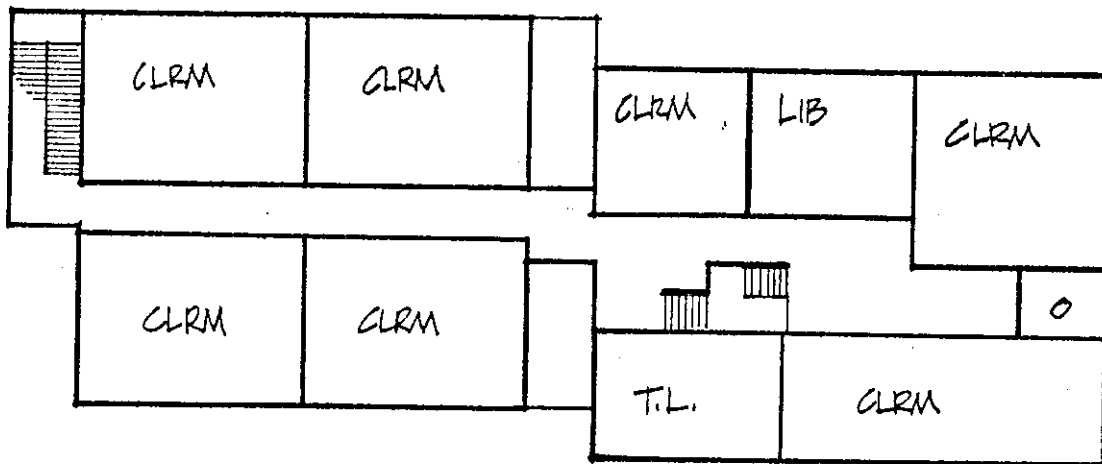
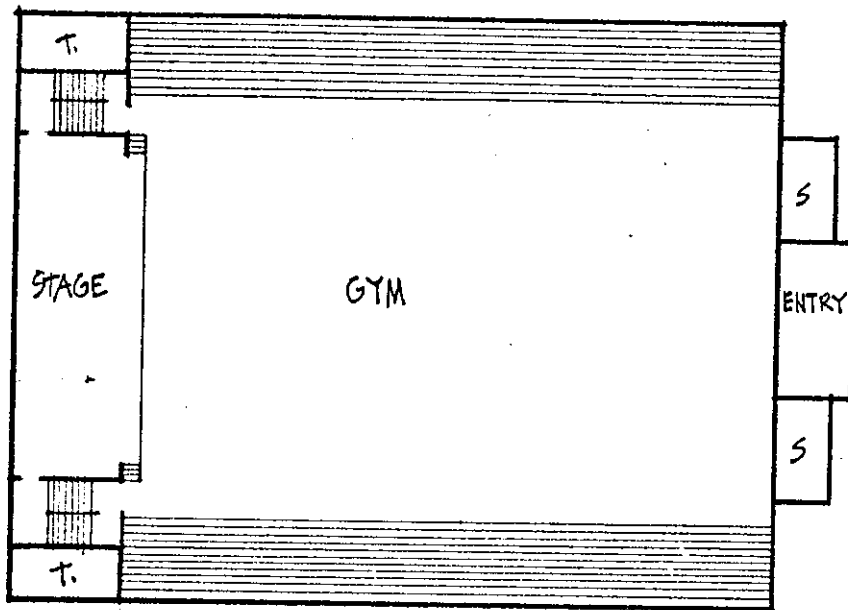
### Building Summary

There are approximately 12 teaching stations within this complex. The gymnasium is the only area that meets the current Rule B requirements for space.

This complex was constructed in 1910 with additions in 1930 and 1956. The building houses grades K through 6 with an enrollment of approximately 100 students.

There are many deficiencies, especially within the original building.

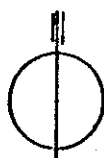
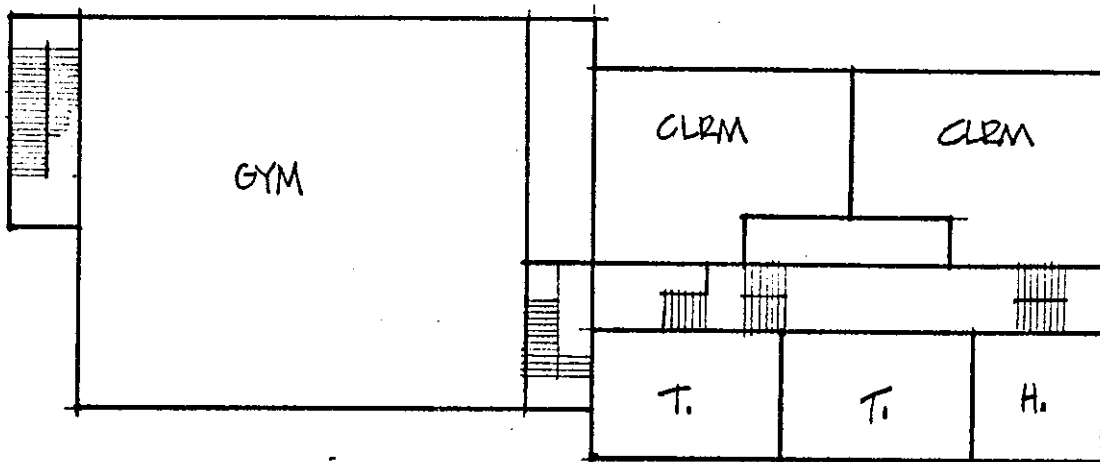
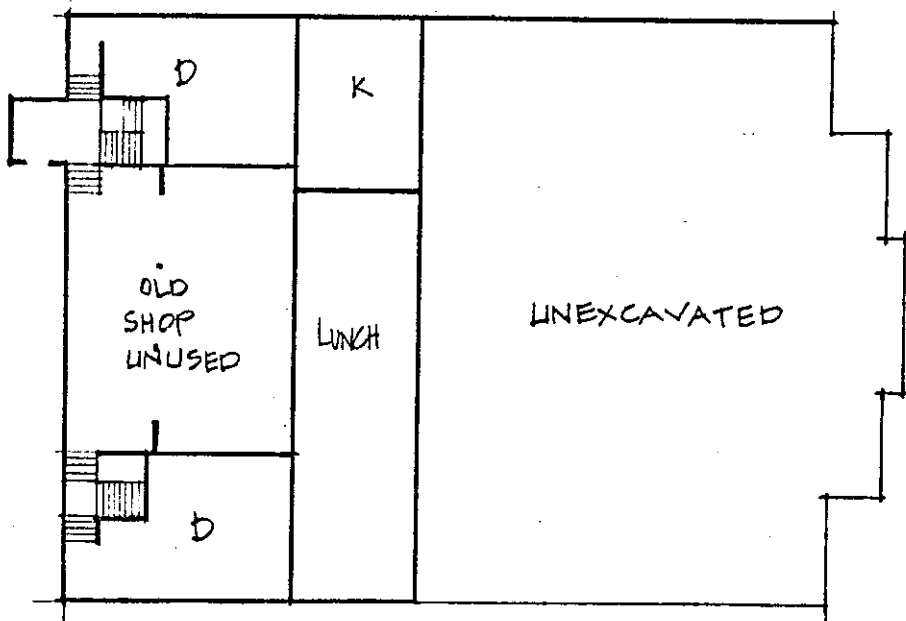
1. All of the instructional areas are less than Rule B requirements with the exception of the gymnasium.
2. Programs and buildings are not accessible to the handicapped.
3. Programs such as music, art, library, speech and hearing, kindergarten and special education are really hampered by inadequate space.
4. See general building appraisal for severe code violations in building structure.



UPPER LEVEL

TUNNELTON ELEMENTARY

SCALE: 1"=30'



LOWER LEVEL

TUNNELTON ELEMENTARY

SCALE: 1" = 30'

## Bedford Junior High School

The Bedford Junior High School is located on a four and one-half acre site located between "N" and "O" Streets and 16th Street and an alley toward 14th Street. The site is considerable less than the fifteen acres required by Rule B for a school this size.

There does not appear to be any practical or economical way to enlarge the site.

### General Building Appraisal

#### Academic Building - 1961

##### Exterior:

- Stone masonry needs repointing.
- Scuppers and downspouts in fair condition.
- Aluminum windows and door frames with single glazing.
- No designated handicapped parking areas.

##### Interior:

- Concrete joist and clay tile floor system bearing on brick masonry walls.
- Numerous levels in building prohibit handicapped access.
- Wood doors and frames do not meet corridor exit code requirements.
- Steel stairs with terrazzo treads open to all floors violate code for exit enclosure.
- Six classroom area rebuilt in 1964 after fire using steel columns and beams with concrete floor areas.
- City water and sewer system.
- Steam from central plant to radiators.
- No air conditioning.
- No handicapped toilet, drinking fountain or telephone provisions.
- Exit lighting installed.



#### Lower Level:

- Classrooms have concrete/tile floors, plaster/block walls, plaster/acoustic tile ceilings, surface and suspended fluorescent fixtures.
- Lockers are free standing in corridor in poor condition.
- Toilet rooms have step down which prohibits handicapped access, no handicapped provisions, marble partitions, generally in poor condition.
- Special education area has studs and paneling to sub-divide areas.
- Music room has single access stair down without proper railing. Masonry and plaster walls with suspended acoustic tile ceiling.
- Exposed piping and conduit throughout.
- Home Economics has tile floor, original metal cabinets in fair condition.
- Art and Home Economics have some wood floor areas in poor condition.
- Concrete corridor floors.

#### Intermediate Level:

- Ceramic tile corridor floors, plaster walls and ceiling with surface-mounted fluorescent fixtures.
- Classrooms have wood floors in poor condition, plaster walls and ceilings, suspended fluorescent fixtures and original chalkboards.
- Some areas of water damaged walls.
- Fire damaged area classrooms - tile floors, painted block. Some areas of vinyl wall covering, suspended ceiling.
- Administration area's carpet is in poor condition, studs and paneling walls in counselor area.

#### Upper Level:

- Corridor same as intermediate level only with free standing lockers.
- Classrooms same as intermediate level.
- Toilet rooms in poor condition. Step up prohibits handicap access to urinals, no handicapped provisions.
- One wall of boys toilet room painted plywood.
- Science cabinetry in fair condition.

#### Auditorium Building - 1964

##### Exterior:

- Stone masonry walls with metal gravel stop fascia.
- Flat built-up roofing.
- Aluminum doors and frames.
- Aluminum window frames with single-pane glazing.

#### Interior:

- Lobby area has terrazzo floor, vinyl wall covering, acoustic tile ceiling with recessed light fixtures.
- Steps in connecting link to classroom building prevent direct access for handicapped. Grade level main entry accessible for handicapped.
- Steel bar joist with metal deck structural system.
- Auditorium has concrete floor with carpeted aisles, vinyl wall covering with wood trim, plaster and acoustic tile ceilings. Fixed cushion seats in good condition.
- Wood stage area in good condition.
- Plastic laminate doors in metal frames with panic hardware at exits.
- Projection booth suspended above rear of auditorium.
- Girls gym has wood floor, block walls painted above tile wainscot and acoustic tile ceiling. Room serves as dining area for lunch program.
- Minimum kitchen area in old dressing room area. Minor cooking, most food is delivered. No fire cut off from kitchen area.
- Toilet rooms have terrazzo floor, ceramic tile wainscot with painted block above, acoustic tile ceiling, metal toilet partitions. Rooms in good condition.

#### Boys Gym Building

##### Exterior:

- Stone masonry walls.
- Metal window frames with single-pane glazing.
- Perimeter of roof is shingles with flat built-up portion over middle area of building.
- Exposed gutters and downspouts in poor condition.
- Large steel framed stair serves balcony area.
- Hollow metal doors and frames in fair condition.

##### Interior:

- Steel columns and roof trusses with wood rafters and roof deck.
- Balcony area suspended from roof structure by steel rods with wood flooring and seats.
- Painted brick masonry walls.
- Wood gym floor with concrete surrounding areas.
- Wooden bleachers in poor condition.
- Interior walls for toilets, storage and entries wood painted.
- Wood stairs to balconies in poor condition and do not meet current code.
- Steps in exit passages do not meet current code.
- Toilet rooms are small with minimum fixtures, wood walls and ceiling in poor condition.
- Locker rooms under wood bleachers. Plywood walls and ceiling. One entry with steps down to concrete floor. Low head room area with free standing lockers in poor condition. Toilet fixtures below adequate minimum requirement.

### Central Boiler Plant

- Brick walls above grade with concrete walls below grade.
- Steel truss and wood roof rafters/deck.
- Gas boilers with oil standby.
- Exterior concrete entry stair down to room in poor condition.
- Railings to protect exterior stair are inadequate and not up to current code.
- Wood door and frame entry in poor condition.
- Pipe tunnels connect to various structures.
- Evidence of water seeping through walls and from pipe tunnels.

### Vocational Building - 1952

#### Exterior:

- Stone masonry walls.
- Hollow metal doors and frames.
- Metal windows with single-pane glazing.

#### Interior:

- Concrete structural frame and floors at two-story classroom area.
- Steel beams, bar joist and metal deck at one-story shops.
- Flat built-up roofing.
- First floor classrooms have concrete/tile floors, painted block walls and suspended fluorescent fixtures.
- Non-rated wood doors used throughout.
- Concrete stairs to second floor band room.
- Second floor band room has tile floor, acoustic tile walls and ceiling with surface-mounted fluorescent fixtures.
- Built-in wood band risers.
- Room is air conditioned.
- Toilet room off band area has tile floor, structural facing tile walls in fair condition.

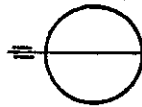
### Building Summary

There are approximately 45 instructional areas within this school complex. Most of the general purpose classrooms are less than the 900 square feet required by Rule B.

The buildings were constructed in 1924, 1952 and 1964. There are approximately 485 7th and 8th graders and 80 special education students housed in this complex.

There are some deficiencies that should be pointed out with these complexes.

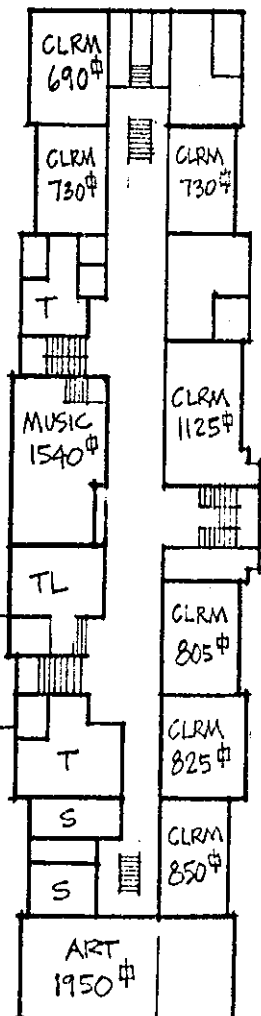
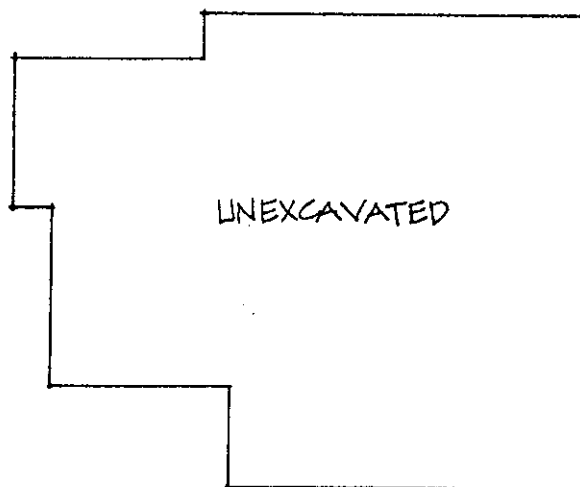
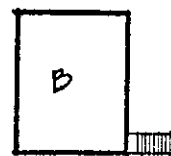
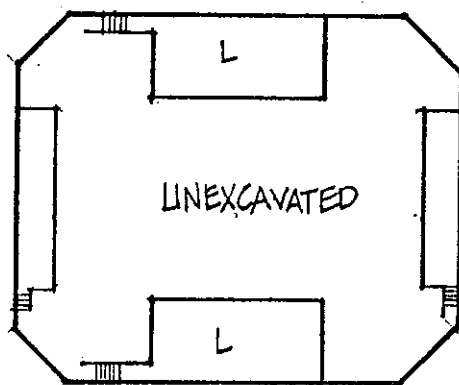
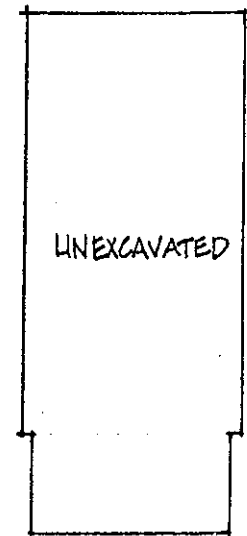
1. All programs and buildings are not accessible to the handicapped.
2. Many of the instructional areas are below Rule B requirements.
3. The large number of special education students present problems for building administration.

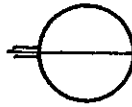


LOWER LEVEL

BEDFORD JR-HI SCHOOL

SCALE 1" = 60'

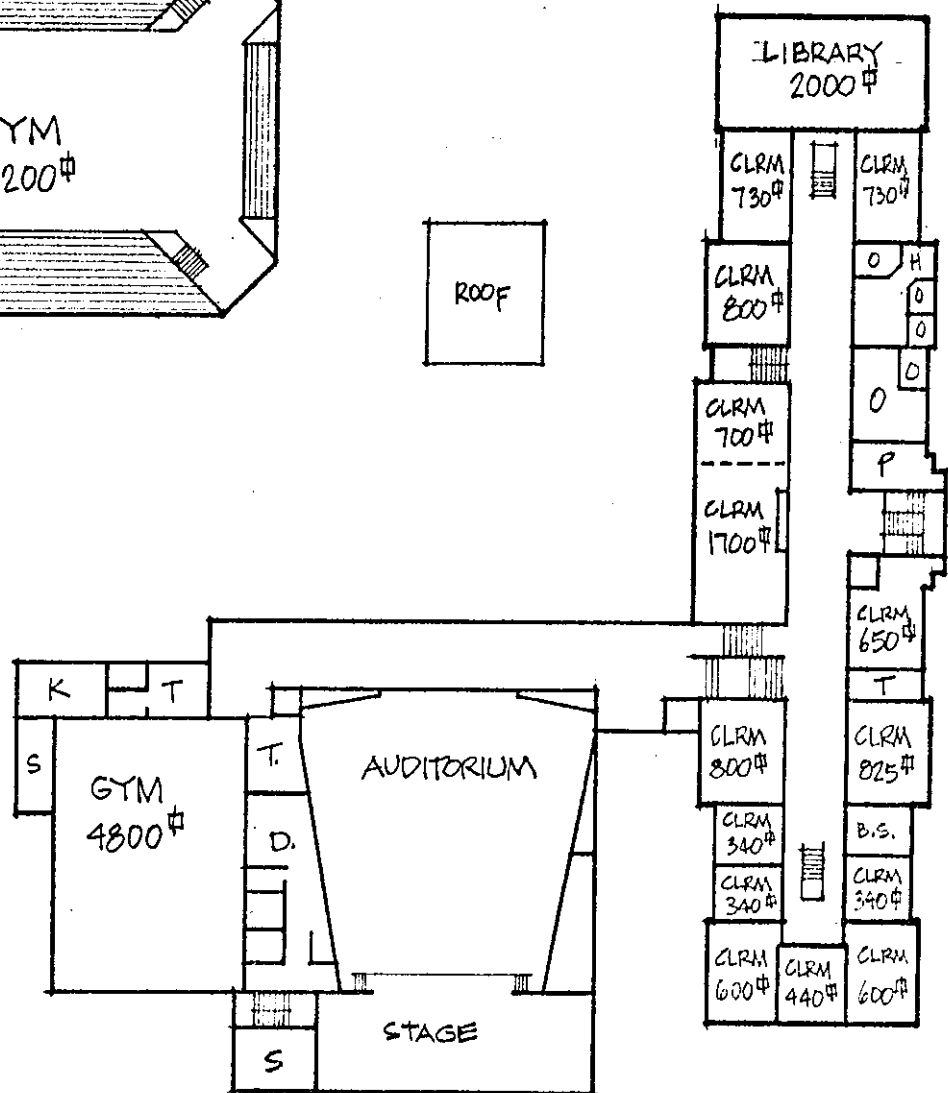
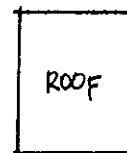
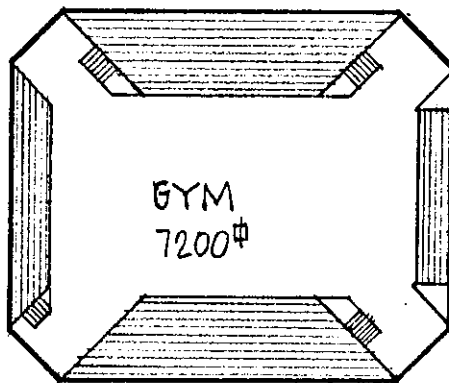
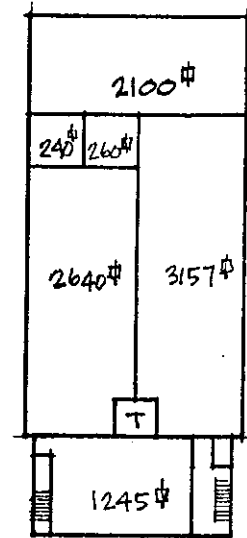


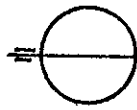


# INTERMEDIATE LEVEL

## BEDFORD JR. HI SCHOOL

SCALE: 1" = 60'

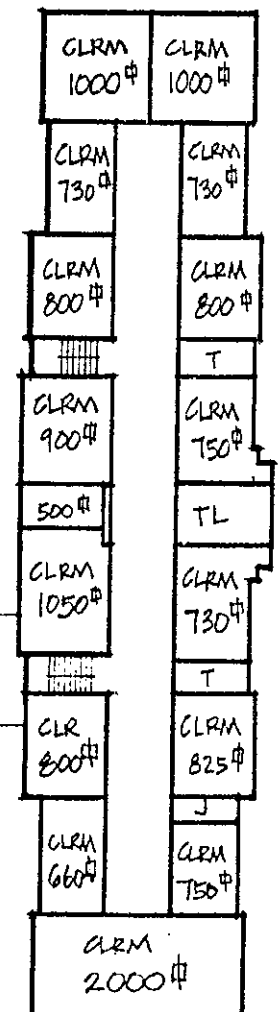
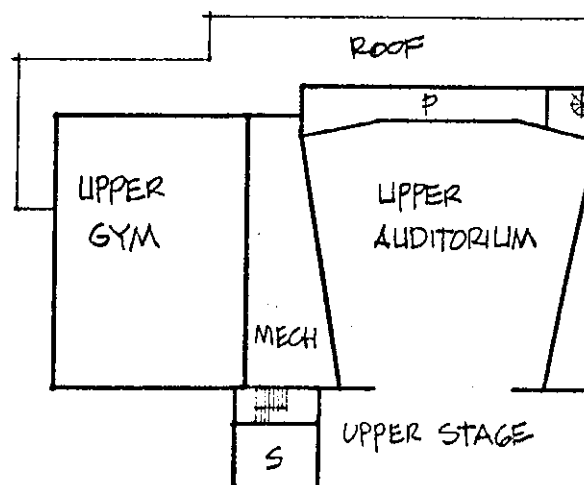
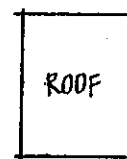
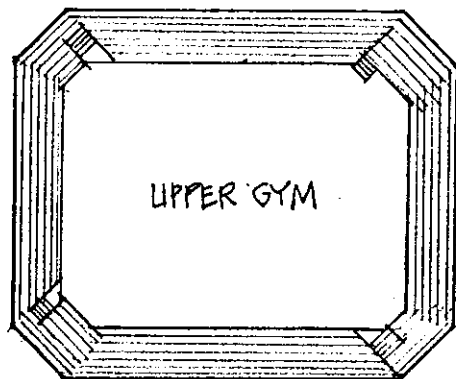
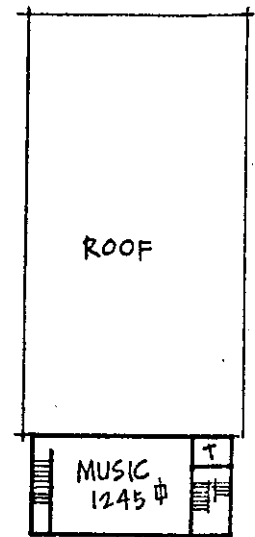




# UPPER LEVEL

## BEDFORD JR-HI SCHOOL

SCALE: 1/4" = 60'



## Lincoln Elementary School

The Lincoln Elementary School is located on an attractive eleven acre site. The site more than meets the minimum requirements set forth in Rule B.

### General Building Appraisal

#### Exterior:

- Stone exterior masonry walls with metal gravel stop fascia.
- Hollow metal entry doors and frames.
- Aluminum window frames with single-pane glazing. Some windows replaced with insulated panel.
- Window air conditioning units.
- No designated handicapped parking areas.
- Roof was flat built-up which has been sprayed with foam insulation.
- Metal frame and fiberglass panel canopy at bus unloading in fair condition.

#### Interior:

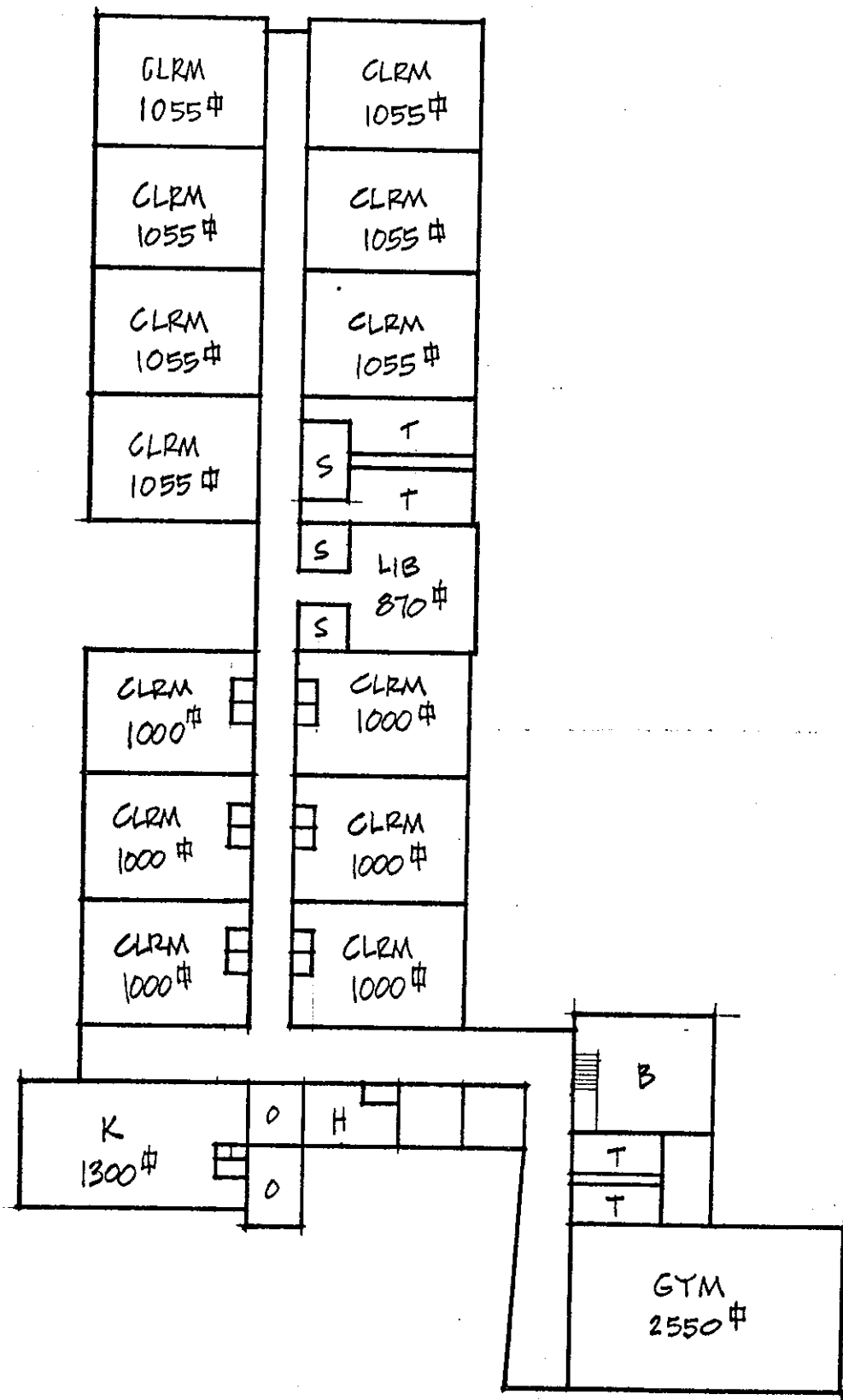
- Masonry bearing walls with rapidex roof deck system.
- Gas boiler with hot water heating.
- Electrical system is original for building.
- Corridors are terrazzo floor, structural facing tile walls, acoustic tile ceiling with surface-mounted incandescent fixtures.
- Wood doors in hollow metal frames into corridor do not meet current code separation requirements.
- Classrooms are tile/carpet floors, structural facing tile wainscot with painted block above, acoustic tile ceiling with surface-mounted fluorescent fixtures. Chalkboards and tackboards are in good condition.
- Toilet rooms have terrazzo floors, structural facing tile walls and metal toilet partitions. Rooms are in good condition.
- Kitchen area is not fire separated from dining area.
- Administration has carpeted floor, painted block walls, acoustic tile ceiling with wood doors throughout.
- Library is former exterior court enclosed and roofed. Stone and vinyl wall covering walls, carpet floor and suspended acoustic tile ceiling.
- Some areas showing block wall settlement cracks which have caused strain and cracks in rapidex.
- Roof skylights have been closed, but still some areas of ceiling have water damage.

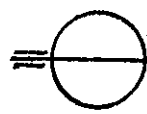


### Building Summary

There are 16 instructional areas located within this educational complex. All general classrooms exceed the minimum requirements that are required by Rule B. The library and gymnasium are less than the current requirements but both are nice areas as they are.

The building currently houses grades K-6 with an enrollment of approximately 350 students. There are very few deficiencies within this building. This complex was constructed in 1959.




**LINCOLN ELEMENTARY**  
 SCALE: 1" = 40'

## Needmore Elementary School

Needmore Elementary School sits on an eleven acre site in the Needmore community. The acreage is adequate for a school of this size but the land is not the best for playground and outdoor activities. Parking and playground areas are only fair.

### General Building Appraisal

#### Exterior:

- Brick exterior walls need some repointing.
- Aluminum window frames with single-pane glazing installed last year. Some steel frames and glass block areas remain.
- Grade level entry but no designated handicapped parking nor accessibility in building.
- Parking and playground area in fair condition.
- Installing three-ply built-up roofing.

#### Interior:

- Gas-fired boiler and steam radiators.
- Two classrooms have electric furnace heating.
- Gas-fired unit heaters in gym and dining room.
- Building rewired and updated two years ago. A lot of exposed conduit.
- Toilet rooms partially redone last year. Still not up to current standards and handicapped code.
- Hollow metal and wood frames with wood doors at corridors not up to code.
- Masonry bearing wall steel beams and wood floor joist.
- Gym steel truss, wood rafters and deck.
- Steel stairs with concrete treads and wood stair to second floor in poor condition.
- Window air conditioners in classrooms.

#### Lower Level:

- Classrooms have tile floors, painted block walls, plaster ceiling and surface-mounted fluorescent fixtures. Water damaged wall areas at original building connection.
- Kindergarten has wood stairway from corridor down to area. Wood stud and plywood walls to separate a corridor space. Grade level entry to this area. Electric unit heaters on walls to supplement radiator heat.
- Girls restroom has brick walls painted, metal and marble partitions.
- Music has wood floors and brick painted walls.

- Kitchen not separated from corridor. Dining area across corridor under gym bleachers.
- Steps in corridor violate current code.
- Gym has wood floor, bleachers and stage with fan room below. Wood panel on stud stage backdrop. New hollow metal exit doors and frames added to gym.

#### Intermediate Level:

- Corridor floor wood and concrete.
- Classrooms have wood floors, plaster walls and ceilings with suspended fluorescent fixtures. Built-in closets with wood doors. Rooms in poor condition.
- Some water damaged classroom areas.
- Administration has carpeted floor, plaster walls and ceiling.

#### Upper Level:

- Classrooms and corridors are same as intermediate level.
- Library and classrooms developed from plywood partitions separating old assembly room.
- Library with carpet floor has water damaged walls and ceiling area.
- Teachers lounge has carpeted floor, plaster walls and ceiling.
- Art room has leaking skylights and damaged ceilings.

#### Building Summary

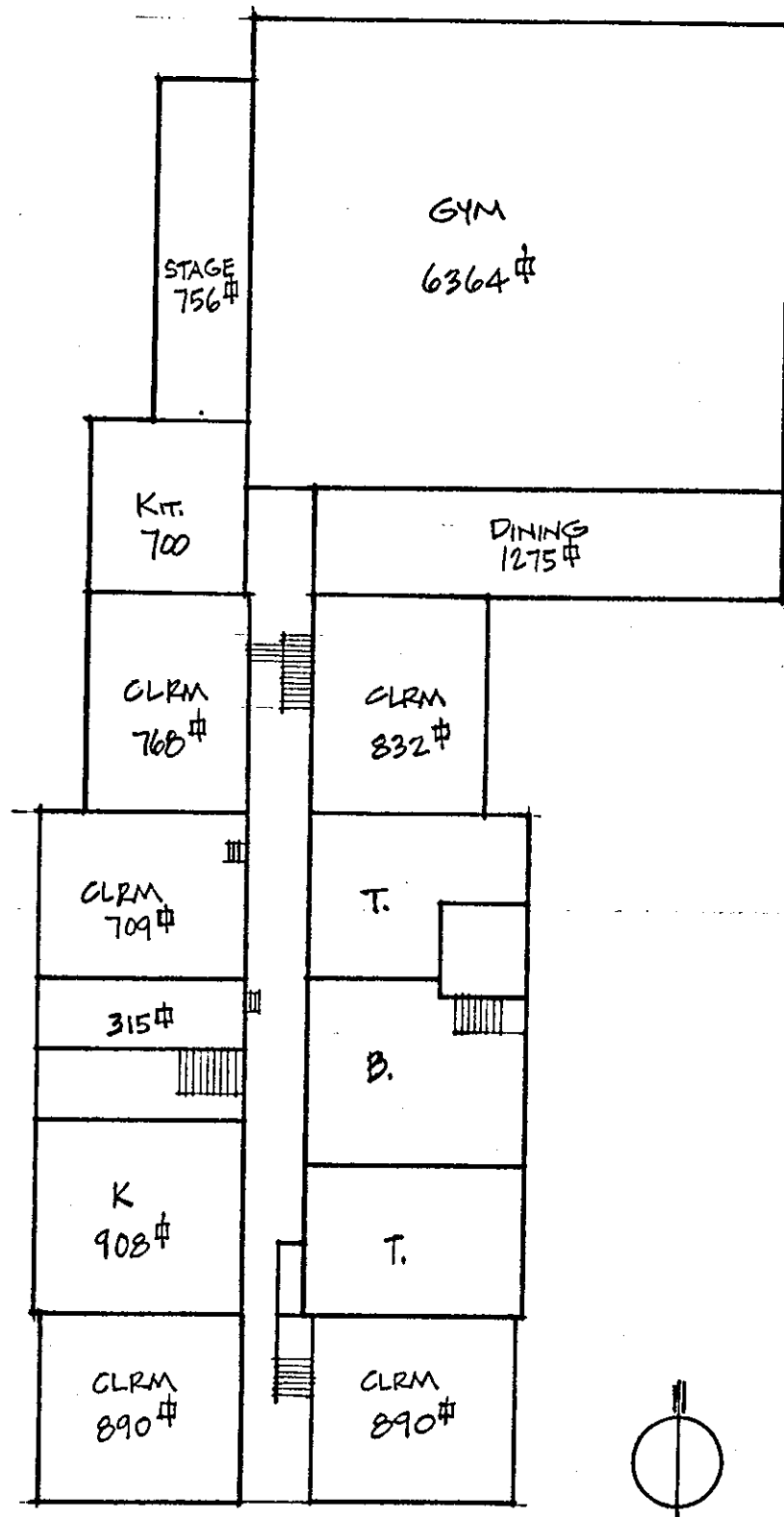
This educational complex contains approximately 22 instructional areas. The gymnasium and art areas are the only two areas that meet the current Rule B requirements for space.

The building contains grades K through 6 with an enrollment of approximately 425 students. The building was constructed in 1911 with additions in 1937 and 1954.

There are various building deficiencies that tend to get in the way of operating a good educational program.

1. Tri-level with classes located below and above grade.
2. All of the general classrooms are below standard size.

3. Inadequate space for art, library, speech and hearing and health clinic.
4. Inadequate space for administration and guidance.
5. Building does not have restrooms on all levels.
6. Programs and building are not accessible to the handicapped.
7. The learning environment is not very conducive to teaching and learning.
8. See general building appraisal for other code deficiencies.

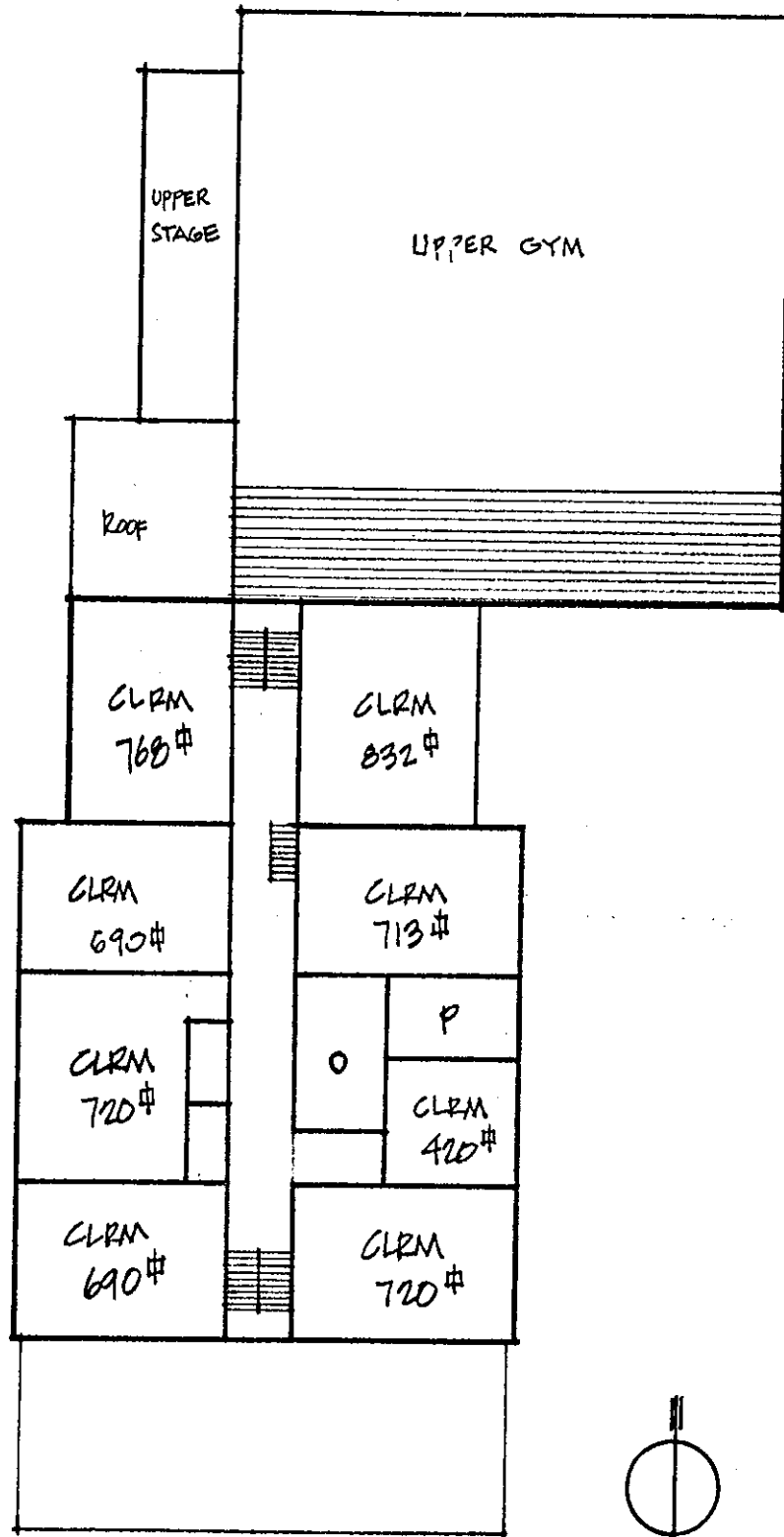


LOWER LEVEL

NEEDMORE ELEMENTARY

SCALE: 1"=30'

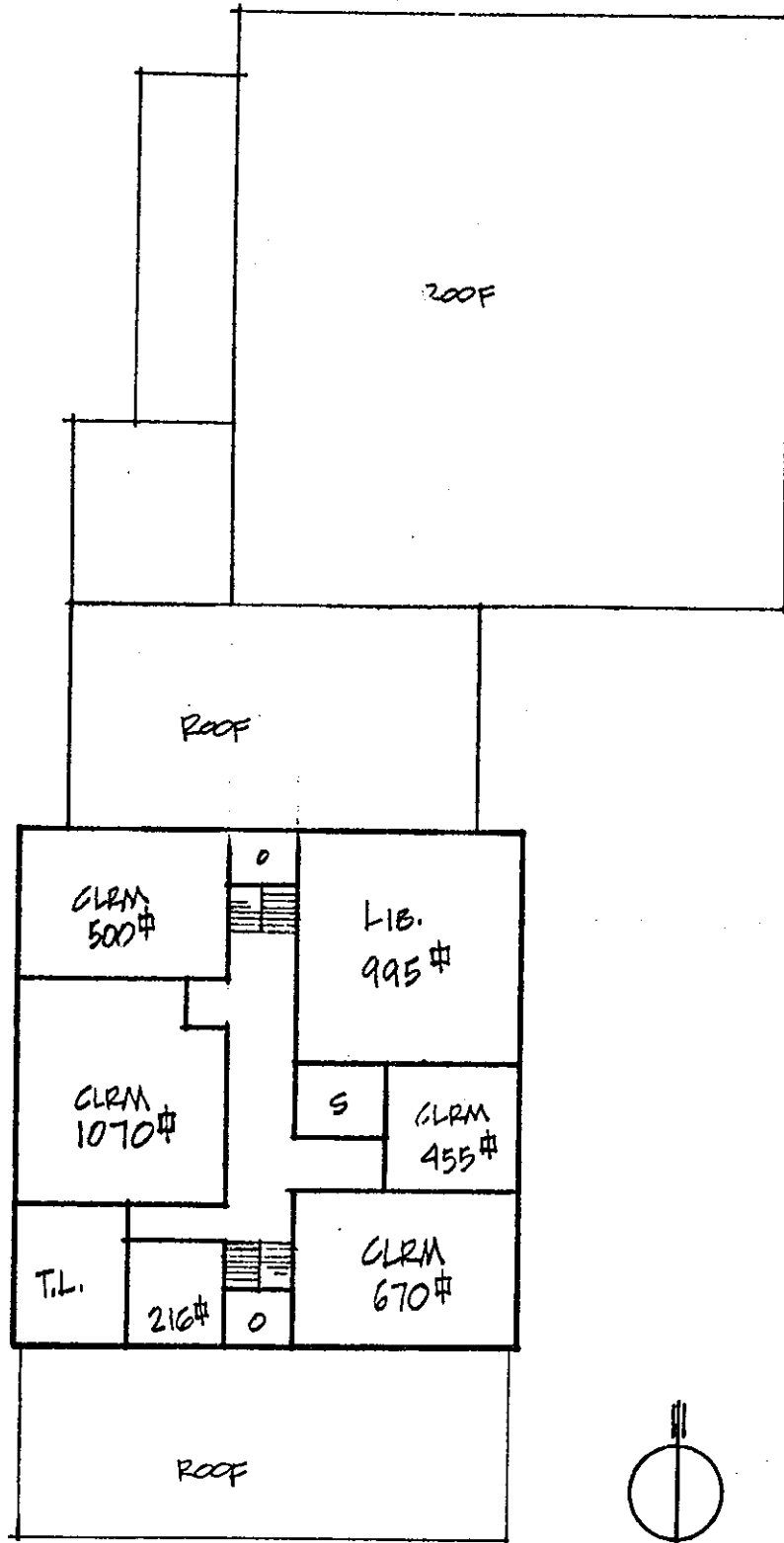
1 of 3



INTERMEDIATE LEVEL

NEEDMORE ELEMENTARY

SCALE: 1" = 30'



UPPER LEVEL

NEEDMORE ELEMENTARY

SCALE: 1" = 30'



## Stalker Elementary School

Stalker Elementary School is located in Bedford on a three-quarter acre site. The site is considerably less than the nine (9) acres required for a school of this size. There does not appear to be any way economically to expand the school site.

### General Building Appraisal

#### Exterior:

- Stone masonry walls need some repointing.
- Shingle roof over original building and built-up roof over addition which has been foam insulated and sealed.
- Aluminum window frame replacement in progress.
- Single-pane glazing with some areas of opaque insulated panels.
- Exterior scuppers and downspouts in fair condition.
- Hollow metal doors and frames.
- Entry at grade level but interior steps prohibit handicapped access. No handicapped parking area.
- Steel fire escape to second floor classroom in fair condition.
- Playground area asphalt in good condition.

#### Interior:

- Rewired and electrical update last year.
- New suspended acoustic tile ceilings with recessed fluorescent lights.
- Restrooms redone last year to include handicapped, however handicapped cannot get to restroom through narrow door.
- Gas boiler, steam radiators, city water and sewer system.
- Wood column and beam construction.
- Window air conditioners in classrooms.
- Corridors have wood doors and frames and do not comply with code.
- Wood stairs do not meet current codes. Steel stair and terrazzo treads in addition area.

#### Lower Level:

- Dining area has glazed brick walls and concrete floor.
- Kitchen not fire separated from rest of building.
- Some special classroom areas carpeted, wood panel walls and gypsum board ceiling.

#### Intermediate Level:

- Classrooms have carpet/tile/wood floors, wood and glazed brick wainscot wall with plaster above. Floors in poor condition.
- Carpeted central area used for open classroom teaching.
- Surrounding floor and walls in poor condition.

#### Upper Level:

- Classrooms are in same condition as intermediate level.
- Library in central area is carpeted. Second exit from this area is through classroom. Access to four classrooms is through library area.
- Office wood and glass partitioned area.

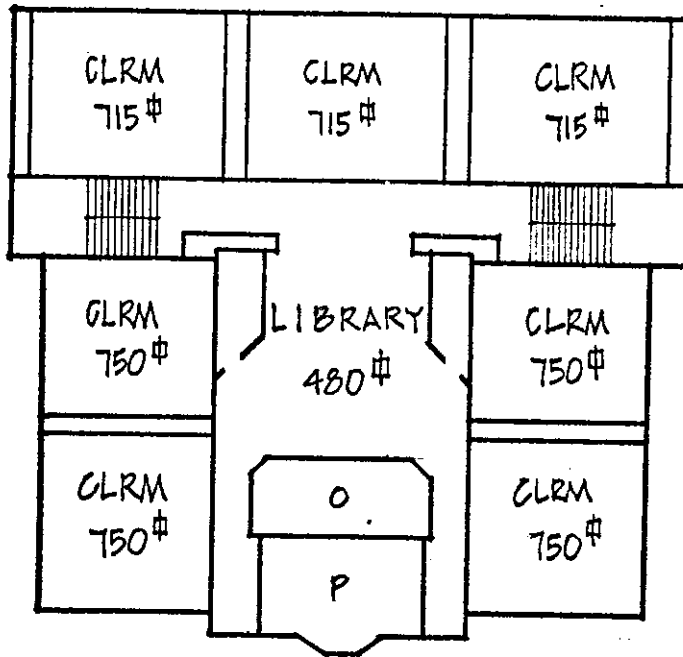
#### Building Summary

Stalker was built in 1899 with an addition in 1929. There are 18 instructional areas within this educational facility. Not a single one of the 18 instructional areas meet the current requirements of Rule B, as they relate to space requirements.

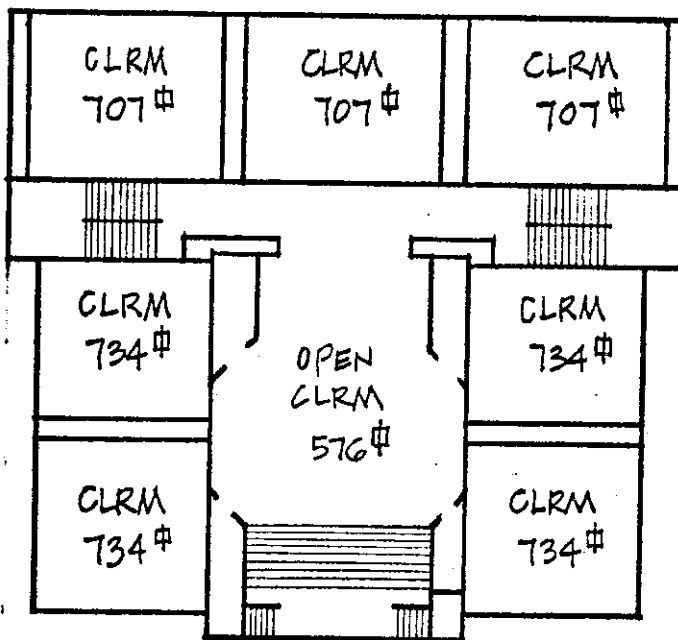
The building currently houses grades K-6 with an enrollment of approximately 240 students.

The facility has recently undergone some renovation to upgrade the overall appearance and efficiency of the building. There are still deficiencies within the building that can and may hamper the educational program.

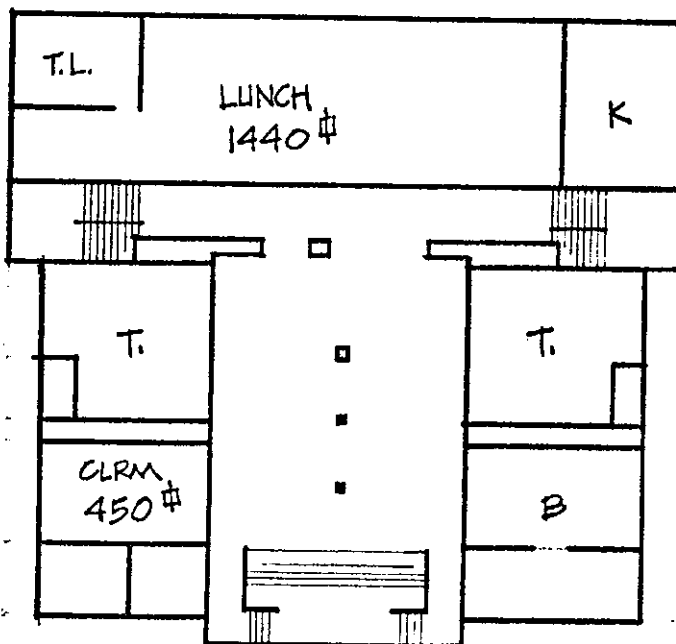
1. Tri-level with classes located below and above grade.
2. All of the instructional areas are below standard size.
3. No indoor physical education area.
4. Building does not have restrooms on all levels.
5. Programs and building are not accessible to the handicapped.
6. See general building appraisal for other code deficiencies.



UPPER LEVEL



INTERMEDIATE LEVEL



LOWER LEVEL

STALKER ELEMENTARY

SCALE: 1"=30'



## Fayetteville Elementary School

The Fayetteville Elementary School is located on a sixteen acre site in the Fayetteville community. The site is more than adequate for a school of this size. The playground and parking are in rather poor condition.

### General Building Appraisal

#### Exterior:

- Brick masonry in need of repoint and repair areas, some exposed concrete wall areas and concrete block gym addition.
- Walks in poor condition.
- Parking and playground areas in poor condition.
- Metal windows single-pane glazing in poor condition.
- Flat built-up roof.
- Scuppers and downspouts in poor condition.
- Hollow metal doors and frames.
- Railings around areaways not up to code.
- No designated handicapped parking areas and steps up to main entry level prohibit getting into building.

#### Interior:

- Wall bearing masonry construction classroom area with concrete spandek floor and roof.
- Gymnasium area steel column and trusses with wood roof deck and masonry walls.
- Building rewire and electrical update in last year.
- Oil-fired boiler and steam to original radiators.
- Served by rural water system and on septic system.
- Stairs are concrete and steel with concrete tread.
- Wood doors into classrooms from corridor do not meet code and swing in wrong direction.
- Some settlement cracks in block walls of later addition.

#### Lower Level:

- Corridors are concrete floors, plaster walls and ceiling.
- Exposed piping and conduit.
- Boiler room exterior wooden door and frame in poor condition.
- Kitchen is not fire separated from other spaces.
- Music room has wood separation partitions.
- Corridor doors are wood and do not comply with code.
- Long dead end corridor since second exit is through basement storage space.
- Concrete stair up to intermediate level.
- Old shop area is used for general storage.

#### Intermediate Level:

- Gymnasium in poor condition, wood bleachers over old shop area.
- Classrooms are tile/carpet/wood floors in poor condition, block and plaster walls and ceilings with suspended fluorescent fixtures.
- Hollow metal/wood frames with wood doors do not meet corridor code requirements.
- Restrooms recently redone - seamless flooring, wood panel walls, suspended acoustic ceilings with recessed lights. Handicapped stall in metal partitions.

#### Upper Level:

- Library has carpet floor, plaster walls and ceiling and suspended fluorescent fixtures.
- Classrooms have wood floors in poor condition, plaster walls and acoustical ceiling.
- Administration is carpeted and air conditioned.

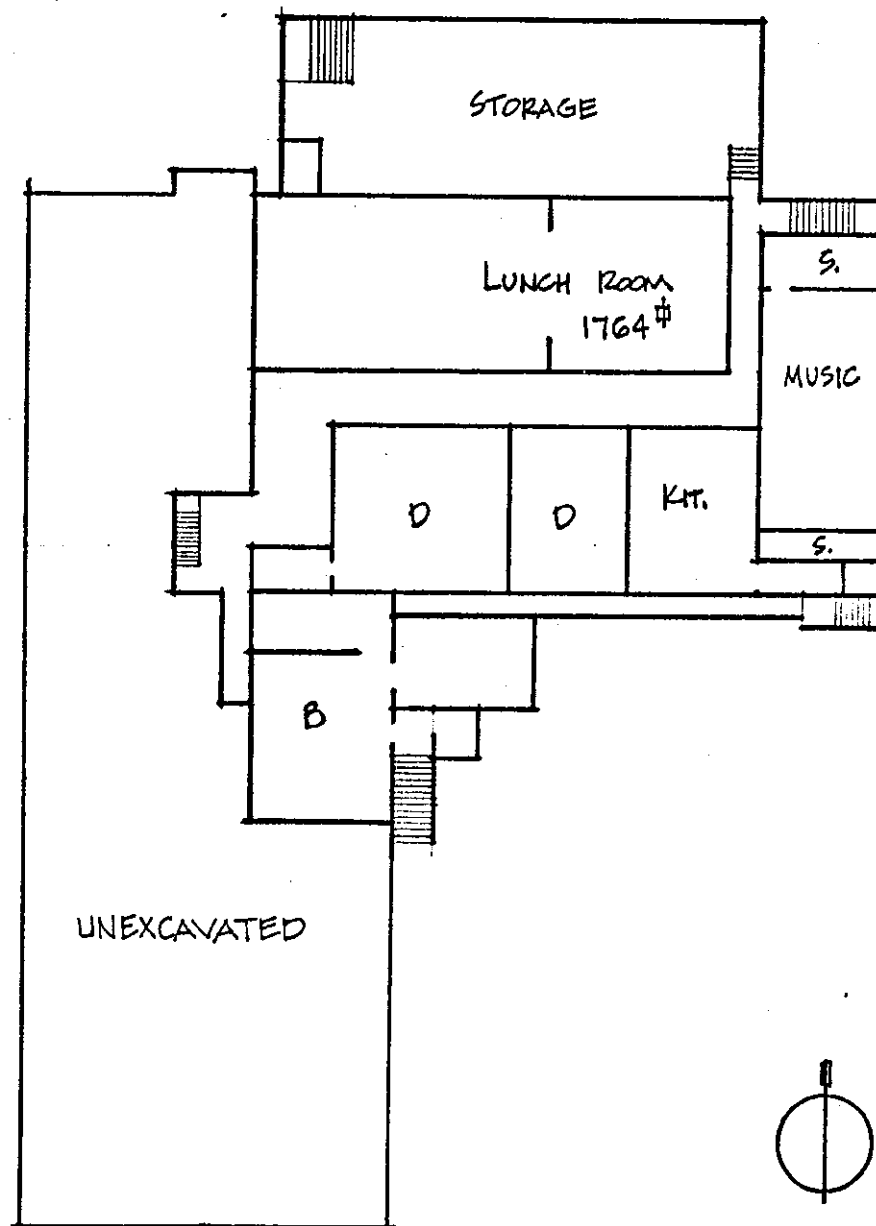
#### Building Summary

There are sixteen instructional areas within this facility. All of the general purpose classrooms are considerable below the minimum 900 square feet as required by Rule B. The only spaces that meet the current requirements are the gymnasium, library and music area.

The building was constructed in 1930 with additions in 1952 and 1959. There are approximately 320 students in grades K-6.

This facility has had considerable work in the past few years which has enhanced the total atmosphere. There still are several deficiencies within the building.

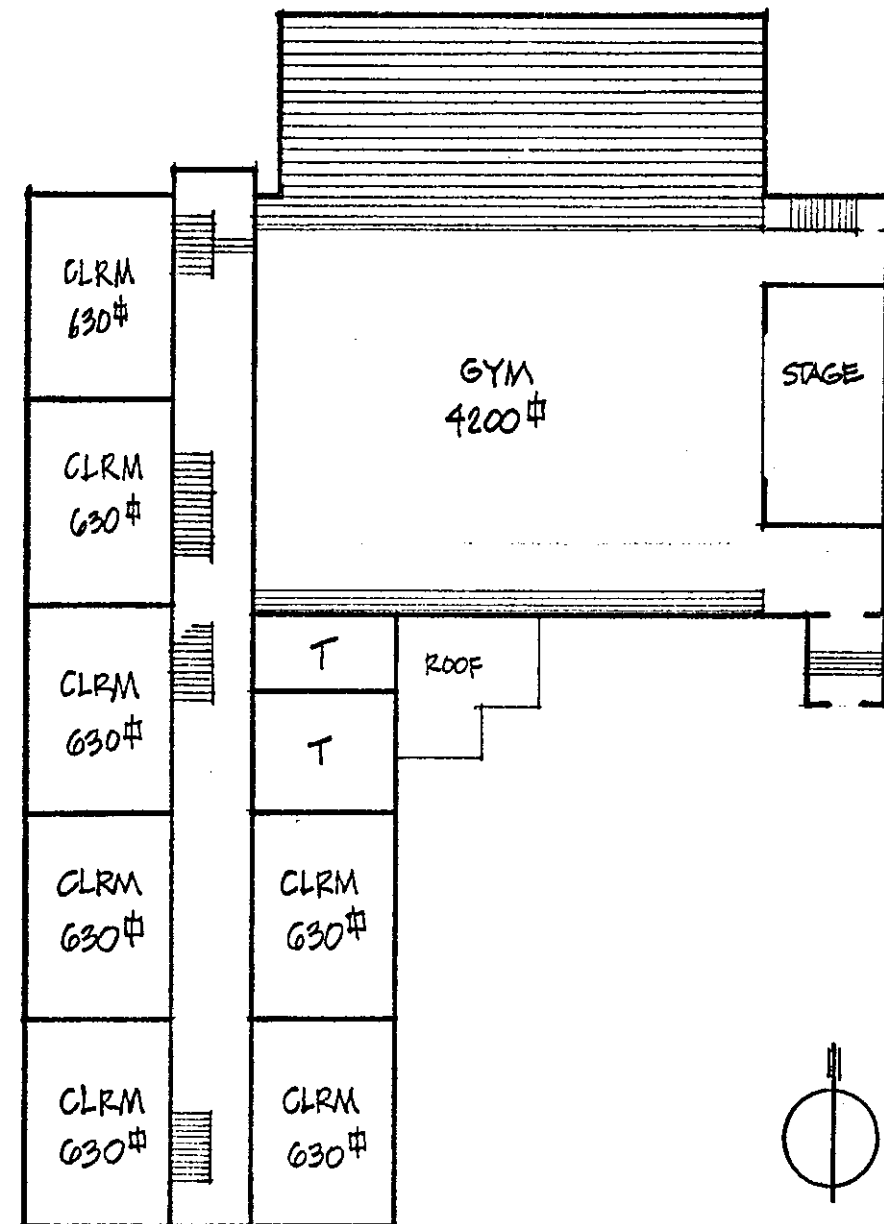
1. Tri-level with instructional areas below and above grade.
2. Most of the instruction areas are below current requirements.
3. Building does not have restrooms on all levels.
4. Programs and building not accessible to the handicapped.
5. See general building appraisal for other code deficiencies.



LOWER LEVEL

FAYETTEVILLE ELEMENTARY

SCALE: 1"=30'



INTERMEDIATE LEVEL

FAYETTEVILLE ELEMENTARY

SCALE: 1" = 30'



FAYETTEVILLE ELEMENTARY

3 of 3



## Parkview Elementary Schools

The two Parkview Elementary School complexes are located on a twenty acre site on West Sixteenth Street. This is an excellent site for a school complex.

### General Building Appraisal

#### Exterior:

- Stone masonry walls.
- Metal window frames with single-pane glazing.
- Flat, built-up roofing.
- Parking, drives and playground in good condition.
- Wood entry doors and frames.
- Grade level entry but no designated handicapped parking.

#### Interior:

- Bearing wall masonry with steel floor and roof joist supporting concrete decks.
- Gas boilers with low pressure steam heating.
- Two rooms added with individual electric heat units.
- No interior access to all floors for handicapped.
- Non-rated wood doors and frames do not meet current code.
- Sprayed acoustic plaster ceiling used throughout building.
- Interior walls having some plaster areas patched.
- Toilet rooms have structural facing tile walls, metal partitions in poor condition. One handicapped toilet stall not in accordance with code.
- Some areas of water damaged ceiling.
- Steel stair with terrazzo treads.

#### Lower Level:

- Boiler room has concrete floor, concrete/block walls.
- Original dressing rooms converted to special education rooms. Concrete walls/columns, acoustic tile ceiling, carpeted floor and direct outside access.

#### Intermediate Level:

- Corridor has terrazzo floor, structural facing tile walls and recessed fluorescent lights.
- Classrooms are tile floors, plaster walls, original chalk and tackboards in fair condition. Built-in storage and closet areas with wood doors and frames.
- Kindergartens have self-contained restrooms with ceramic tile floors and wall areas.
- Administration has terrazzo and tile floors with plaster walls.
- Speech and Hearing has carpeted floors.
- Multi-purpose has tile floor, painted block walls with built-in tables.
- Teachers lounge in original kitchen, quarry tile floor and structural facing tile walls.

#### Upper Level:

- Corridor is same as intermediate level but with tile floor.
- Classrooms are same as intermediate level.

### Parkview Junior High School

#### General Building Appraisal:

##### Exterior:

- Stone masonry walls.
- Aluminum window frames with single-pane glazing.
- Hollow metal entry doors and frames.
- Flat built-up roof with aluminum fascia.
- Parking, drives, playground in good condition.

##### Interior:

- Wall bearing masonry with bar joist metal deck second floor construction.
- Wall bearing rapidex and bar joist metal deck roof systems.
- Gas boiler with hot water to cabinet unit heaters.
- Original wiring to be redone this year to allow for building air conditioning.
- Main heating lines run outside around building. Electrolis problems in piping change has caused problems.
- Public water and sewer system.
- Hollow metal frames and wood doors do not meet current exit separation codes.
- Roof skylights in some areas show areas of water leakage and damage.
- Steel stairs with terrazzo treads, vinyl wall covering.

- Toilet rooms have terrazzo floors, ceramic tile walls, rapidex ceiling, metal toilet partitions and no handicapped facility.

#### Lower Level:

- Corridor has terrazzo floor, structural facing tile with plaster above and vinyl wall covering, acoustical ceiling with recessed fluorescent fixtures. Some areas have built-in wall lockers in fair condition.
- Administration has tile floor, vinyl wall covering, and acoustic tile ceiling.
- Gym has tile floor, structural facing tile and painted block, wood bleachers and suspended fluorescent fixtures.
- Locker room has concrete floor, structural facing tile/painted concrete block walls, painted rapidex ceiling, hollow metal frames and wood doors.
- Library has tile floor, vinyl wallcovering, acoustic tile ceiling with recessed fluorescent fixtures.
- Classrooms are tile floor, vinyl wall covering, acoustic tile ceiling with recessed fluorescent fixtures. Chalk and tackboards in good condition. Floor carpet in some classroom areas in poor condition.
- Music Room has tile floor, block walls with acoustical tile treatment on upper portion and rapidex ceiling.
- Art - redone original Home Ec room, cabinetry is in fair condition.

#### Upper Level:

- Corridor is similar to lower level but with tile floor in lieu of terrazzo.
- Classrooms are similar to lower level but with painted rapidex ceilings and suspended fluorescent fixtures.

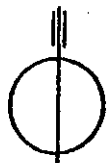
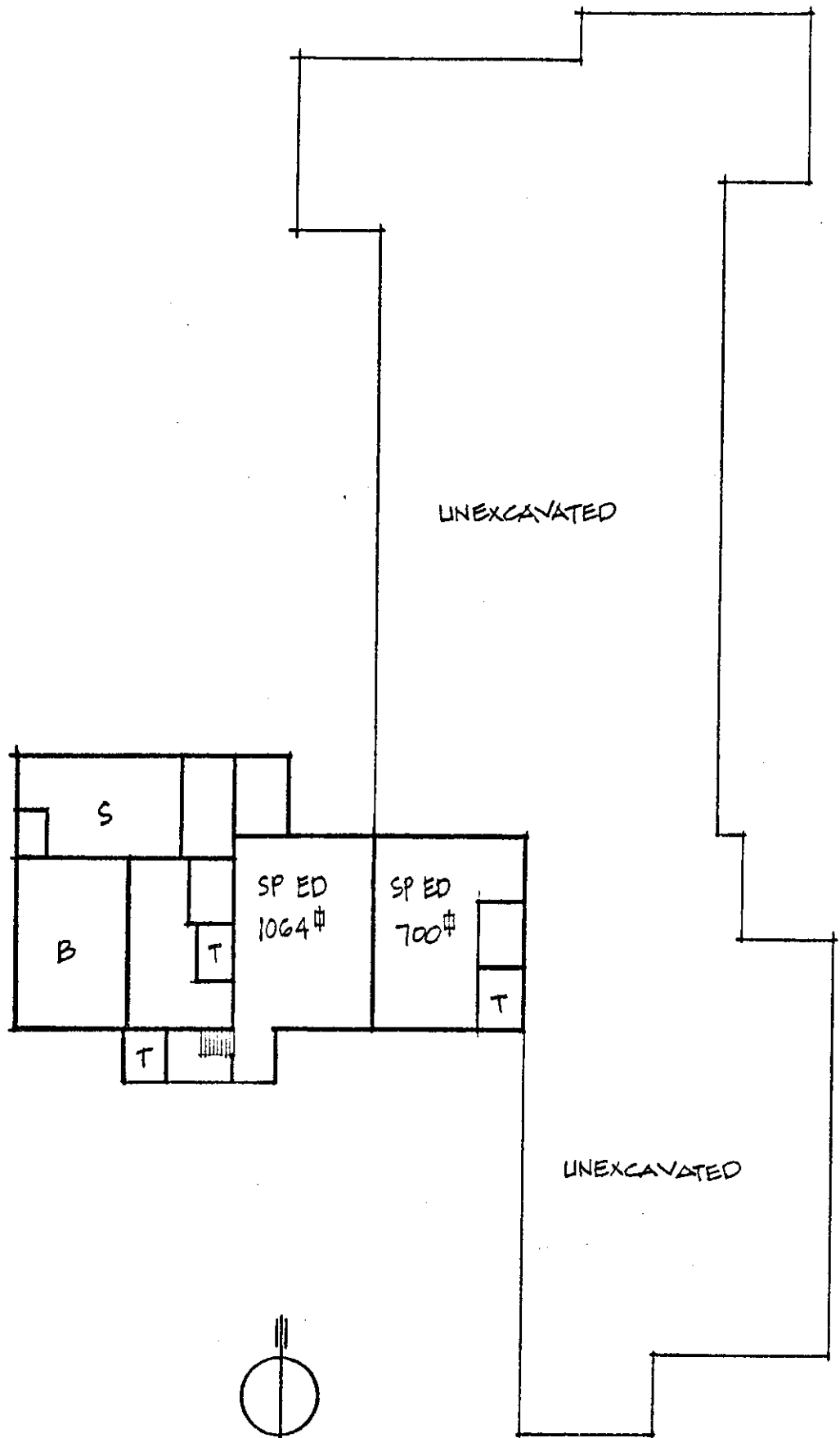
#### Building Summary

The current Parkview Elementary buildings were constructed in 1951 and 1961. The 1961 building was originally constructed as the Bedford Junior High School.

The 1961 building contains 19 instructional areas. While most of the general purpose classrooms are below the minimum requirement as listed by Rule B, they are very good spaces. The 1951 structure contains 20 instructional areas. Many of these spaces are also less than the current requirements.

The two buildings currently house approximately 600 students in grades K-6.

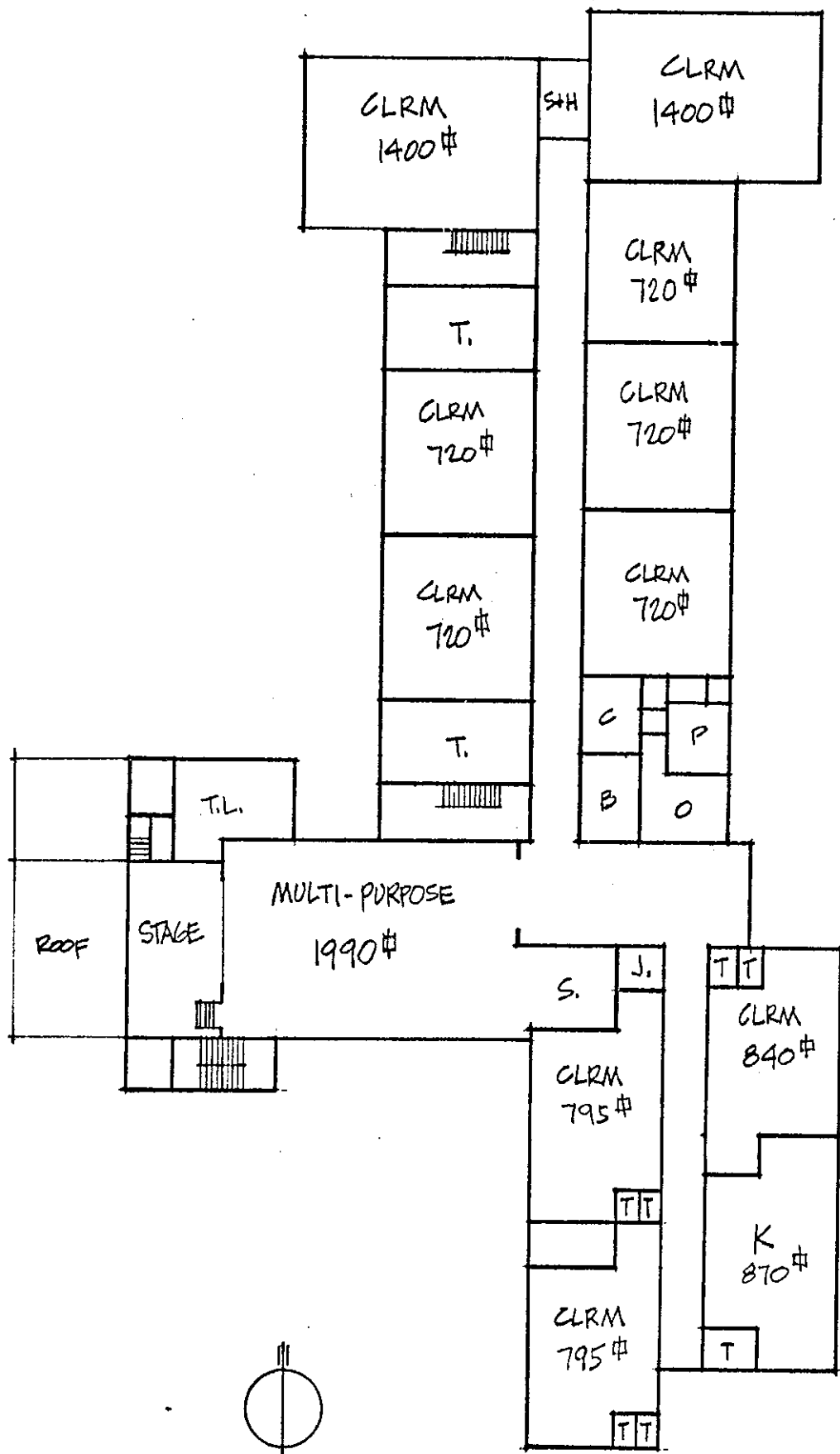
The major problem with this school complex is the large concentration of Special Education students. There are some deficiencies listed in the general building appraisal that should be attended to.



LOWER LEVEL

PARKVIEW ELEMENTARY

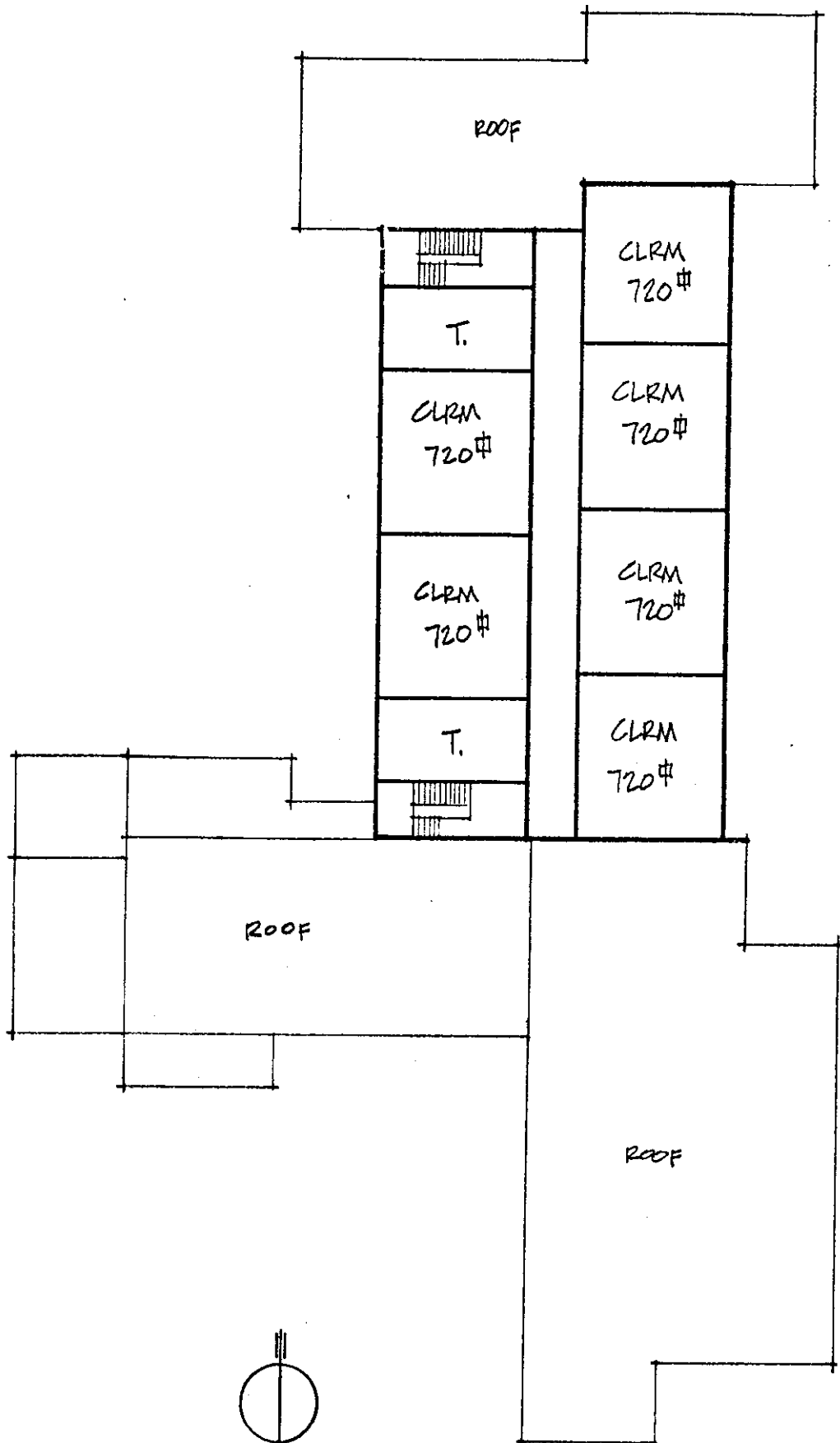
SCALE: 1"=30'



INTERMEDIATE LEVEL

PARKVIEW ELEMENTARY

SCALE: 1" = 30'

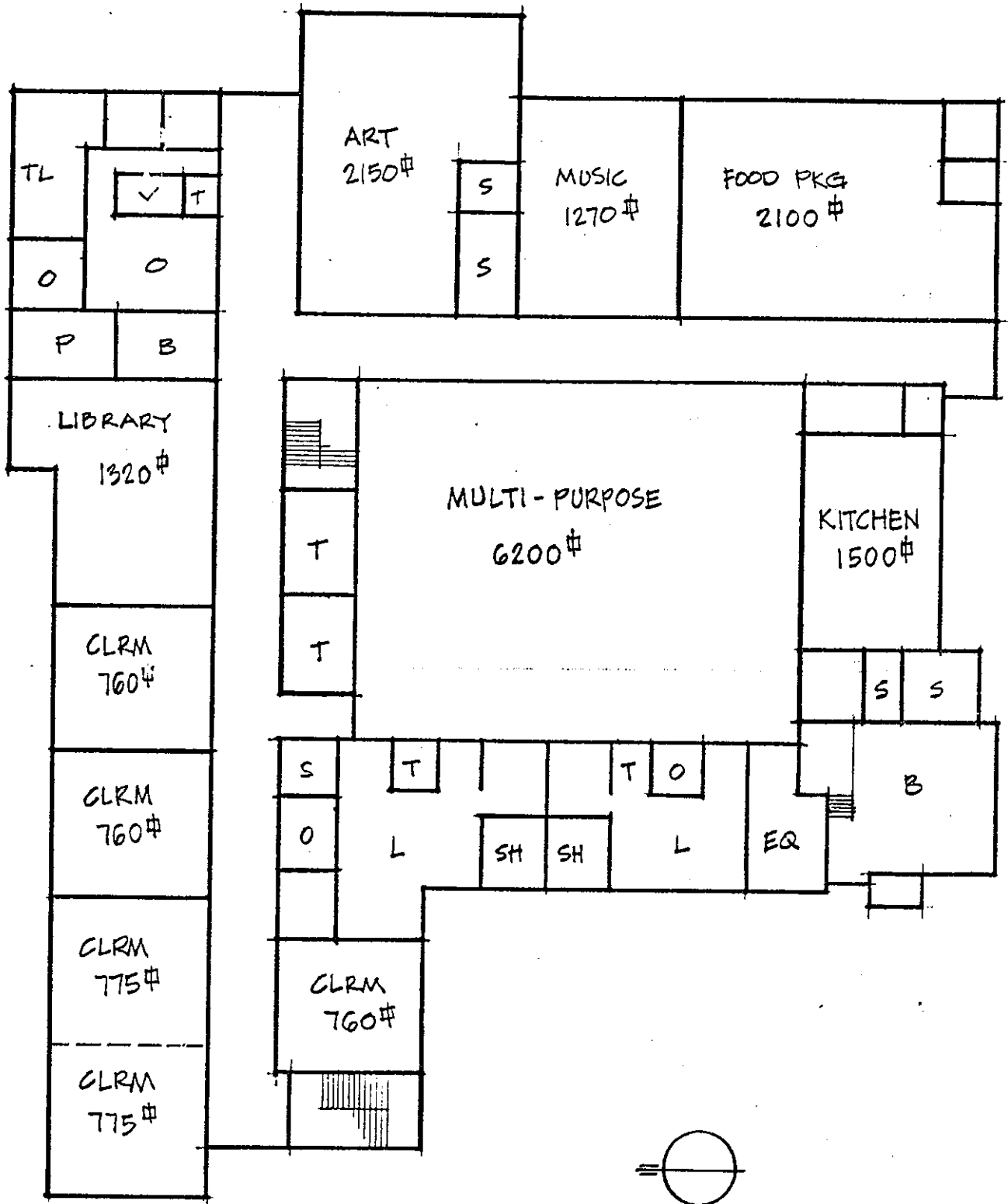


UPPER LEVEL

PARKVIEW ELEMENTARY

SCALE: 1"=30'

3 OF 3

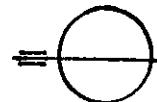
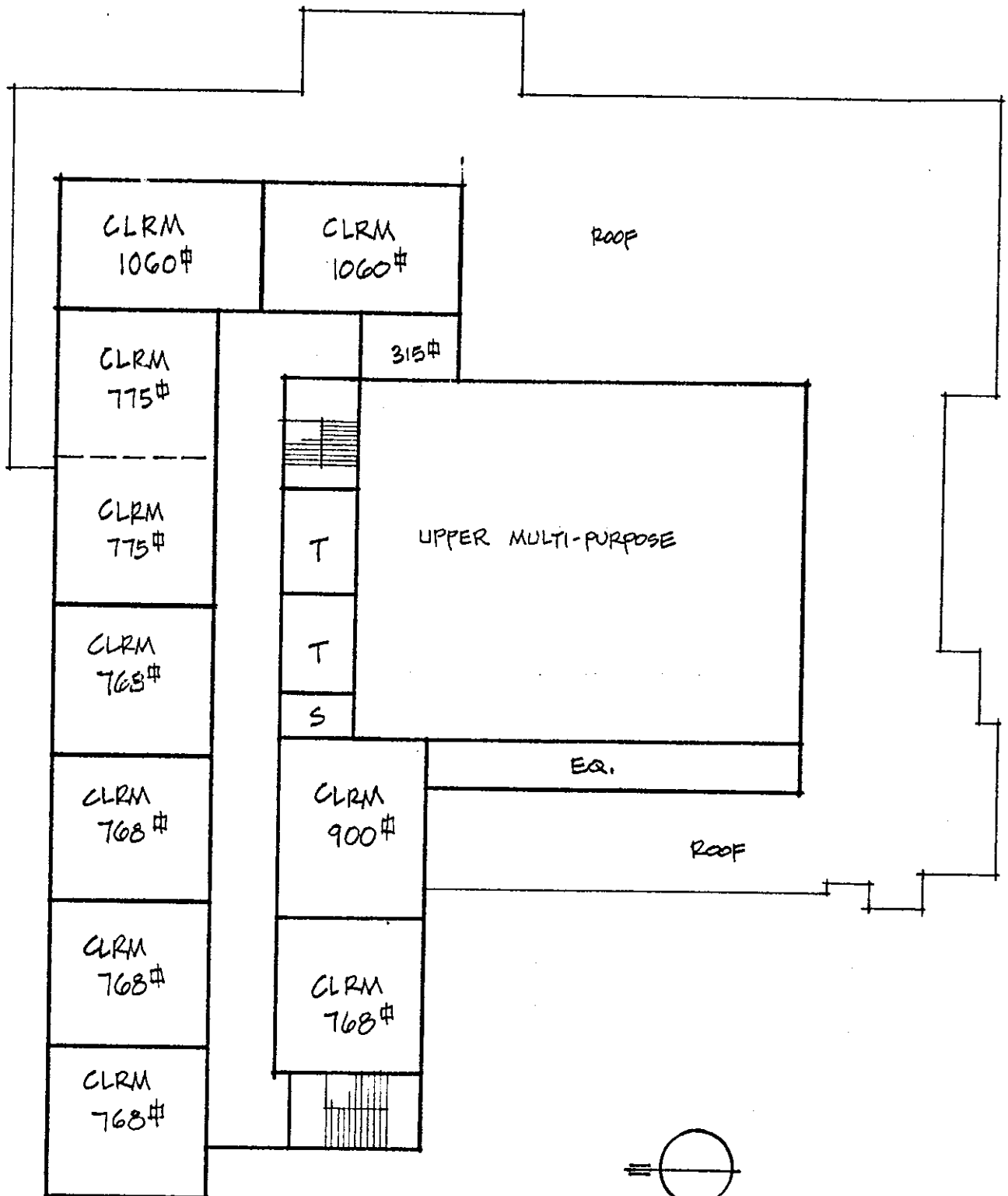


LOWER LEVEL

PARKVIEW JR-HI

SCALE: 1"=30'





UPPER LEVEL

PARKVIEW JR. HI

SCALE: 1" = 30'

## Bedford-North Lawrence High School

The high school complex is located on a beautiful 110 acre site east of Bedford. This site is also shared with the Vocational-Technical School.

### General Building Appraisal

#### Exterior:

- Stone exterior.
- Flat, built-up roof with one area of metal standing seam roofing.
- Hollow metal entry frames.
- Metal window frames with single-pane glazing.

#### Interior:

- Concrete structural frame with precast concrete double tee floor units.
- Oil-fired boilers with low pressure steam heat. Converting for gas fuel also.
- Central air conditioning with chiller.
- Waste water plant and rural water system supply.
- Suspended acoustic tile ceilings and surface-mounted fluorescent fixtures.
- Gypsum board and block painted walls throughout.
- Hollow metal frames with rated wood doors interior.
- Large glass areas of walls not in accordance with current code for amounts or separation requirements.
- Three story open spaces not in accordance with current code requirements.
- Carpeted floors throughout classroom areas. Carpet in poor condition in locker pod/corridor areas.
- Toilet rooms have marble partitions with handicapped stall.
- Elevator for access to all floors.
- Exposed ductwork through spaces.
- Some railings are too low for current code.
- Some areas of cracked masonry walls.

#### Lower Level:

- Ceramic tile in major circulation corridor.
- Band is carpet covered permanent risers.
- Commons area has concrete floor and risers, permanent tables and chairs with folding partitions for large group teaching.
- Kitchen area has quarry tile floor. Serving area is not separated from corridor space.

Intermediate Level:

- Locker pods have tight rows of lockers, exposed ductwork and wiring trays/conduit.
- Home Economics has equipment in good condition.

Upper Level:

- Science labs have equipment in good condition.

Gym/Pool Building:

- Pool has laminated wood beams and roof deck. Concrete floor with stainless steel gutter and painted block walls.
- Gym has steel truss, bulb tee and fiber deck, painted block walls, wood gym floor, concrete balcony and plastic coated bleachers in good condition.
- Some suspended acoustic tile ceilings in circulation corridors.

Building Summary

This educational complex was constructed in 1975. At the present time there are approximately 1,750 students enrolled in grades 9-12.

The building contains many instructional areas that vary in size. The building was designed around a flexible-modular-scheduling technique. Class size varies depending on instructional objectives. There are large group (50 to 150), small group (7 to 15), and independent study areas within this complex.

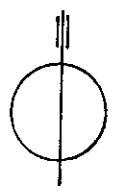
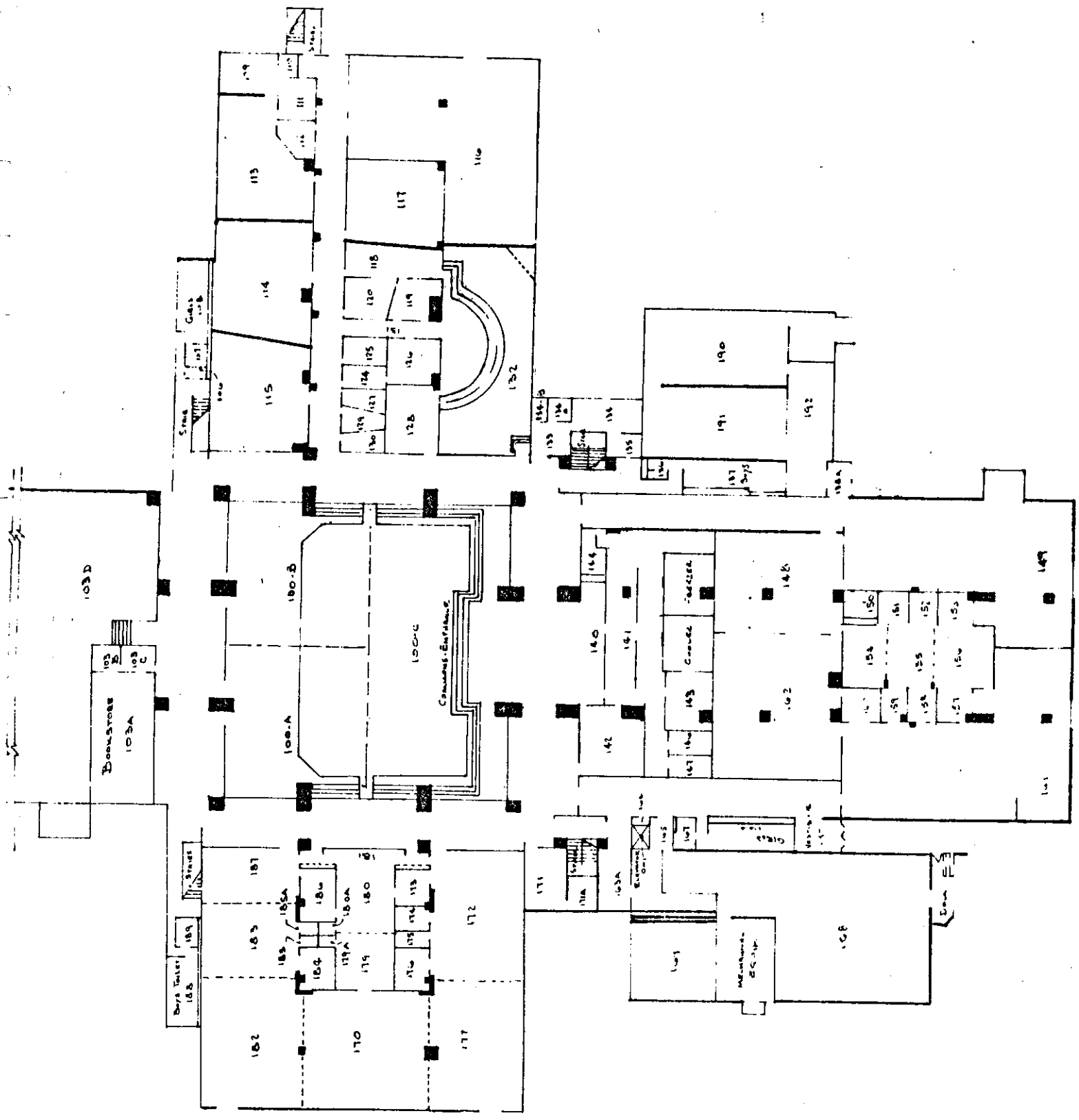
The concept of a continuous progress program with team-teaching, variable class groupings, and independent study must be having positive results. One has to be impressed after reviewing the latest SAT scores.

1975 through 1979

	<u>Math</u>		<u>Verbal</u>	
	<u>B-NL</u>	<u>National</u>	<u>B-NL</u>	<u>National</u>
1975	448	472	412	434
1976	448	472	401	431
1977	445	470	412	429
1978	454	468	421	429
1979	460	467	430	427

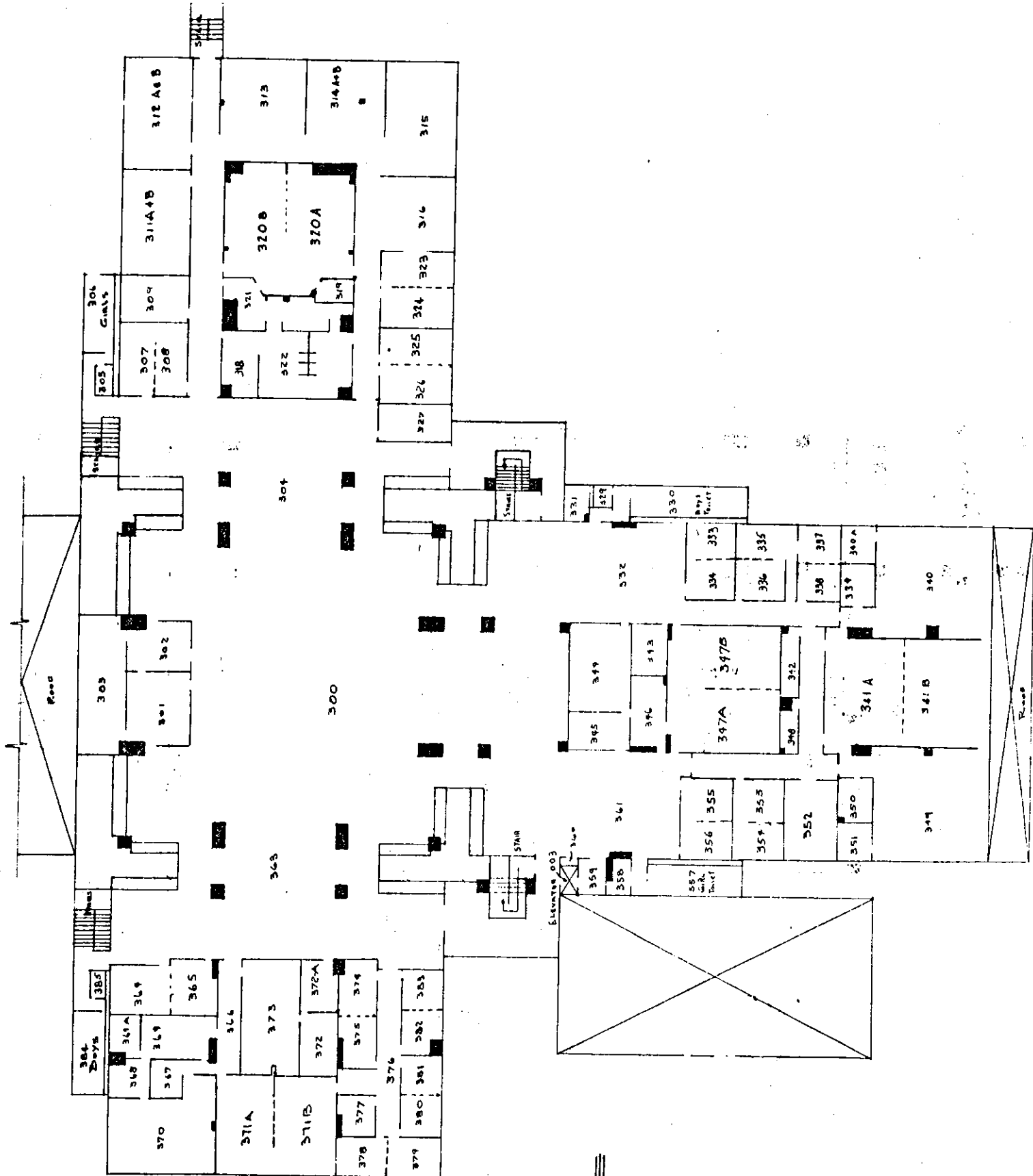
There are several problems that exist within this total complex.

1. The building is very crowded as it is currently being used.
2. With the freshmen and other students being block schedule, there are not enough conventional classrooms.
3. There are currently ten home rooms in the "commons" area.
4. The "commons" area is not a very inviting area.
5. There is no auditorium on this site.
6. Music has out grown its space.
7. Rooms are scheduled at approximately 80% of the time and a Flexible-Modular-Scheduling process would call for a scheduling ratio of approximately 65%.
8. The complex really needs additional, conventional classrooms.
9. Currently using two classrooms at the Vocational Building for Math instruction.

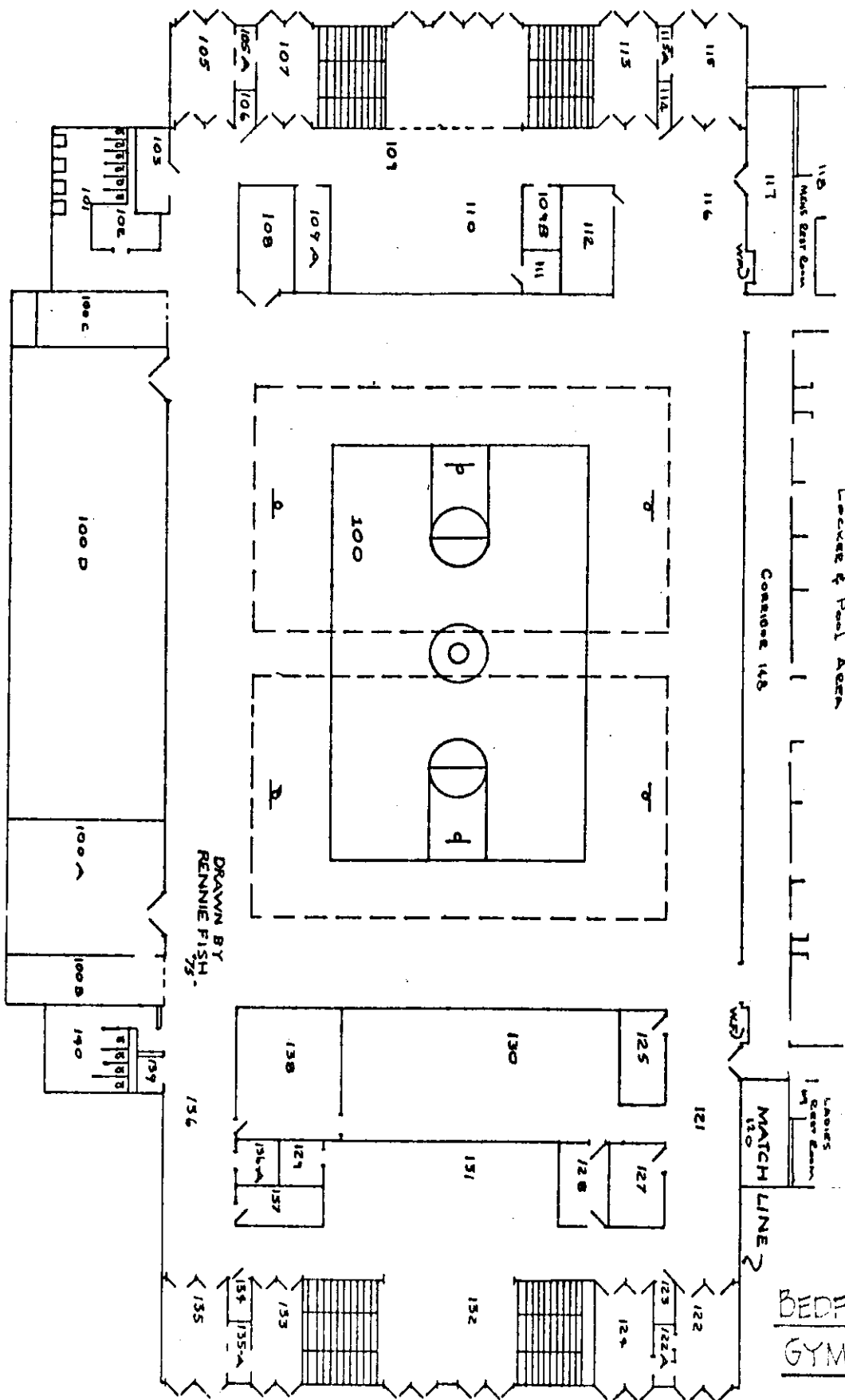


FIRST LEVEL  
BEDFORD NORTH H.S.





THIRD LEVEL  
BEDFORD NORTH H.S.



DRAWN BY  
RENNIE FISH  
7/2

BEDFORD NORTH H.S.  
GYM BUILDING



## Vocational Technical Center

The Area Vocational Technical building shares the 110 acre site with Bedford-North Lawrence High School.

### General Building Appraisal

#### Exterior:

- Stone panels with metal roof panel fascia.
- Hollow metal entry doors and frames.
- Flat with built-up roofing.

#### Interior:

- Steel frame with bar joist and metal deck.
- Gas boiler with hot water heat.
- Rural water system supply and school waste water plant.
- Central air conditioning system.
- Walls painted block and demountable gypsum board partition.  
Two wood panel/stud partition classroom areas in IMC.
- Hollow metal doors and frames are not in conformance with current code.
- Suspended acoustical tile ceilings with surface-mounted fluorescent fixtures.
- IMC and classrooms have carpet floors.
- Shop areas have concrete floors and exposed joist/deck ceiling areas.
- Toilet rooms have sealed concrete floors, marble toilet partitions and plaster ceilings. No handicapped facilities.
- Greenhouse is steel frame with fiberglass panels.
- Administration is small offices with direct access to IMC.  
Block walls, acoustic ceilings, carpet.
- Data processing area has plywood raised floor, however, area is used for classroom.
- Building is in good condition.

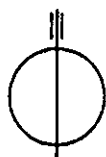
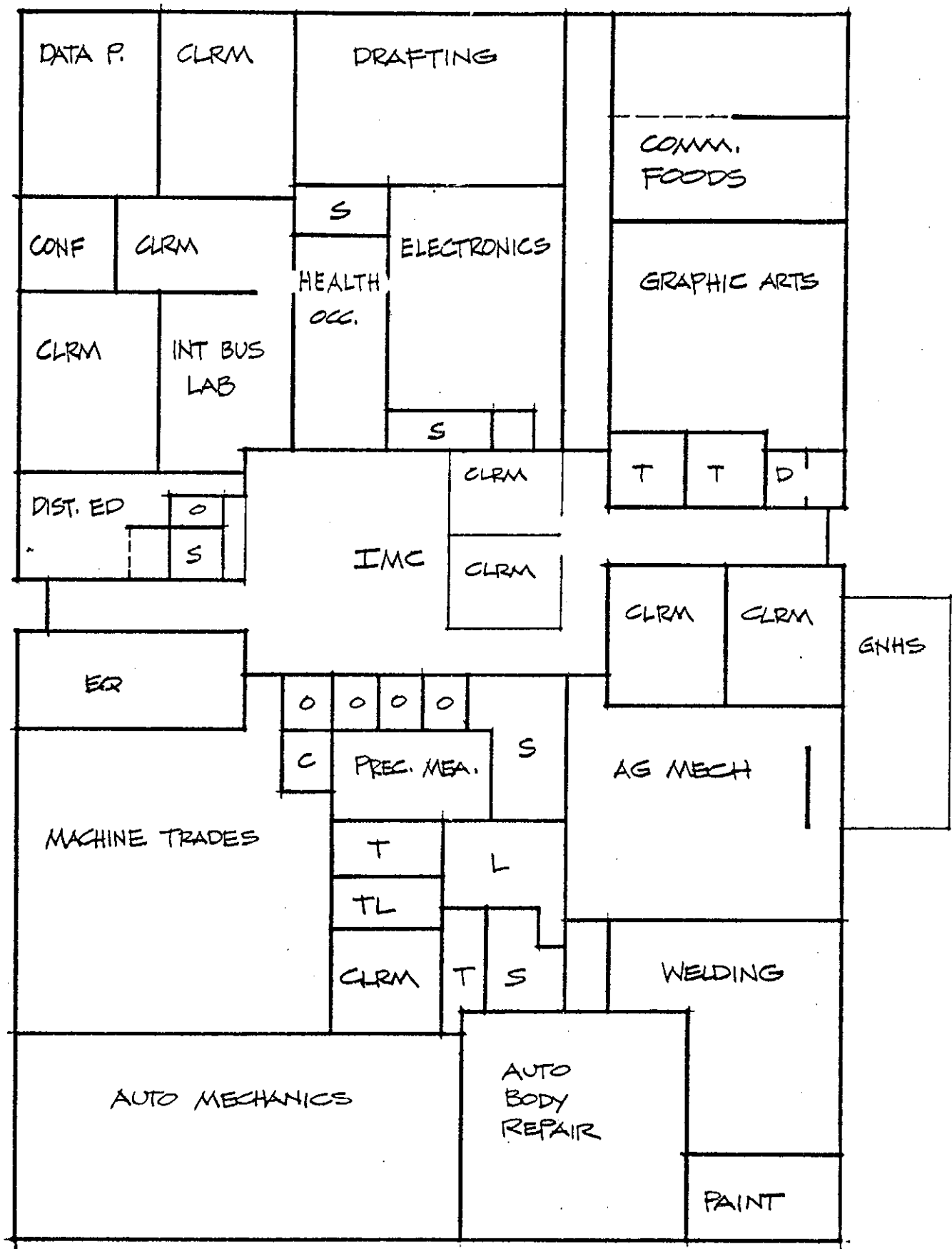
### Building Summary

The Vocational Center is a school which offers programs of instruction that are designed to develop job entry skills and knowledge necessary for successful vocational and technical careers. The Center is to serve the needs of secondary school students and adults. Needs of management, business, labor and the community are primary concerns of the Center.

Program offerings by the Vocational Center include: Auto Mechanics, Auto Body Repair, Commercial Foods, Drafting, Electronics, Graphic Arts, Health Occupations, Intensive Office Lab, Machine Trades, Welding, Agriculture Mechanics, Data Processing, Distributive Education, Building Trades, Horticulture and Production Agriculture. This is a most impressive list of programs for students and adults in this area.

Here are some additional needs for the Vocational Center:

1. They need the space that is currently being used by the high school math program.
2. They need space for a program in Air Conditioning and Heating.
3. They need space for a Farm Shop.
4. They need a larger, better area for a paint shop.
5. They need to up-grade Data Processing Equipment.
6. They need additional space for Intensive Office Lab.



# VOCATIONAL TECHNICAL CENTER

SCALE 1" = 30'

## Summary of Educational Facilities

Awareness of the significance that the physical environment in schools has upon the teaching-learning process is gradually increasing among the American people. School children everywhere are affected by the type, condition, appearance and functional adequacy of the facilities they are required to attend. The school plant consists of the site, buildings, furniture and equipment. Each of these represents tools and teaching aids utilized by administrators and teachers in the operation of an educational program. A school plant which has been adequately planned, designed, constructed and equipped can facilitate desirable educational practices and the attainment of educational objectives.

### Operation and Maintenance:

The operation of school buildings is the most expensive and time consuming of all plant management responsibilities. Although cleaning may seem to have little relationship with the instructional program, it does have great effect on the quantity and quality of instruction and on the morale and health of all the occupants. The provision of custodial services and adequate equipment and materials at the appropriate time have great influence on the quality of instruction and the morale of those involved in the process.

The following charts will tend to express the cost of maintenance and operation of the different educational facilities.

1979 Per Pupil Cost on Operation and Maintenance Per School

School	Students	Utilities	Maintenance	Janitorial Supplies	Wages	Cost Per Student
Area V.S.	143	\$186.15	\$17.34	\$11.04	\$149.45	\$363.98
Tunnelton	107	225.76	7.61	18.67	88.21	340.25
Parkview-Int.	283	68.23	52.26	7.51	159.49	287.49
Bedford-N.L.	1732	157.14	26.45	4.12	96.84	284.55
Bedford J.H.	485	91.05	10.00	5.10	113.65	219.80
Shawswick	528	41.39	11.59	3.43	112.87	169.28
Heltonville	200	88.91	7.26	6.63	61.94	164.74
Parkview Pri.	317	48.45	11.95	4.65	92.22	157.27
Fayetteville	320	88.91	7.26	4.85	79.63	155.01
Englewood	205	28.53	28.55	3.87	86.26	147.21
Springville	211	55.08	14.42	5.32	70.42	145.28
Oolitic- Dollins	608	48.05	9.80	3.65	68.06	129.56
Stalker	343	28.09	17.57	3.16	78.95	127.77
Needmore	431	32.16	9.55	2.98	58.57	103.26
Lincoln	353	27.32	5.33	4.10	61.16	97.91

1978-79 Per Square Foot Cost On Maintenance and Operation Per School

School	Square Feet	Utilities	Maintenance	Janitorial Supplies	Wages	Cost Per Sq. Foot
Englewood	10,500	\$53.96	\$12.54	\$12.79	\$64.95	\$144.24
Fayetteville	28,180	61.40	14.06	7.16	50.52	133.14
Bedford-N.L.	295,000	71.78	12.15	5.17	42.39	131.49
Parkview Pri.	34,228	43.10	19.69	5.23	61.36	129.38
Tunnelton	23,580	77.33	3.80	7.63	34.69	123.45
Heltonville	25,680	67.37	12.16	7.09	36.70	123.32
Stalker	27,700	33.40	15.21	4.21	60.80	113.62
Springville	24,000	41.18	17.17	4.89	37.57	100.81
Oolitic-Dollins	62,922	44.08	3.95	7.18	45.03	100.24
Lincoln	30,300	30.87	6.39	4.43	56.66	98.35
Area V.S.	46,500	54.27	5.60	.90	36.77	97.54
Needmore	38,900	35.39	12.14	3.05	45.35	95.93
Bedford J.H.	95,000	44.28	9.09	2.93	39.03	95.33
Shawswick	59,940	33.83	11.03	3.14	45.81	93.81
Parkview Int.	49,820	35.85	3.00	4.22	35.41	78.48

1978-79 Per Square Foot Cost On Utilities Per School

School	Utilities	Square Feet	Cost Per Square Foot
Tunnelton	\$ 18,233.22	23,580	77.3 cents
Bedford-N.L.	211,761.09	295,000	71.8
Heltonville	17,361.52	25,680	67.4
Fayetteville	17,302.69	28,180	61.4
Englewood	5,665.62	10,500	54.0
Area V.S.	25,234.80	46,500	54.3
Oolitic-Dollens	27,739.02	62,922	44.9
Bedford J.H.	42,068.52	95,000	44.3
Parkview Pri.	14,751.73	34,228	43.1
Springville	9,884.28	24,000	41.2
Parkview Int.	17,857.85	49,820	35.9
Needmore	13,767.82	38,900	35.4
Shawswick	20,275.36	59,940	33.8
Stalker	9,250.43	27,700	33.4
Lincoln	9,352.71	30,000	30.9

## Program and Building Accessibility

Today, when dealing with additions and/or renovations governmental agencies require existing structures be brought up to the standards and code requirements of a new building. Since the 50's and 60's many new standards and codes have been enacted for the life and safety of our children and other occupants in school buildings. Most recently new codes and design standards have been mandated for public buildings for use by the physically handicapped.

Fire hazards have brought about many requirements to better protect building occupants from smoke, heat and gaseous fumes. Section\*504 of the 1973 Rehabilitation Act insures the accessibility of the handicapped to all buildings being supported by HEW funds. The Education Amendments of 1974, as amended by Public Law 94-142, defines handicapped students as follows:

The term "handicapped children" means mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, or other health impaired children or children with specific learning disabilities who by reason thereof require special education and related services.

Briefly touching on some specifics, most parking lots lacked clear definition as to spaces, configurations and a clearly defined pedestrian network, separate and apart from auto traffic and free of obstructions. A designated loading-unloading zone is needed at



the most accessible entrance equipped with a regulation ramp, handrails, surface material and door openings. Some outside doors are heavy and do not meet code. Mats, unless recessed in the floor and entrances of 1/2" thick or less, create obstacles for the blind as well as wheelchair-bound. Fire alarms and water fountains are inaccessible from a sitting position in various places throughout the buildings and there is little signage to aid the handicapped. Probably the most evident physical barriers, beside the building entrances and stairs, are the toilet rooms. Some lack adequate space for wheelchairs along with grab bars and lowered sinks and fixtures. Once in the toilet room, it could prove to be a most frustrating experience for the disabled in the school building.

To summarize the deficiencies that are most noticeable in most of the buildings here are the basic items:

Site Considerations

Parking space

Curb cuts

Sidewalks

Change in Level

Ramps

Elevators

Lifts

Doors

Width

Opening pressure

Threshold

Telephones

Height

Volume control

#### Floors and Halls

Width  
Surface covering  
Obstructions and hazards

#### Seating

Space for wheelchairs  
Traffic circulation

#### Water Fountains

Controls  
Height

#### Rest Rooms

Location  
Size  
Stall width and depth  
Grab bars

#### State Standards

The Department of Public Instruction has recently issued Rule B that outlines procedures and standards for remodeling existing buildings or constructing new school plants. When these current standards are compared against the existing buildings, we find many deficiencies. The most serious deficiencies are in not having the necessary space or the current spaces are too small. In order to eliminate these deficiencies, there are other factors that must be considered. Rule B states that "remodeling" means any architectural change which affects the entire structure or a major portion thereof. Remodeling shall, also, mean any change which alters the square footage of any learning areas or otherwise affects the learning environment. In any major remodeling projects, all existing areas of the facility must be brought up to current standards. This brings the new Indiana Uniform Building

Code into consideration, which means that any major renovation or addition will require that the entire building(s) be brought up to present day code.

The following charts will point out that the school corporation is operating more facilities than is actually needed.

1979-80 Utilization of All Kindergarten, Grade 1 through 6  
and Special Education Classrooms with Pupil Capacity\*

School	Kindergarten	Grades 1-6	Special Education	Total Capacity
Lincoln	50	300	30	380
Parkview Pri.	34	225	84**	343
Parkview Int.	--	244	77***	321
Stalker	30	309	8	347
Dollens	50	357	15	422
Englewood	36	150	--	186
Springville	40	239	--	279
Fayetteville	24	203	10	237
Needmore	36	322	14	372
Shawswick	--	345****	--	345
Heltonville	24	185	13	222
Tunnelton	<u>27</u>	<u>121</u>	<u>--</u>	<u>148</u>
TOTAL	351	3,000	251	3,602

\* Capacity based on Rule B requirements of 30 square feet per pupil in grades 1-6, 50 square feet per kindergarten students and 60 square feet per special education students.

\*\* Special Education uses 6 classrooms.

\*\*\* Special Education uses 6 classrooms.

\*\*\*\* Based on grades 1-8, if K-6 capacity is 450 students.

# Utilization of Classrooms based on a 25 and 30 Pupils Per Teaching Station

School	Kindergarten			Regular Classrooms			Special Ed.		Total Bldg. Capacity	
	# of Rooms	Capacity 25	Capacity 30	# of Rooms	Capacity 25	Capacity 30	# of Rooms	Capacity @ 15	Capacity @ 25	Capacity @ 30
Tunnelton	1	50	60	8	200	240	0	0	250	300
Heltonville	1	50	60	8	200	240	1	15	265	315
Fayetteville	1	50	60	10	250	300	1	15	315	375
Springville	1	50	60	8	200	250	0	0	250	300
Needmore	1	50	60	15	375	450	1	15	440	525
Shawswick	0	0	0	19	475	570	0	0	475	570
Lincoln	1	50	60	10	250	300	2	30	330	390
Englewood	1	50	60	5	125	150	0	0	175	210
Stalker	1	50	60	12	300	360	1	15	365	435
Dollins	1	50	60	12	300	360	1	15	365	435
Parkview Pri.	1	50	60	9	225	270	6	90	365	420
Parkview Int.	<u>0</u>	<u>0</u>	<u>0</u>	<u>9</u>	<u>225</u>	<u>270</u>	<u>6</u>	<u>90</u>	<u>315</u>	<u>360</u>
TOTALS	10	500	600	125	3,125	3,760	19	285	3,910	4,635
Bedford J.H.	0			17	425	510	8	120	545	630
Oolitic J.H.	0			<u>14</u>	<u>350</u>	<u>420</u>	<u>0</u>	<u>---</u>	<u>350</u>	<u>420</u>
				<u>31</u>	<u>775</u>	<u>930</u>	<u>8</u>	<u>120</u>	<u>895</u>	<u>1,050</u>
Bedford N.L.	0			Approximately 1600						

# SUMMARY OF SCHOOL BUILDINGS

School	Ori. Construction and Addition Dates	Grades	Enrollment 1979-80	Remaining Useful Life
Tunnelton	1910, 1932, 1952	K-6	107	None
Oolitic J.H.	1918, 1936, 1937	7-8	250	10/12 yrs.
Heltonville	1910, 1936, 1950	K-6	200	8/10 yrs.
Shawswick	1925, 1936, 1949, 1963	1-8	520	10 yrs.
Needmore	1911, 1937, 1954	K-6	425	12 yrs.
Stalker	1899, 1929	K-6	340	10 yrs.
Fayetteville	1930, 1952, 1959	K-6	320	10/12 yrs.
Bedford Jr. Hi.	1910, 1924, 1952, 1964	7-8 (Sp.Ed.)	560	15/18 yrs.
Parkview	1951, 1961	K-6 (Sp.Ed.)	690	25/30 yrs.
Englewood	1959	K-6	210	25/30 yrs.
Lincoln	1959	K-6	350	25/30 yrs.
Springville	1964, 1972	K-6	210	20/25 yrs.
Dollens	1959, 1980	K-6	---	50 yrs.
B-NL High	1975	9-12	1,750	50 yrs.
Area V-T School	1970	---	---	40 yrs.

\*Based on normal distribution of students and not centralization of Sp. Ed.

### Conclusions About Educational Facilities:

1. Although only one school can be classified as "bad" or "completely undesirable" for educational use, there are substantial and significant differences and variations between and among the schools relative to facility adequacy.
2. Good maintenance, repair and renovation services have been consistently provided, over the past few years, for educational facilities currently in use throughout the school corporation.
3. The Tunnelton Elementary School has become educationally obsolete. A couple of other facilities such as Heltonville Elementary and Oolitic Junior High are running out of time.
4. Elementary schools in excess of what is needed to accommodate the present student body are being maintained and operated within the school corporation.
5. The fact that school locations are set, although not ideally located in some cases, will necessitate the reassigning of attendance boundaries and the reassignment of pupils to different buildings if efficient utilization of school facilities is to be achieved.
6. Expenditure for maintenance and operation reveals that some schools are not very efficient to operate.
7. Program and building accessibility for handicapped are not obtainable in most schools.
8. Special Education programs are centralized, basically in two schools, Parkview and Bedford Junior High.
9. Rule B, Indiana State minimum standards of adequacy, as established by the General Commission on Education and administered by the Division of Accreditation and School Facility Planning are generally not being met as they relate to space.
10. Organizational patterns relative to the way students are grouped by buildings for educational purposes should be changed for better building utilization and program development.
11. Additional facilities are needed at the Bedford-N.L. High School, Area Vocational School, Springville Elementary and for a School Bus Garage.

## TRANSPORTATION

School transportation systems are designed to get students to school, to get students to school on time and to get students to school safely. Even though the transportation of students is an accepted social service provided by a school system, distances to schools caused by declining enrollments and consolidation with inflated costs, have caused boards of education to re-evaluate this important service. The old emphasis of the number of minutes a student should spend on a bus has given way to "as little time as possible."

The North Lawrence Community Schools is a reorganized district of 325 square miles. It is witnessing slight enrollment decline. Another characteristic of this district is a shift in areas of enrollment intensity. In the past the enrollment was somewhat evenly distributed throughout the district. Now, the student population is concentrated in the Northwest quadrant of the district. This places enrollment pressures on some schools while leaving other schools in need of students.

Profile of the Transportation System Costs

There are 65 transportation units making 102 bus runs daily transporting approximately 4,500 students. Besides the regular 65 routes, 27 buses make express runs thus accounting for the 102 total runs (see Table: Bus Routes and Costs).

An express run is the transporting of an accumulated number of students at one school to another school. Students from K-12 will ride on each bus. After the buses arrive at the appropriate elementary school, the junior high, high school and special education students are divided and expressed to the appropriate buildings.



# BUS ROUTES AND COSTS 1979-80

BUS ROUTE #	NAME OF DRIVER	AGE	SEX	TYPE OF VEH.	CHASSIS OWN. YR.	CHASSIS PURCH. PRICE	BODY OWN. YR.	BODY PURCH. PRICE	CAPA-CITY	PRIV PARO	PUPILS TRANSPORTED UNDER	1-12 PUPILS	1-12 PUPILS	TOTAL ROUND TRIP OF MILES	NO. OF TRIPS
01F	BAKER, JOYCE	32	2	1	4	71	7,750	14,891.01	60		7	60	67	42.2	1
02F	KEITH, PAUL	44	1	1	4	75	13,500	*4,809.09	66			73	73	55.9	2
03F	SMITH, LOUIE	49	1	1	4	71	10,000	11,113.83	66			64	64	27.0	1
04F	CRAIG, EDWIN	48	1	1	4	71	10,000	9,735.00	60			54	54	37.8	1
05F	EVANS, BEN	48	1	1	4	75	14,490	*5,062.20	66	2	3	4	17	58	84
06F	CRAIG, MERLA	62	1	1	4	67	9,200	12,795.35	60		1	1	59	61	43.4
07F	CRANE, HAROLD	47	1	1	4	78	21,000	*4,529.43	66		2	62	64	52.4	2
08F	YOUNGER, HOWARD	43	1	1	4	75	13,929	11,255.43	66		2	63	65	30.0	1
09F	SPEER, FRED	44	1	1	4	78	17,600	*4,062.15	66		6	88	94	48.5	2
10SP	COBB, EARL	55	1	1	4	71	8,000	*1,644.35	66		5	64	69	60.0	2
11SP	CASADA, CLAUDE	55	1	1	4	71	7,500	10,754.52	66		6	60	66	16.4	1
12SP	BYERS, B	67	1	1	4	67	9,700	7,387.98	60		5	61	66	22.8	2
13SP	MORROW, JASON	39	1	1	4	67	7,000	*2,177.10	60		5	73	78	34.6	2
14SP	BALL, W, DEAN	41	1	1	4	71	8,000	*6,202.08	66		2	60	68	55.3	2
15SP	CLAMPITT, JOHN	27	1	1	4	75	13,500	*5,189.64	66		6	60	66	26.6	2
16N	WHITMILL, GEORGE	55	1	1	4	67	8,850	*3,290.43	66		4	68	72	45.6	2

BUS ROUTE #	NAME OF DRIVER	AGE	SEX	TYPE OF VEH.	CHASSIS OWN. YR.	BODY PURCH. PRICE	CAPA-CITY	PRIV PARO	PUPILS TRANSPORTED KDGN. 1-12	TOTAL PUPILS 1-12	ROUND TRIP MILES	NO. OF TRIPS		
17N	HILDERBRAND, ALICE	62	2	1	4 67	4,500	12,768.78	66		5	68	73	15.2	2
18N	MCFADDEN, ROBERT	54	1	1	4 79	21,000	12,777.63	66		10	60	70	30.0	1
19N	HAMILTON, BETTY	49	2	1	4 79	19,000	14,043.18	66		3	61	64	36.0	1
20N	CRAIG, RONALD	26	1	1	4 71	7,500	*4,872.81 9,182.76	66	5	4	64	77	31.0	3
21N	DECKARD, JERRY	44	1	1	4 76	13,500	*1,923.99 12,800.64	66		5	62	67	37.9	2
22N	FISH, DON	60	1	1	4 71	7,500	*3,290.43 13,181.19	66		4	76	80	57.9	2
23N	HUGHES, ROBERT	32	1	1	4 67	3,500	*3,670.98 13,158.18	66		3	73	76	48.9	2
24N	EVANS, ROBERT	31	1	1	4 75	13,500	12,273.18	66		3	78	81	28.4	2
250	DECKER, FRANK	56	1	1	4 67	9,000	*2,023.11 13,172.34	66			115	115	38.0	3
260	DENNISTON, KAG	70	1	1	4 67	2,580	*2,214.27 9,864.21	66		12	93	105	33.0	2
270	DILLION, JOHN	56	1	1	4 71	7,500	13,032.51	66			184	184	31.7	3
280	FISH, ROBERT	57	1	1	4 75	14,000	*2,023.11 12,981.18	66			85	85	27.4	2
29H	FAUBION, JACK	24	1	1	4 71	7,500	13,158.18	66		5	58	63	28.4	1
30H	FLEETWOOD, DEAN	42	1	1	4 71	6,538	13,944.06	66		2	27	29	42.0	1
31H	YOUNGER, JAMES	58	1	1	4 75	14,000	*3,416.10 14,073.27	66		3	59	72	49.0	2
32H	CAIN, DONNA	35	2	1	4 75	13,250	*3,290.43 10,754.52	66		1	55	56	48.2	2
43SH	COBB, DOYLE	55	1	1	4 71	3,720	*531.00 10,888.18	66			66	66	36.0	2
34H	STULTZ, STEVE	25	1	1	4 79	26,000	*1,923.99 14,193.63	66		1	50	52	54.0	3
35H	FOUNTAIN, GEORGE	49	1	1	4 79	21,350	*4,959.54 14,574.18	66		1	70	71	44.8	2

BUS ROUTE #	NAME OF DRIVER	AGE	SEX	TYPE OF VEH.	CHASSIS OWN. YR.	PURCH. PRICE	BODY OWN. YR.	PURCH. PRICE	CAPA-CITY	PRIV PARO	PUPILS TRANSPORTED KDGN. 1-12 UNDER	PUPILS TRANSPORTED KDGN. 1-12 OVER	TOTAL PUPILS 1-12	ROUND TRIP MILES	NO. OF TRIPS	
36SH	SCHERSCHEL, KENNETH	35	1	1	4 79	27,500	* 531.00 12,390.00		66	1			63	64	32.2	2
37SH	CUMMINGS, JAMES	52	1	1	4 79	21,000	12,036.00 *12,177.60		66				60	60	30.0	1
48T	BAILIFF, ERNEST	43	1	1	4 71	7,000	17,951.34		60			1	66	67	38.5	2
40SH	STULTZ, FRANK	57	1	1	4 79	21,000	12,524.52		66				66	66	22.0	1
42SH	BRASSFIELD, JOHN	56	1	1	4 79	20,000	13,055.52 * 531.00		66	5			63	68	23.8	1
44SH	SCHERSCHEL, CAROL	34	2	1	4 79	27,500	11,505.00 *1,771.77		66	4			59	63	39.0	2
45SH	LAWHEAD, CHARLES	53	1	1	4 69	4,000	13,669.71		66	11			64	75	24.0	2
46SH	HENDERSON, JANICE	30	2	1	4 71	5,500	13,214.82		66				47	47	26.0	1
47SH	THOMAS, RHEA DAWN	47	2	1	4 79	22,000	14,777.73 *7,214.52		66				47	47	42.0	1
49T	LEE, MARY	36	2	1	4 75	14,000	15,312.27		66		2	2	66	70	68.0	2
50T	LEE, DONALD	40	1	1	4 71	8,000	15,961.86		60			7	53	60	35.0	1
51T	WOOD, OREN	62	1	1	4 71	10,000	11,843.07		60			3	58	61	32.0	1
01	SEGO, BEVERLY	32	2	1	3 74	9,425	3,540.00		66				108	108	24.0	2
02	KOPP, WARREN C	35	1	1	3 74	9,425	3,540.00		66				96	96	26.0	3
03	BANKS, MAC	52	1	1	3 74	9,425	3,540.00		66	6			114	120	30.3	3
04	MOORE, RICHARD	44	1	1	3 74	9,425	3,540.00		66				118	118	24.0	2
05	CLEON, RAMSEY	48	1	1	3 74	9,425	3,540.00		66	3			86	89	28.0	2
06	MICKELS, KENNETH	46	1	1	3 74	9,425	3,540.00		66				90	90	22.0	2
07	PADGETT, HAROLD	56	1	1	3 75	9,425	3,540.00		66				108	108	26.0	3

BUS ROUTE #	NAME OF DRIVER	AGE	SEX	TYPE OF VEH.	CHASSIS OWN. YR.	PURCH. PRICE	BODY OWN. YR.	PURCH. PRICE	CAPA-CITY	PRIV PARO	PUPILS TRANSPORTED UNDER	1-12 UNDER	TOTAL PUPILS	ROUND TRIP MILES	NO. OF TRIPS	
108	BARLOW, GEORGE	40	1	1	3	75	9,425	3,540.00	66				100	100	18.0	3
109	MANION, WAYNE	35	1	1	3	75	9,139	3,540.00	66		8		62	70	16.0	1
110				1	3	67	6,940		66							
111	MCFADDEN, PATSY	26	2	1	3	72	8,807	3,540.00	66				90	90	32.0	2
112				1	3	67	6,940		66							
113				1	3	65	1,995		60							
114				1	3	67	3,500		66							
115	CROWN, PHIL	34	1	1	3	79	18,905	3,540.00	66				91	91	24.6	2
116	BOWDEN, WAYNE	37	1	1	3	79	18,905	3,540.00	66				111	111	42.0	3
117				1	3	79	18,905		66							
118	BROOKING, MELENDIA	32	2	1	3	79	15,945	3,540.00	35		19			19	30.0	1
119				1	3	79	15,945		35							
120	STEVENSON, WM M	34	1	1	3	79	16,928	3,540.00	16				12	12	45.0	2
123H	EASTON, EVERET	70	1	1	4	67	7,000	10,287.24	54		1	4	25	30	36.6	1
128SH	FISH, PAUL	52	1	1	4	71	7,500	* 708.00 10,784.61	66				71	71	34.2	2
130SH	LARRECHT, P	54	1	1	4	79	19,500	16,538.88	66				65	65	40.6	1
141SH	STULTZ, RICHARD	32	1	1	4	79	21,000	12,524.52	66				65	65	21.4	1

\* Express Runs

05/20/80 Prepared By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Approved By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_



*****									
*DRIVERS*		*PUPILS TRANSPORTED*			*CORPORATION VEHICLES*			*DAILY VEHICLE MILEAGE*	
AGE	MALE	FEMALE	PRIV						
-19					CORPORATION OWNED				
-29	5	2	PARO	37	OVER 10 YEARS	19,375	NO. OF TRIPS	117	
-39	10	6							
-49	17	1	SUB TOTAL	37	CORPORATION OWNED		ROUND TRIP MILES:		
-59	17				LAST 10 YEARS	198,879			
-69	5		PUBLIC:				CORPORATION OWNED	387.9	
-99	2		KDGN - UNDER	5	10% DEPRECIATION				
			KDGN - OVER	140	ALLOWANCE	19,887.90	PRIVATE OWNED	1,966.0	
TOTAL	56	9	1.0 & LESS	55					
TOTAL DRIVERS	65		OVER 1.0	4,555	PURCHASE	105,533	JOINT OWNED		
TOTAL ASSIGNED	6		TOTAL PUBLIC	4,761	NO. OF VEHICLES	20	TOTAL MILEAGE	2,353.9	
								TOTAL VEHICLES ON ROUTES	65
*****									
TOTAL ROUTES	71		TOTAL PUPILS	4,788			PUBLIC CARRIERS	3	
TOTAL RATED CAPACITY	4,143		UTILIZATION FACTOR	1167					
(DOES NOT INCLUDE SPARE BUSES)									
TOTAL PUBLIC ENROLLMENT	6,419		PERCENT OF PUPILS TRANSPORTED	74.01					

Buses. All buses, except four, are near the 66 passenger capacity with near maximum utilization. The smallest bus transports the physically handicapped students. Several buses are utilized for express runs and make multiple runs, thus utilizing the individual buses where possible.

Buses ranged in age from 1967 models to 1979 models. It is assumed that all buses meet Indiana State safety standards. Comparing the purchase price during this period of time will reveal one reason why school transportation costs have inflated during this time.

Bus Routes. Because of "sacred" attendance area lines that have continued since before reorganization, students have been required to ride buses much longer than necessary with additional costs to the school district. In the Springville area routes 13SP and 14SP have to stop at the east edge of the township line leaving only a few students to be bused to Needmore. This is an unnecessary special trip for a bus. A problem exists between the Fayetteville and Springville attendance areas. A special education student who is across the line in the Springville attendance area is transported to Springville, then into Bedford and out to Fayetteville. When at home, this student is approximately three miles from the Fayetteville school.

Kindergarten students from the Shawswick area are transported into the Lincoln and Englewood Elementary Schools. Shawswick Elementary School is in need of student spaces. There are approximately 120 elementary students being transported from south of Bedford to

Shawswick on bus routes 44SH, 43SH, 42SH and 41SH. All of these students are closer to the elementary schools in this city.

In the Tunnelton area there are four bridges closed to bus transportation which prohibit route 48T from direct access to the Tunnelton Elementary School. The bus must travel a round-about route to arrive at the school. Because of the additional bus travel required to reach Tunnelton, these students are closer to Shawswick.

Costs. Costs for transporting students varied from carrier to carrier. These costs ranged from \$.44 per mile for a district owned vehicle to \$4.75 per mile for a private transportation carrier. The cost figure for the district owned carrier does not include the operation and maintenance cost. Most studies comparing the differences in private v. school owned costs, conclude that there is a cost savings to the district if it owns and runs its own transportation system.

It is interesting to compare other districts in other parts of the country. In a Wisconsin district that contracts all of its transportation costs, it cost \$.93 per mile. In Bedford that cost was \$1.94. There is an important difference between the two districts. North Lawrence contracts with individual carriers, the Wisconsin district contracts with a common carrier.

#### Discipline of Students

The discipline of students appears to have deteriorated paralleling other areas in the society. It's not that bus drivers or principals have become more lax, it's because parents have become too lax in the home and do not support others in authority when disciplinary action is necessary.



This lack of support does not preclude the official from controlling bus students. Nor has the court in their recent opinions limited the authority of the school in taking proper action.

Every school official should understand that with present due process requirements that transportation regulations should be in writing and distributed to all bus students and their parents. These regulations should include the policies governing the transportation system, behavior expectations of students, penalties for infractions and the authority of the bus driver, principal and other administrators to take action.

Student riders can be temporarily suspended from riding or excluded completely from having the service. In either case a student who bends or breaks a rule should not be given proper due process. For a temporary suspension, a student must be given oral or written notice of the charges. He should be given a chance to affirm or deny the charges. If he denies the charges, the accusers explain the evidence and give the student a chance to tell his side of the story. There does not have to be any delay between a notice of charges and the hearing held.<sup>1</sup>

For indefinite exclusion of a student from being transported, the school officials should handle the due process similar to a school expulsion. In this case the notice of charges and grounds for those charges should be in writing. The notice would include the time and place for a hearing before an impartial hearing officer.<sup>2</sup>

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<sup>1</sup>Goss v. Lopez, 419 U.S. 565, 95 S. Ct. 729.

<sup>2</sup>Dixon v. Alabama State Bd. of Education, United States Court of Appeals, Fifth Circuit, 1961, 294 F.2d 150, cert. denied, 368 U.S. 930, 82 C. Ct. 368.

### Staff Development

Within the scope of a bus drivers contract, attendance to continuous staff development programs should be required. These programs should be under the direction of the school official and should include a variety of topics.

The understanding of human relations with whom the bus driver works. He/she needs to be aware of adolescent behavior and the attitude of elementary children and how to deal with such behavior. The driver needs to understand how to work with parents. Even though that driver may be a parent, there are certain valuable ideas in dealing with parents during times of conflicts which will save the driver and district additional problems.

Closely associated with human relations is the handling of discipline on a bus. Almost without exception, a drivers authority will be challenged. His/her handling of each episode will determine the long term relationship between students and driver. Each driver should be well acquainted with the school districts policy on discipline and how due process for students relates to the school transportation service.

Continuous reminders on defensive driving is needed. At least annual defensive driving instruction should be given each driver.

Each driver should be competent in first aid. After each driver receives a first aid card, the district should make updating of first aid skills an ongoing and continuous effort in the driver development program.

The foregoing list is not exhaustive, but each item should be included in each driver development program. Other items of personal growth should be included as the district sees the need.

## CHAPTER V

### CAPABILITY TO FINANCE NORTH LAWRENCE SCHOOL CONSTRUCTION

Funds for school building construction in Indiana may come from a variety of sources. Public school officials are charged with the responsibility of measuring the impact on the financial structure of their school district of each of the alternate methods available to them. Often the optimum method of providing building funds will involve a combination of several sources. The various sources have restrictions on their use, and these are important considerations in development of a capital improvement plan.

School Bonds. Bonds are a legal written promise to repay borrowed funds at a specified time with a fixed interest charge. Bonds have been used to finance school buildings in Indiana for over one hundred years. Indiana's constitution limits school district's and other civil corporation's bonding power to two percent of taxable property. These general obligations or "full faith and credit" bonds generally receive favorable interest rates from buyers. The use of general obligation bond issues for major building programs is restricted by the severe debt limit. Legislation in 1965 increased the maximum term of any general obligation bond issue to 25 years, but most are for 20 years or less.

School bonds may be used for purposes of new construction remodeling of buildings, equipment, site purchases and site development.

North Lawrence Community Schools have no outstanding bonds at this time. Bonds could be issued, based on latest assessed valuation of \$101.2 million, in a total amount not to exceed \$2,020,000 and this potential will grow slowly as assessed valuation increases.

School Building Corporations. Indiana's school construction needs became critical after World War II. To meet this need, the legislature in 1947 devised a method to evade the constitutional two percent debt limit by authorizing the use of local school building corporations or "holding companies". Local corporations may be formed in school districts for the express purpose of building and leasing a school building to the school district. The school building corporation obtains its funds by issuing bonds. There is no legal limit on the size of the bond issue. Such bonds are classed as first mortgage bonds and are secured by annual payments from the school district as specified in the lease agreement. Lease contracts must be for a minimum of 15 years and may not exceed 30 years. School building corporation bonds technically are not quite as secure as general obligation bonds and consequently may have slightly higher interest rates. The higher rates on school building corporation bonds also are due to the usually longer terms of issue.

North Lawrence used this method of financing in 1972 with a bond issue of \$6,550,000 with final maturity scheduled for January, 1996. The school corporation pays an annual lease-rental of \$546,000 which is approximately \$35,000 more than required for

lease-rental obligations. The law provides that should any school district fail to meet its obligations, the state will make the payments and deduct the amount from the school district's next state aid distribution. It is believed that this legislation has a favorable effect on bond interest rates.

Cumulative Building Fund. School districts in Indiana may accumulate funds for construction, remodeling and major maintenance needs. The current law for the CBF now permits a tax levy of up to \$1.25 per hundred dollars of taxable property to be collected and reserved for capital outlay and/or lease-rental payment purposes. Such a tax levy may be approved by a school board, subject to certain legal procedures, for a period up to five years. A school board may decrease an established cumulative building fund rate by resolution but may not increase such a rate without due notice of intent to the public. It is necessary to have rather specific school building needs identified in order to establish a tax levy, and the levy must be approved by the State School Property Tax Control Board and the State Board of Tax Commissioners.

North Lawrence Schools have had a CBF rate of 50¢ which was readjusted downward to 32¢ to compensate for increased assessed valuation. All collections through 1981 are obligated for the Dollens Elementary project and for energy conservation measures. The current rate expires in 1982 and will need to be reestablished in that year.

If the rate was re-established at \$1.00 on the new assessed valuation, the potential collections each year would be in excess of \$1 million.

While that amount of money is not sufficient to do a great amount of construction or remodeling at any one time, it can provide a flexible source of funds as part of a financing package. The cumulative building fund potential needs to be examined in the context of the recommendations at the end of this study and a decision made as to the level of cumulative building fund rate to be sought in 1982 or perhaps in 1981.

State Grants. A portion of non-property tax revenues in Indiana is earmarked for local public schools for use of school building debt retirement. The state collects the taxes and distributes the receipts to school districts through the ADA Flat Grant on the basis of average daily attendance. Receipts from this source are to be applied first on existing bond or lease-rental obligations with any balance used in the General Fund or CBF. The amount of this flat grant is now fixed at \$40 per pupil in average daily attendance (1-12) and has a significant impact on the finance programs of local school districts. For 1980, approximately \$103,000 should be received and the amount will decline slightly each near future year in accordance with the enrollment change. The 1980 grant is equivalent to the proceeds of a local tax rate of 10¢, based on assessed valuation of \$101.2 million.

While not direct aid to schools, the Property Tax Replacement program of the 1973 Indiana Tax Package does provide tax relief to taxpayers who must ultimately pay for school buildings. Credit of at least 20 percent of tax liability is provided by the state for all local funds, including the debt service and the cumulative building funds. Thus, the state is involved significantly in providing school building dollars.

Other Local Taxes. Local tax receipts provide all construction/debt service funds other than the \$40 flat grant and the indirect aid from the Property Tax Replacement Fund. Previously discussed was the Cumulative Building Fund tax and its potential for raising construction money. In addition, a local debt service tax rate has been needed. Rates for this fund have been as follows:

<u>Year Payable</u>	<u>Debt Service Tax Rate</u>
1973	\$.00
1975	.48
1977	.74
1978	.57
1979	.57
1980	.38

Of the 304 Indiana school corporations, average debt service tax rate in 1979 was 56¢. North Lawrence's rate thus was close to the state-wide average. The CBF rate, however, was 50¢ while the state average was 82¢. The two school building tax rates considered together averaged \$1.38 for all Indiana corporations, compared to \$1.06 for North Lawrence. Thus, total tax effort for school building purposes was somewhat lower than average for Indiana.

Assessed valuation has been increasing and local General Fund levies for the most part have been frozen since 1973. Valuation, tax rates by fund and total tax rates have been:



## TAX RATES

<u>Year Payable</u>	<u>Assessed Valuation</u>	<u>General*</u>	<u>Debt Service</u>	<u>CBF</u>	<u>Total</u>
1973	\$ 48,124,235	\$3.86	\$ .00	\$.50	\$4.36
1975	52,623,810	3.48	.48	.50	4.46
1976	55,347,465	3.41	.48	.50	4.39
1977	57,482,940	3.25	.74	.50	4.49
1978	60,764,695	3.63	.57	.50	4.70
1979	63,091,065	3.47	.57	.50	4.54
1980	101,217,376	2.36	.38	.50	3.24

\*Includes transportation in 1980.

It can be seen that the total tax rate increased by 18¢ from 1973 through 1979. For the taxpayer, the change was a decline due to the 20 percent property tax replacement grants made by the state. Thus, the 1979 net tax rate was 80 percent of \$4.54 or \$3.63, \$.73 or 16 percent less than the 1973 rate of \$4.36.

For taxes payable in 1980, substantially increased assessed valuation has resulted from the general reassessment of property. Tax rates for 1980 are based on the new valuation, and the rate shown for the General Fund also includes the amount required for the newly created Transportation Fund. For 1980, the net tax rate (\$3.24 x 80 percent) is \$2.59 or 40 percent less than the 1973 rate.

The following table shows tax rate data for nine Indiana school corporations, ranked by 1979 enrollment with North Lawrence in the middle. Also shown are debt ratios and state averages.

1979 TAX RATES

<u>School Corporation</u>	<u>1979 ADM</u>	<u>General</u>	<u>Building</u>	<u>Total</u>	<u>Debt Ratio %</u>
Huntington Co.	6,875	\$3.18	\$1.04	\$4.22	5.2
Penn-Harris-Madison	6,744	3.79	2.00	5.79	6.7
Merrillville	6,495	3.54	3.14	6.69	23.9
Lake Central	6,200	4.08	3.97	8.05	32.1
<u>North Lawrence</u>	<u>6,120</u>	<u>3.47</u>	<u>1.07</u>	<u>4.54</u>	<u>9.9</u>
Martinsville	5,742	4.20	2.37	6.57	20.0
Fayette Co.	5,737	3.66	.79	4.45	7.5
New Castle	5,723	3.85	1.76	5.61	16.5
Crown Point	5,496	3.86	3.17	7.04	17.0
State Averages		\$3.65	\$1.38	\$5.03	12.8

Source: Farm Bureau Statistics, State Dept. of Public Instruction.

It can be seen that North Lawrence ranked second from the bottom in General Fund tax rate, third of the nine in school building tax rate and third also in total tax rate. General Fund rate, school building rates and total tax rates for North Lawrence were also lower than the state-wide averages. Debt ratio for North Lawrence was fourth from the bottom of the nine corporations, and also was lower than the state average.

Exertion of more tax effort may be needed for North Lawrence to properly address building needs.

### Projected Financial Capacity

Assessed Valuation. Taxable wealth of the North Lawrence Schools has increased significantly in the past few years. Following are figures for 1973-1979:

<u>Year Taxes Payable</u>	<u>Assessed Valuation</u> (Millions)	<u>Percent Increase</u> <u>Over Prior Year</u>
1973	\$48.1	---
1974	51.0	+6.0
1975	52.6	+3.1
1976	55.3	+5.1
1977	57.5	+4.0
1978	60.8	+5.7
1979	63.1	+3.9

Over the six year period, valuation increased by \$15 million or 31 percent. Increase has been about 4.6 percent annually compounded. These steady increases reflect the nature of the area and can be expected to continue, perhaps at a slower rate, for the foreseeable future.

Following is a conservative projection of assessed valuation which begins with the new reassessed valuation and adds an annual increase of 3.0 percent of taxable property for future years.

<u>Year Taxes Payable</u>	<u>Estimated Assessed Valuation</u> (Millions)
1980	\$101.2
1981	104.2
1982	107.2
1983	110.4
1984	113.7
1985	117.1
1986	120.6

As valuations grow, capability to finance schools increases and debt service tax rates will decrease. The estimated increases above appear to be realistic, even conservative, compared to experience of the last six years.

Borrowing Potential. Total debt of North Lawrence Community Schools, as of January 2, 1981, will be:

1. Common School Loan	\$ 525,000
2. North Lawrence School Building Corporation	<u>5,280,000</u>
TOTAL	\$5,805,000

The North Lawrence School Building Corporation, as mentioned earlier, has surplus funds each year which are invested and accumulate to be used for early retirement of bonds. Thus, the above amount overstates net indebtedness.

The above total represents 5.7 percent of assessed valuation which is a low debt ratio. North Lawrence is in an excellent position to acquire more debt if construction needs require this.

Debt Service Requirements. For existing debt, the following table shows annual requirements for the next few years.

<u>Year</u>	<u>Common School Loan</u>	<u>North Lawrence Lease Rental</u>	<u>Total</u>
1981	\$55,635	\$546,000	\$601,635
1982	54,270	546,000	\$600,270
1983	53,004	546,000	\$599,004
1984	51,738	546,000	\$597,738
1985	50,473	546,000	\$596,473
1986	49,207	546,000	\$595,207
1987	47,941	546,000	\$593,941
1988	46,676	546,000	\$592,676

Total debt service requirements decline slightly each year. Debt service for existing debt will continue until 1995. For planning purposes, it can be assumed that the debt service tax rate will remain at about its present level. Borrowing of various amounts of new money would have the following added impact on debt service.

<u>Amount Borrowed</u>	<u>Annual Payment</u>	<u>Tax Rate Required</u>
\$1 million	\$ 97,000	\$.09
\$5 million	475,000	.43
\$10 million	946,000	.86
\$15 million	1,420,000	1.29
\$20 million	1,890,000	1.71

These calculations were based on 22 year loans at interest of 7.5% and tax rate impact was based on 1983 estimated assessed valuation of \$110.4 million. The tax rate estimates do not include the

impact of license excise taxes and other miscellaneous revenue which will flow to the debt service fund, so they are "high side" estimates. No consideration is given to the property tax replacement grants which will reduce liability to the taxpayers by at least 20 percent. Required amounts for repayment could come from either part of the CBF yield or by adding to the debt service tax rate.

### Summary

North Lawrence School Corporation is in an excellent financial position to undertake school construction. Debt is low, tax rates are modest and the state is now sharing in the financing of school construction.

It is suggested that the CBF rate be increased to \$1.00 to generate cash for needed projects. When any new debt service obligations begin, the CBF rate can be reduced to minimize the total tax burden. Establishment of the new rate of \$1.00 should be for a five year period beginning with the 1982 tax collection year.

More specific financing recommendations can be developed when projects have been identified and realistic cost estimates for such projects have been developed.

## CHAPTER VI

### RECOMMENDATIONS AND COMMENTARY

Solutions to school facilities in North Lawrence Community Schools rest on more than the individual building deficiencies described previously. They are intimately interwoven with other factors and issues which call for school planning decisions. Such decisions have long-term implications for educational administration and practice in the school corporation.

Implicit in the resolution of facility needs is the opportunity to enhance educational opportunities. Facilities themselves do not guarantee an improved educational program but frequently the program can not under any circumstance be upgraded because of the current facilities.

These recommendations made to the North Lawrence Community Schools are those which, in the opinion of the consultant team, best meet the current and long range facility needs of the school corporation.

#### Vertical Organization for Servicing Students

The diverse grade arrangements of North Lawrence Community Schools appears to take little account of the nature of contemporary pre-adolescent and early adolescent children. Research strongly suggests that children are learning more and at an earlier age than their counterparts 50 or even 25 years ago. Students in this school corporation should have the advantage of academic specialists and more sophisticated equipment and facilities earlier than is now provided by the grade plans in effect.

3. The approximate 120 students south of Bedford now attending Shawswick school along routes 44SH, 43SH, 42SH and 41SH should be divided between Lincoln Elementary School and Parkview Elementary School.
4. All kindergarten students from the Shawswick attendance zone now attending Englewood and Lincoln elementary schools should return to the Shawswick school.
5. Students now attending Tunnelton Elementary School along route 48T, that are blocked off from direct access to the Tunnelton Elementary School by closed bridges, should be transported to the Shawswick school. There are approximately 21 elementary students involved.
6. Because of the formula for figuring bus contracts a wide range of costs have evolved. This formula should be re-evaluated to bring all contracts in line. It is doubtful that it costs one driver twice the dollars to operate a bus as compared to another.
7. There should be an attempt made to find a common carrier with whom to contract all contracted transportation. It is believed that this would save the district tax dollars.
8. Because there is a savings for a district to operate its own transportation system and since the district owns and operates buses, the district should investigate the possibility of phasing in all the transportation carriers as district owned and operated.
9. Definitive rules and regulations should be developed for students who are transported. These rules and regulations should be distributed to all students transported and to their parents.
10. A comprehensive staff development program should be developed for each driver. Attendance should be part of the drivers contract.

#### Attendance Areas

If efficient utilization of school facilities is to be achieved, this will necessitate the reassigning of attendance boundaries and the reassignment of pupils to different buildings.



### Finance

The recommendations are fiscally feasible if the residents and patrons of the school corporation desire the quality of school facilities that their children and youth deserve. If and when the Board of School Trustees and Administration decide what they want to do, the consultant team will work out the financing plan for the proposed work.

## Heltonville Elementary School

This school plant is located on a five acre site in the community of Heltonville. The size of this site is less than the minimum seven (7) acres required by Rule B.

### General Building Appraisal

#### Original 1910, 1936 and 1950 Additions

##### Exterior:

- Stone masonry walls classroom area, brick at boiler room and block at gymnasium.
- Flat roof with built-up roofing.
- Steps up to entry violate handicapped code.
- No designated handicapped parking.
- Parking lot and drive in poor condition.
- Hollow metal doors and frames.
- Gutters and downspouts in poor condition.
- Play ground area in poor condition.

##### Interior:

- Classroom area has concrete roof beams and deck bearing on masonry walls.
- Gym has masonry walls, steel truss roof members with wood rafters and wood deck.
- Concrete stairs and ramps for some level changes.
- Metal window frames with single-pane glass in poor condition.
- Window type air conditioners.
- Building rewired in 1974-75.
- Solid core rated wood doors meet code requirements for corridor; however, swing out into corridor traffic.
- Oil-fired boiler with steam heat to unit heater cabinets.
- Steps in various areas prohibit access by handicapped to all areas.

##### Lower Level:

- Kindergarten - carpeted floor, acoustic tile ceiling, surface mounted fluorescent fixtures.
- Kitchen and dining area are in same room, no separation, violate code. Seamless flooring, masonry walls.
- Boiler room has evidence of water seeping through exterior walls.
- Exposed piping and conduit runs throughout building.
- Gym - wood bleachers with storage below. Wood stage built free standing in gym with wood walls.