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SCHOOL ISSUE

Construction of new schools and additions to existing school facilities, has continued at a rapid pace during the past twelve months. High schools, elementary schools and dormitories, either completed or under construction during the past year, are presented in this, the sixth annual School Issue of New Hampshire Architect.

According to Paul E. Farnum, deputy commissioner of education, New Hampshire architects have a substantial list of proposed school buildings on their drawing boards, which should be under construction early in 1960.

Through the cooperation of the construction industry, this issue is made possible. School officials in every city and town in New Hampshire have looked to the annual issue since its inception in 1954.
NORTHERN ASSOCIATION OF SUB-CONTRACTORS FORMED

C. Bader Brouilette, President

The Northern Association of Sub-Contractors became a reality at a meeting of the group held at the Hanover Inn Thursday night, October 22. Officers and directors were elected and a constitution and by-laws were adopted.

Elected to head the new organization was C. Bader Brouilette, as president. Mr. Brouilette is president of The Bader Company, acoustical and partition contractors of Burlington, Vt. He is also president of Champlain College at Burlington.

Other officers elected were: Whitman R. Mitchell, of Mitchell and Hicks Company, Concord plumbing and heating contractors, first vice-president; Ira A. Huntley, Keene electrical contractor, second vice-president; George Francoeur, of Francoeur-Gill Company, Lakeport plumbing and heating contractors, treasurer.

Nathan Brown, Burlington, Vt., heating and sheet metal contractor, secretary.

Directors elected for a one year term were: Robert Galloway, Walpole plumbing and heating contractor; Arnold Anderson, Brattleboro, Vt., roofing contractor; Kenneth Jones, Burlington, Vt., masonry contractor; Walter J. Parenteau, Manchester plumbing and heating contractor.

Elected as directors for a two year term were: Robert Galloway, Walpole plumbing and heating contractor; Arnold Anderson, Brattleboro, Vt., roofing contractor; Raymond Houlette of Dunlop and Hoey, Tilton and Lakeport electrical contractors; Edward Malynowski of the Acme Engineering Company, Manchester heating and sheet metal contractors.

Named directors for three year term were: William Law of Vermont Structural Steel Corporation, Burlington, Vt.; William B. Cummings of the Bader Company, Concord; Robert S. Hicks of Mitchell and Hicks Company, Concord heating and plumbing contractors.

Henry J. Pfisterer of New Haven, Conn., addressed the group on proper specifications for each individual job, public relations and other phases of the construction industry. Mr. Pfisterer is a structural engineer and professor of architectural engineering at Yale University. He is also past president of the Connecticut Building Congress.
In the elementary school most of the educational program is concerned with the general development of the pupils. In contrast, at the high school level, it is expected that students will study particular subjects more or less intensively. Many of these subjects require special facilities, designed and built to meet unique learning requirements.

Even though there are no fixed standards which will invariably guarantee optimum school facilities, some general guidelines can be established. The following suggestions and illustrations, prepared by the staff of the New Hampshire State Department of Education, are intended to offer just such guidelines for planning facilities for music, art, and science.

**Providing Adequate Space for Art Education**

By Alice A. D. Baumgarner

Director, Arts Education

State Department of Education

Concord

A well designed and fully equipped art room is necessary where art is to be taught to all students as a means of expression and communication. Provision will be made so that through active participation students may study the contemporary development in the arts and come to realize some of the values of the art heritage.

The environment should help each student to acquire esthetic sensitivity. Because students work with a wide variety of tools and materials the art room must provide more square feet per pupil than is necessary in most of the other classes.

This means that about 55 square feet per pupil should be planned for art work areas. Suggestions for including end of corridor space to provide clay work area and storage:

1. Kiln 24" x 24"
2. Spray Booth 24" x 24"
3. Wet Clay Cabinet 35" x 33" x 36"
4. Cabinet 38" x 24" x 36"
5. Wood Bench 48" x 48" x 30"
6. Metal Work Bench 9' x 30" x 36"
7. Benches 17" x 12" x 17"
8. Clay Bin 16" x 15" x 28"
9. Clay Work Counter 9' x 20" x 28"
10. Trash Cans 18" x 22" x 28"
11. Student Tables 60" x 42" x 29"
12. Teacher Desk & File 72" x 36" x 36"
13. Chair 18" x 20"
14. Bookcase 4' x 12" x 36"
15. Cabinets 60" x 24" x 36"
16. Sink 48" x 24" x 36"
17. Tackboard

(Continued on Page 10)
and storage, or at least 30 square feet of working space per student, net. Skillful planning will have some storage units serve also as work surfaces.

It is desirable to have the art room located within the regular traffic lanes used by all students, yet have the room acoustically treated so that the work noises of constructing, carving, turning or hammering will not disturb other school areas.

North light is desirable but artificial lighting that approximates daylight and can be kept constant is far more important. Attention should be given to a plan for balanced lighting where the brightness difference between the work and the surrounding is kept low. Reflection from the light matte painted walls may be a big factor in this plan.

Careful planning for a diversified art program may tend to suggest effective provision for equipping, working and storing. Plan to have drawing boards, easels, paints, brushes, various papers including 24" x 36" size adequately stored and easily accessible for drawing or painting.

For pottery and clay modeling: kiln for clay and a kiln for enameling, 220V and 110 outlet, a sink with sediment trap, spray booth, clay bin to hold one to two hundred pounds, and 9 cubic feet of moist storage of work in process, a potter's wheel and a wedging board about 18" x 24", shelves for drying and for jars of glazes.

Construction requires a work bench with vise and space to store tools, art materials such as wood, metal, plastic, and clay work in process.

**ART ROOM - HANOVER HIGH SCHOOL**

**SUGGESTIONS FOR SPACE & EQUIPMENT**

1. STORAGE CLOSET 12' x 6' x 9'
   - one door opening in
2. SHELF 36" x 22" x 36" over T. can
3. TACKBOARD 9' from floor to top of storage
4. TABLE 6' x 30" x 30" to hold KILN and SPRAY BOOTH
5. COUNTER 7' x 18" x 30" for clay work
6. SHELF 36" x 30" x 36" over trash can and clay bin
7. SINK with CABINET 48" x 24" x 36"
8. TACKBOARD 47" from baseboard to 7' wall on shop side 4' x 4'
9. CLERESTORY WINDOWS along 36" of wall
10. CHALK BOARD 6' x 4'
11. FLUORESCENT LIGHTS & ELECTRIC OUTLETS 110V or 220V GAS OUTLETS
Weaving and work with textiles may be one on tables which serve as general work area but provisions must be made for storage of looms and yarns. Cupboards with tote trays serve best.

Block printing, screen printing, lithography require special tools and work provisions as does work with metal. The list of furniture is given with standard measurements such as may be secured from any good supply house. Sometimes the best use of space can be attained through construction of storage units.

Furniture listed for a modern program in Art Education for junior and senior high schools.

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<th>Item</th>
<th>Length</th>
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<tbody>
<tr>
<td>Teacher's desk</td>
<td>72&quot; x 36&quot;</td>
<td>36&quot;</td>
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<tr>
<td>Cabinet for paper</td>
<td>40&quot; x 26&quot;</td>
<td>36&quot;</td>
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<tr>
<td>Cabinets for wet clay-work storage</td>
<td>35&quot; x 33&quot;</td>
<td>36&quot;</td>
<td></td>
</tr>
<tr>
<td>Cabinets for storage of paper, textiles, weaving materials and student work</td>
<td>60&quot; x 24&quot;</td>
<td>36&quot;</td>
<td></td>
</tr>
<tr>
<td>Cabinets for storage of brushes, paints, ink, clay tools—illustrative materials</td>
<td>50&quot; x 24&quot;</td>
<td>30&quot;</td>
<td></td>
</tr>
<tr>
<td>Sink and cabinet</td>
<td>48&quot; x 24&quot;</td>
<td>36&quot;</td>
<td></td>
</tr>
<tr>
<td>Student tables</td>
<td>60&quot; x 42&quot;</td>
<td>29&quot;</td>
<td></td>
</tr>
<tr>
<td>24 Student benches</td>
<td></td>
<td>17&quot; x 12&quot;</td>
<td>17&quot;</td>
</tr>
<tr>
<td>1 Bookcase</td>
<td></td>
<td>4&quot; x 12&quot;</td>
<td>36&quot;</td>
</tr>
<tr>
<td>1 Metalcraft bench materials, tools and work storage</td>
<td>9&quot; x 30&quot;</td>
<td>36&quot;</td>
<td></td>
</tr>
<tr>
<td>1 Wood bench materials, tools and work storage</td>
<td>48&quot; x 48&quot;</td>
<td>30&quot;</td>
<td></td>
</tr>
<tr>
<td>1 Clay Bin</td>
<td></td>
<td>16&quot; x 16&quot;</td>
<td>28&quot;</td>
</tr>
<tr>
<td>1 Spray Booth</td>
<td></td>
<td>24&quot; x 24&quot;</td>
<td>49&quot;</td>
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In addition to these, a walk-in closet, opening from the art room, should be provided as well as one wall of tack board, at least 30 square feet chalk board, and large trash cans that can be rolled under the counter top.
PLANNING A SCHOOL MUSIC ROOM

BY ALICE A. D. BAUMGARNER
Director, Arts Education
State Department of Education
Concord

Factors to be considered in planning a music unit.

Location
Convenience to auditorium and to other classrooms. A ground floor location to avoid carrying heavy instruments up flights of stairs. An outside entrance to help in loading of students and instruments for trips and to give easy access for evening use of both school and community. Sufficient space for classrooms, practice rooms and rehearsals of large groups to be in one compact area.

Space
For band and orchestra members 20 sq. feet per student, risers 60" wide. For choral groups, where chairs or 30" risers are provided, 16 sq. feet per student. Room height for a 60 piece instrumental group should be 14 to 16 feet, for fewer players at least 12 feet. Locked storage for instruments, music stands, sheet music and textbooks, gowns and uniforms. Two or three practice rooms of at least 60 sq. feet. A recording room with specially treated walls. For the music teacher, an office which may be used also as library and testing room, space for desk, chair, piano, bookcases, etc.

Sound
The best acoustical treatment for the music classes and sound insulations to reduce disturbances to other classes. Splayed walls for balancing dispersion and propagation of sound. Surface treatment of walls for alternate absorption and reflection.

Light
Lighting should be maintained at level 40% above the recommended level for general classrooms. Adequate electric outlets for use of radio, projector, organ, TV and tape recorders.

Irving W. Hersey Associates, A.I.A., Architects - Durham, N. H.
One well equipped rehearsal room may serve both instrumental and vocal groups in a small school with one teacher. This same room may be used for classes in general music where the emphasis is primarily on listening.

However in a six year junior-senior high school, a separate classroom for music listening should be provided. Recommended time use explains this: All students in grades seven and eight are expected to have two periods of general music each week for the school year. Students in grades nine through twelve should have available as electives, classes in understanding music or music appreciation in addition to offerings in theory, harmony, conducting, band, chorus and orchestra. This may make it most desirable to equip a regular classroom with record player, television, projector, screen, black out curtains, tape recorder and piano. Provisions should be made for convenient storage cabinets for this equipment and for tapes and records.

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Openings, double thickness doors, should be at least 6 feet wide in rooms where piano must be moved in and out. Practice rooms should have glass doors to facilitate supervision. Where these can be built in series along an outside wall the problem of ventilation and to some extent light can be met easily.

Built in risers, or movable risers or a floor for rehearsals are matters of teacher preference. The first consideration is for adequate space with provision for storage.

Thoughtful planners agree that it is a better investment to make plans to house the music program well than to try the make-shift arrangements of using stage or cafeteria which means that time use is limited and most classes disturbed by sounds of rehearsal.

(Continued on Page 14)
FLOOR PLAN for A ONE-TEACHER MUSIC DEPARTMENT

CANDIA SCHOOL DISTRICT

Candia, typical of many New Hampshire towns, is a rural community with a population of 1,250 people. The first school was built in the Smyth School District in 1790. It was built on the homestead of former Governor Smyth who served as mayor of Manchester and governor of New Hampshire during the Civil War period.

The Smyth school was a small one room building with a sloping floor. It is said that the floor was built in this way to let the marbles roll to the teacher's desk. In 1954 the building was moved to Old Sturbridge in Massachusetts and restored to its original condition.

Candia originally had 13 school districts and at the time of its centralization in 1930 there were 6 of these buildings in operation. Its first central building was the Moore School, a 4 room structure with additional space for the serving of lunch and play in the basement. In 1954 a new elementary building and community hall was built to house its increasing school population. Candia now has 10 teachers and 270 elementary pupils in its present school plant. (See Cover Photo).
It is generally recognized that the most essential element in providing a good science program is the teacher. It is equally important, however, to recognize that the effectiveness of a good science teacher may be severely limited by the classroom space in which he must work. If a science teacher is effective in a situation that fails to provide efficient student work space, basic utilities such as gas, water, and electricity, and convenient storage space, then he can do an even better job when these handicaps are removed. The general purpose of this article is to present some suggestions to school administrators, science teachers, architects, and others who have the responsibility of planning new or remodeling old science classrooms.

It is important in discussing the organization of space in a science classroom, to consider the kinds of pupil and teacher activities we can expect to find there. Perhaps a "picture" may assist in visualizing the science classroom and its multiple purposes.

The activities represented in the "picture" are a few of the many diverse demands that are placed upon space within the science classroom. It is doubly important, therefore, to plan with care. (Continued on Page 16)
Some Specific Considerations:

1. How much space should be allocated for science classrooms?

Effective science teaching requires 40 to 45 square feet per pupil. This does not include space for storage or accessory rooms such as a plant and animal room, a dark room, and a preparation room. If space for storage and accessory rooms is included, there should be an allowance of 50 square feet per pupil.

2. Should there be separate rooms for chemistry, physics, and biology, or should each science classroom be a multipurpose room?

The provision of separate rooms for each of the science offerings may be justified as the enrollment reaches approximately 750 in grades 9 through 12. With enrollments up to this number, it is likely that the science classroom will be scheduled for multiple use. It is advisable, therefore, to provide multiple-purpose classrooms. When more than one science classroom is needed, it is advisable to provide a minimum of one laboratory classroom that will serve both general science and biology and another that will serve chemistry, physics, and other related sciences.

There is a definite trend from the construction of a separate room for class work and a separate room for laboratory work to the provision of combined facilities. This provides a larger per-student area and requires a smaller total floor space.

3. What factors should be considered in determining location and exposure?

A first floor location offers advantages in terms of use of the rooms and in terms of economic utilization of utilities. Easy access to outdoor areas is a distinct advantage for biology, general science, and physics classes. As far as exposure is concerned, it is helpful to provide a location in the building which will receive direct sunlight during some part of the day. In this section of the country, this would suggest an eastern or western exposure. A southern exposure will provide direct sunlight, but may present serious problems of light and heat control. There is more than one science classroom, it may be possible to locate each with a slightly different orientation.

4. What elements in the design of the science classroom are important to the teacher?

There is a definite trend away from the long, narrow room with a recitation area in one end and a group of laboratory tables in the other end. Such a room must necessarily be quite long and pose some difficulties for the science teacher. Observation and supervision of student activities is somewhat easier if the science classroom is laid out in the form of a square. This arrangement provides laboratory tables and work counters along the walls and a discussion-recitation area in the central part of the room. It is easier, within this arrangement, to provide supervision of groups located in the work areas and in the discussion-recitation area. This works to increase the efficiency and effectiveness of the teacher within the science classroom.
5. What important accessory rooms and spaces should be provided in connection with science classrooms?
A. Preparation-work room — A work room for students to conduct individual experiments or to assist the teacher in the repairs and cleaning of equipment should be provided adjacent to each science classroom.
B. Plant and animal room — A room for plants and animals which provides good ventilation and separate heat and humidity controls is helpful to the work of the biology teacher.
C. Darkroom — A darkroom to service the science laboratories as well as the entire school should be provided with facilities for developing and printing photographs. This room should be accessible from the classroom-laboratory, the preparation room, and the corridor.
D. Display space — Generous space allotment for tackboard and chalkboard should be provided in the classroom. If possible, there should be some display space visible from the corridor.
E. Reading corner — Space should be provided for a table with chairs and space for display and storage of current published materials in one corner of the room.

(Continued on Page 18)

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Figure I and Figure II sketched below illustrate a suggested arrangements for a multiple-purpose chemistry-physics room and a multipurpose biology-general science room.

Figure I. This multipurpose science room has many facilities needed for biology. A storage wall behind the demonstration desk provides storage space otherwise available in a separate room. (From “School Facilities for Science Instruction,” The National Science Teachers Association, Washington, D. C., Figure VI-6, P. 128.)

Figure II. In this classroom-laboratory for physics and chemistry, students can move readily from one kind of learning activity to another. The seating arrangement is such that all students are relatively near the demonstration desk. (From “School Facilities for Science Instruction,” The National Science Teachers Association, Washington, D. C., Figure VIII-9, P. 170.)

A discussion of essential characteristics to be considered in providing space for science teaching is not within the limits of this article. No reference has been made to important considerations of construction involving floors, illumination, gas, water, and electrical services, or specific types of furniture. In no way does this suggest they are unimportant or that they do not require serious consideration by teacher, administrator, architect. Designing space for science teaching in high school must continue to be a cooperative effort.

Limitations of time and space make it impossible to develop in similar detail our recommendations for the many other special areas which should be part of a modern secondary school plant. Nonetheless, school planners may find it helpful to hold in mind the suggested space requirements which follow:

**General Classroom** — 770 square feet, will vary with purpose.

**Library** — size based on enrollment; minimum 770 square feet but large enough to accommodate 15 per cent of enrollment allowing 25 square feet per pupil; 10 per cent of enrollment if over 500.

**Business Education — Typing** — 840 square feet; **Office Practice** — 840 square feet.

**General or Comprehensive Shop** — 1800-2000 square feet; **Unit Shop** — 1200 square feet.

**Homemaking** — 1200 square feet.

It should be emphasized that these recommendations are generally adequate, but should be modified in view of the educational emphasis and objectives accepted in the local school district. Only when they are used with imagination and flexibility will these suggestions produce the best environment for learning.

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TOTAL VOLUME: 42,784 cubic feet — FLOOR AREA: 2,674 square feet — BID OPENING DATE: May 12, 1959.

ALFRED T. GRANGER Associates, A.I.A.
Architects and Engineers
Hanover, N. H.

C. T. DRISCOLL CO., INC., DOVER, N. H.
GENERAL CONTRACTOR
Glass and Glazing

For

ALTON ELEMENTARY SCHOOL ADDITION
BEDFORD MEMORIAL SCHOOL ADDITION
LISBON ELEMENTARY SCHOOL
LITTLETON ELEMENTARY SCHOOL ADDITION
NORTH STRATFORD HIGH SCHOOL ADDITION

BY

TRUDEL GLASS CO.

Tel. NA 3-9542
49 Laydon St., Manchester, N. H.

C. T. DRISCOLL CO.
INCORPORATED
Sherwood 2-5528
44 Bellamy Road Dover, N. H.

General Contractor

for

CLASSROOM ADDITION

to

ALTON SCHOOL
Alton, New Hampshire

Spaulding Brick Co., Inc.

DISTRIBUTORS OF BRICK AND STRUCTURAL TILE

120 Middlesex Avenue, Somerville, Massachusetts
DESCRIPTION:

Footings and Foundations — reinforced concrete; Exterior walls — brick veneer and lightweight block backup; Interior partitions — lightweight block; 4'-0" glazed tile dado corridor, lobby and toilet rooms; Floors — reinforced concrete slab on grade; finish asphalt tile, toilet rooms ceramic tile; Roof construction — structural steel frame, steel joist, precast insulating roof deck, bonded built-up roofing; Windows — aluminum sash; Ceilings — acoustical plaster; Heating — extension of present steam system with individual room control; Plumbing — Standard size fixtures, sink cabinets with bubbler in each classroom; Electric — fluorescent lighting fixtures in classrooms; Ventilation — mechanical ventilation in classrooms, toilet rooms and office.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Cost</th>
<th>% of Total Cost</th>
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<th>Cost Per C Cost</th>
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Alexander J. Majeski, A.I.A., Architect — Bedford, N. H.

ANDRE COURCHESNE, MANCHESTER, N. H.
GENERAL CONTRACTOR
G. M.
PLUMBING, HEATING & OIL, INC.
Member of the Master Plumbers Association
613 Front St. Manchester, N. H.
NAtional 2-1188

Andres Courchesne
Greer St., R. F. D. #4
MANCHESTER, N. H.
Tel. NA 2-4179

General Contractor
for
ADDITION TO
BEDFORD MEMORIAL SCHOOL
Bedford, N. H.
and
ADDITION TO
SIMONDS HIGH SCHOOL
and Elementary
Warner, N. H.

Leon Calawa, Jr.
R. F. D. #1
Hudson, N. H.
HArrison 4-3495

LATHING and PLASTERING
CONTRACTOR
at
BEDFORD MEMORIAL ADDITION
RAYMOND ELEMENTARY SCHOOL
LITCHFIELD SCHOOL ADDITION
BERWICK, MAINE SCHOOL ADDITION
and
NEW MEDICAL BUILDING
Nashua, N. H.
HUDSON POST OFFICE
Hudson, N. H.

Eric Anderson
482 Reservoir Ave. Dial NA 5-5640
MANCHESTER, N. H.

Painting Contractor
for
BEDFORD MEMORIAL SCHOOL
ADDITION
LISBON ELEMENTARY SCHOOL
SANBORNTON ELEMENTARY SCHOOL
DESCRIPTION:
This building was made possible by funds left for this purpose in the will of Mamie Knott Saltmarsh, whose husband was for many years a trustee of the academy. It contains a reading room with flanking book case stack areas, librarian's office, three classrooms and such facilities as toilet rooms, storage rooms, teachers' rooms and boiler room. Construction features include the following: Foundations—poured concrete; Walls—4" brick with masonry block backers; Partitions—masonry block; Floors—concrete on grade; Roofs—long span steel deck, except wood rafters over reading room; Windows—wood awning window (unit type); Flooring—cork in reading room, vinyl tile elsewhere; Ceilings—acoustical tile; steel decking except acoustical tile in reading room; Wall Finishes—wood veneer in reading room, Kaliston wainscots in corridor, glass tile in toilets; Lighting—fluorescent troffers troughs of steel panels. Luminaires in reading room; Heating—unit ventilators, oil fired water boiler.

Tracy and Hildreth, A.I.A., Architects - Nashua, N. H.
BLANCHARD STEBBINS, INC., MANCHESTER, N. H.
GENERAL CONTRACTOR
GLASS and GLAZING

New Hampton Elementary Addition
Salisbury Elementary Addition
Jefferson Elementary School
Saltmarsh Building, Pinkerton Academy, Derry
Bedford Elementary Addition
Highland School Addition, Manchester
Unitarian-Universalist Class Rooms, Nashua
GLASS BLOCK at Littleton Elementary School
INTERIOR GLAZING at Manchester West High School

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS CO.
23 So. Commercial St., Manchester, N. H.

CORRIEUR - ROUTHIER
COMPANY
266 Clay Street — Manchester, N. H.
NAtional 2-3506

BRICK and
MASONRY SUPPLIES
for
Simonds High School, Warner
Plaistow Elementary, Plaistow
Woodbury High School, Salem
Alvirne High School, Hudson
Sanbornton Elementary, Sanbornton
Industrial Arts Building, Manchester
West High School, Manchester
University of New Hampshire Dormitory
Saltmarsh Building, Derry
Pease A. F. B. School, Newington
Bedford Memorial School, Bedford
Highland School, Manchester
St. Joseph's School, Salem

BLANCHARD STEBBINS, INC.

Commercial and Industrial Work
330 Lincoln Street
Dial NA 3-2273
MANCHESTER, N. H.

General Contractor
for
SALTMARSH BUILDING
(LIBRARY and CLASS ROOMS)

PINKERTON ACADEMY, DERRY, N. H.
Women's Dormitory – U. N. H.

DESCRIPTION:
The University presented the architects with a clean-cut program, a difficult but interesting site and the ever-present cost factor.
The basic program required the housing of 119 women-students, the matron and attendant service facilities. In addition to the dormitory rooms the University wished to provide the student with relaxing areas in the form of lounges on each floor, plus the main lounge for guest entertainment. Attendant to the main lounge is a kitchen for light snacks. Laundry areas on each floor plus the main laundry in the basement will solve the feminine needs.
The reinforced concrete columns, grade beams are thoroughly anchored in the rock foundations, and the building areas are planned to the contours; the resultant finished building will provide the students with a wonderful setting.
The structural frame is reinforced concrete columns, floors and attic floors. The roof is wood frame. The exterior walls are 8" concrete blocks, 4" brick veneer. Windows are heavy gauge aluminum, sliding. The interior doors are solid core plywood set in steel frames. Interior partitions are metal studs, wire lath and plaster; the ceiling of the rooms painted concrete, interior face of exterior walls are strapped, lathed and plastered; floors are asphalt tile covered. The corridors are of the same wall finish as rooms but have acoustical plaster ceilings.
The summary of costs based on the contract reveals a cost of construction per student far below the national average which is good news to the taxpayer, University and architect.
Further analysis of the conditions of site, and of climatic conditions both requiring high investment in sub-surface stabilization and comfort control make the below average cost that much more satisfying.

Koehler and Isaak, A.I.A., Architects, - Manchester, N. H.

HARVEY CONSTRUCTION CO., INC., MANCHESTER, N. H.
GENERAL CONTRACTOR
Barker Steel Company
ENGINEERS and FABRICATORS
CONCRETE REINFORCING BARS

BARCO
REMOVABLE STEEL PANS
FOR CONCRETE JOIST CONSTRUCTION

Suppliers of REINFORCED STEEL for
INDUSTRIAL ARTS BUILDING
CENTRAL HIGH SCHOOL
Manchester, New Hampshire

Office and Warehouse
42 School Street
WATERTOWN 72, MASS.
TEL. WATERTOWN 4-4010

Harold L. Barker, General Manager

FREDERICK A. CONNOR, INC.
140 Powell Street
GLenview 4-6591
12 Sheffield West
WI 6-2289

Lathing and Plastering Contractor
at
UNIVERSITY OF NEW HAMPSHIRE
DORMITORY

HARVEY Construction Company, Inc.
MANCHESTER - NEW HAMPSHIRE

1662 Elm Street Tel. NA 2-3745

Two HARVEY BUILT
SCHOOLS IN THIS ISSUE

Industrial Arts Building, Central High School
Manchester, N. H.

Women's Dormitory, University of N. H.
Durham, N. H.
Farmington High School, Auditorium and Gym

DESCRIPTION:
Reinforced Concrete Foundations; Reinforced, Dampproofed Concrete Floor Slabs; Structural Steel Frame; Precast Concrete, Insulating, Roof Decking; Twenty Year Bonded Roofing; Lead Coated Copper Flashings; Aluminum Sash and Curtain Walls; Brick Facing with Cinder Tile Backing; Cinder Tile Interior Partitions; Acoustical Tile, Plastered and Structural Ceilings; Ceramic Tile Corridor and Toilet Dado; Ceramic Tile Floors; Asphalt Tile Finish Floors in Classroom Areas; Wood Stage Gymnasium Floors; Plywood Finish on Walls; Memorial Lobby, Steel Interior Doors Frames; Sixty-Five (65) Plumbing Fixtures; Zone Hot Water Heating System; Forced Ventilation.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Cost</th>
<th>% of Total Cost</th>
<th>Cost per Sq. Ft.</th>
<th>Cost per Cu. Ft.</th>
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TOTAL VOLUME: 562,751 cu. ft.—TOTAL FLOOR AREA: 37,712 sq. ft. — CEILING HEIGHTS: Classrooms 10'-4"; Shop 11'-4" Auditorium-Gymnasium (Under Steel).

Irving W. Hersey Associates, A.I.A., Architects - Durham, N. H.

Winston P. Titus, Lakeport, N. H.
GENERAL CONTRACTOR
Architects, engineers, business men and building committees are fast becoming acquainted with these boilers which provide true fuel economy, simplified installation, space compactness and other fine features.

INSTALLATIONS AT
CONWAY ELEMENTARY SCHOOL
CONWAY, N. H.
NO. CONWAY ELEMENTARY SCHOOL
NO. CONWAY, N. H.
SANFORD JUNIOR HIGH SCHOOL
SANFORD, MAINE
SANFORD JUNIOR HIGH
SHOP BUILDING
NUTE HIGH SCHOOL
MILTON, N. H.
FARMINGTON HIGH SCHOOL
FARMINGTON, N. H.
STRAFFORD SCHOOL
STRAFFORD, N. H.
MEXICO HIGH SCHOOL
MEXICO, MAINE

THROUGH

CRAIG SUPPLY CO., INC.
99 MADBURY ROAD - DURHAM, N. H.

Phone: UNiversity 8-5558 - 8-5559
Alvirne High School and Vocational Agricultural Building, Hudson

DESCRIPTION:
Reinforced Concrete Foundations; Reinforced, Dampproofed Concrete Floor Slabs; Structural Steel Frame; Precast Concrete, Insulating, Roof Decking and Twenty Year Bonded Roofing on Shops Building; Wood Roof and Asphalt Shingles on High School; Lead-coated Copper Flashings; Aluminum Sash; Brick facing with Cinder Tile Backing; Cinder Tile Interior Partitions; Asphalt Decking and Twenty Year Bonded Roofing on Fixtures; Extension of existing Hot Water Heating System in High School; Hot Air Heating System in Shops Building; Extension of Existing Forced Ventilation in High School Addition.

ITEM Cost Total Cost % of Cost Per Sq. Ft. Cost Per C;
STRUCTURE $147,577.00 78.7 $ 8.38 $0.6
PLUMB., HEAT., VENT 28,132.00 15.0 1.59 0.
ELECTRICAL 11,798.00 6.3 .68 0.

TOTAL COST OF BUILDINGS $187,507.00 100.0 $10.65 $0.3

Including Extensive Alterations in Existing Building.

TOTAL VOLUME: 243,348 cu. ft.—TOTAL FLOOR AREA: 17,600 sq. ft.—CEILING HEIGHTS: Basement 11'-2"; First Floor 10'-2"; Second Floor 10'-0"; Shops Building 10'-7".

Irving W. Hersey Associates, A.I.A., Architects - Durham, N. H.
SEPPALA AND AHO, NEW IPSWICH, N. H.
GENERAL CONTRACTOR
W. S. GOODRICH
INCORPORATED
Epping, N. H.

Manufacturers of
Waterstruck Brick

Harvard
Colonial
Antique
Face
and
Common Brick

Plumbing - Heating
and Ventilating

at
Industrial Arts Building
Central High School, Manchester
Women's Dormitory, U. N. H., Durham
Alvirne High School Additions, Hudson

WALTER J.
Parenteau, Inc.

147 Maple St. Tel. NA 2-8130
MANCHESTER, N. H.

SEPPALA and AHO
CONSTRUCTION COMPANY
NEW IPSWICH, NEW HAMPSHIRE

Tel. New Ipswich, N. H. 89 Ashby, Mass. Dupont 6-5380

GENERAL CONTRACTORS
for
ALVIRNE HIGH SCHOOL ADDITION
and
VOCATIONAL AGRICULTURAL BUILDING
Hudson, N. H.
**DESCRIPTION:**
Reinforced Concrete Foundations; Reinforced, Dampproofed Concrete Floor Slabs; Structural Steel Frame; Precast Concrete, Insulating, Roof Decking; Twenty Year Bonded Roofing; Lead Coated Copper Flashings; Aluminum Sash; Brick Facing with Cinder Tile Backing; Cinder Tile Interior Partitions; Asphalt Tile Floors; Acoustical Tile Ceilings; Steel Interior Doors and Frames; Incandescent Lighting; Twenty-Four (24) Plumbing Fixtures Including a Portion of the Cost of the Artesian Well Installation; Coated Copper Flashings; Aluminum Sash; Brick Water Heating System; Forced Ventilation System.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Cost</th>
<th>Total Cost</th>
<th>% of Total Cost</th>
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**TOTAL VOLUME:** 111,410 cu. ft. — **TOTAL FLOOR AREA:** 7,530 sq. ft. — **CEILING HEIGHTS:** Classrooms 10'-2"; Activities Room (Under Steel) 16'-4".

_Irving W. Hersey Associates, A.I.A., Architects - Durham, N. H._

KENNETH E. CURRAN, INC., LITTLETON, N. H.

GENERAL CONTRACTOR
BARRETT FLOORING COMPANY
Quality Floors Since 1932
P.O. BOX 246
BEDFORD
MASSACHUSETTS
Crestview 4-6398
29 ISLAND ST.
KEENE
NEW HAMPSHIRE
Elmwood 2-6204
SUPPLIERS AND INSTALLERS

Working With
ARCHITECTS and CONTRACTORS
For more than a dozen schools in
NEW HAMPSHIRE and VERMONT

Wm. A. Gosselin Co. Inc.
270 Pleasant St. Berlin, N. H.
Tel. 346

Plumbing & Heating
Contractors

Plumbing - Heating
and
Ventilating
at
JEFFERSON ELEMENTARY
SCHOOL

KENNETH E.
CURRAN
INC.
LITTLETON • NEW HAMPSHIRE

General Contractor
JEFFERSON ELEMENTARY SCHOOL
North Stratford High School
PROJECT SUPERINTENDENT
DANIEL BOISVERT
Pleasant Street School, Laconia

DESCRIPTION:

Foundations — concrete, reinforced dampproofed concrete floor slabs; Exterior Walls — facing brick with cinder block backers and porcelain enamel and aluminum curtain walls; Windows — aluminum modified projected type; Roofing — pitched roof, 20 year bonded slag and steep asphalt — Flat roofs, 25 year bonded tar and gravel; Roof deck — 3 inch Tectum over entire building except 2½ inch Tectum at canopies; Structural frames — rigid steel frame at all-purpose room, exposed steel bar joists at all classrooms bearing on load-bearing masonry walls; Floorings — ¼” vinyl-asbestos throughout except ¼” rubber tile at Foyer and Corridors and ceramic tile at boy's and girl's toilets; Ceilings — 1” Tectum at foyer, corridors, principal's office, conference room, and teacher's room. Plastered ceiling at boiler room; Interior Partitions — cinder block painted, with Duraglaze block dado at all-purpose room, kitchen, boy's and girl's toilets, clinic and corridors — porcelainized metal toilet stalls and doors; Interior door frames — pressed steel; Interior doors — flush type birch, natural finish; Exterior door frames — extruded aluminum; Exterior doors — flush type birch, painted exterior face; Each classroom equipped with two wardrobe units, teacher's closet, sink and fountain, 16 feet of chalkboard and 3 feet of tackboards are in aluminum chalk troughs — map hook strips included; Heating and Ventilating — Hot Water with unit ventilators at all classrooms and at all-purpose room. Radian wall units at principal's office, conference room, teacher's room, and at toilets, exhaust ventilation at all toilets; Electric fixtures — fluorescent at all classrooms and at kitchen and foyer. Incandescent at all-purpose room and corridors and other spaces, parking area floodlighted.

<table>
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<th>% Cost</th>
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<th>Per Cu. Ft.</th>
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Henry W. Erickson, A.I.A., Architect — Laconia, N. H.
(Douglas G. Prescott, A.I.A., Associate Architect — Laconia, N. H.)
WINSTON P. TITUS, LAKEPORT, N. H.
GENERAL CONTRACTOR
HAWKIN'S
Plumbing & Heating
INCORPORATED
351 Elm Street
Lakeport, N. H.
LAkeside 4-5675
POWER BURNERS
WATER PUMPS

Plumbing Contractor
for
PLEASANT STREET ELEMENTARY SCHOOL
LACONIA, N. H.

DUNLOP & HOEY
John R. Dunlop
Cross Rd.
Tilton, N. H.
ATlas 6-4512
Raymond A. Hoey
105 Mechanic St.
Laconia, N. H.
LAkeside 4-9458

Electrical Contractors
Industrial — Commercial — Residential

ELECTRICAL CONTRACTORS
for
NEW PLEASANT STREET ELEMENTARY SCHOOL
Laconia, N. H.

WINSTON P. TITUS
GENERAL CONTRACTOR
Specializing in Modern Industrial and Commercial Construction

Lakeport, N. H.
GENERAL CONTRACTOR
for
PLEASANT STREET ELEMENTARY SCHOOL
LACONIA, N. H.

FARMINGTON HIGH SCHOOL
FARMINGTON, N. H.
SCHOOL PORTION:
22 Classrooms - 21 @ 25' x 30'; 1 - 25' x 32'; with language laboratory cubicles, teacher’s and supply closets; 3 Science Laboratories - (a) 25' x 40', (b) 25' x 50', (c) 25' x 45'; 2 - storage and preparation rooms - 20' x 25'; 1 Bookkeeping - 25' x 38'; 1 Office Practice - 25' x 38'; 1 Typing Room - 25' x 45'; 1 Art Room - 36' x 38'; Supply Room - 10' x 26'; 1 Cooking Room - 28' x 36'; Storage Room 10' x 12'; 1 Clothing Room - 25' x 65'; Storage Room - 10' x 12'; 2 Shops - 15' x 15'; (a) 10' x 54' w/office 10' x 15', (b) 20' x 60' w/office 10' x 15', (c) 30' x 30' with closet; 1 Drafting Room - 25' x 50'; with Storage - 8' x 16'; 1 Music Room - 29' x 43', (near stage); 2 Practice Rooms - 8' x 11'; 2 Practice Rooms - 8' x 14'; 1 Band Storage - 17' x 25'; 1 Library - 45' x 48'; Work Room - 9' x 14'; 2 Supply Closets for Books, 1 - 24' x 24' and 1 - 10' x 25'; 3 Supply Rooms, 3

PROPOSED SENIOR HIGH SCHOOL FOR LACONIA, N. H.

Janitor's Closets with Slop Sinks; 2 Boys' Toilets; 2 Girls' Toilets; 750 Built-in Lockers in Corridor; Display cases in lobby and corridor.

ADMINISTRATION UNIT
1 General Office - 15' x 25'; with General Public waiting space; 1 Vault - 5' x 8' and closet; 1 Men and Women Teachers' Room - 12' x 25' with separate rest rooms, toilets and closets; 1 Health Room - 15' x 25', with toilet; 2 Guidance Rooms - 15' x 25'.

GYMNASium AND AUDITORIUM PORTION
Common Lobby to Auditorium, Gymnasium and Cafeteria; Lobby - 32' x 74' - Coat room, ticket booth and telephone, public toilets; Gymnasium - 88' x 125' - Bleachers seating 1218; Basketball court - 60' x 88'; Entire seating for conventions 2260; Gymnasium is adjacent to cafeteria kitchen and could seat 1000 for banquets; 2 Physical Education Directors' Rooms - 10' x 12', with toilets and showers and viewing windows on court; 1 Visiting Team Room - 15' x 25', with shower and toilet; 1 Boys' Locker Room - 28' x 28', gang shower, drying and toilet; 1 Girls' Locker Room - 24' x 28', gang shower, 2 separate showers, toilet; 1 Gymnasium Storage - 18' x 30'; 1 Grounds Equipment Storage - 12' x 30'; 2 Janitor's Closets; 1 Boiler Room - 34' x 39'; Cafeteria - 50' x 75', seating 375, kitchen - 30' x 34', Walk-in refrigerator 6' x 9', Helps' toilet and locker space; 1 Clean-up Closet; Auditorium - 60' x 87', seating capacity 750, pitched floor and orchestra pit for 20; Stage - 30' x 60', proscenium width - 32', stage floor, 8' high; 2 Dressing Rooms and Toilets; 1 Stage Storage - 20' x 30'.

FLOOR AREA: 97,068 square feet.
More outstanding jobs to add to our long list of plumbing and heating installations

Plumbing - Heating Contractors
at
Laconia Elementary School
Alton Elementary Addition
Sanbornton Elementary Addition
McClellan School Addition
Rochester
Francoeur-Gill Co., Inc.
34 Clinton St. Lakeport, N. H.
P. O. Box 61
Lakeside 4-1800

CELOTEX ACOUSTICAL CEILINGS
B-M RADIANT HEATING and COOLING CEILINGS
INSULROCK INSULATING ACOUSTICAL ROOF DECKS
CEMESTEEL MOVABLE OFFICE PARTITIONS

BY
PITCHER and COMPANY, Inc.
67 ROGERS ST. CAMBRIDGE, MASS.
GOFFSTOWN, N. H. HYacinth 7-2376
DESCRIPTION:
Footing and foundations — reinforced concrete; Exterior walls — brick veneer and Norlite block backup; Interior partition — Norlite block, 4' x 0" glazed tile dado corridor, lobby and toilet rooms; Floors — reinforced concrete slab on grade; finish asphalt tile; toilet rooms, ceramic tile; Roof construction — structural steel frame, steel joist, precast insulating roof deck, bonded built-up roofing; Windows — aluminum sash; Ceilings — incombustible acoustical tile classroom wing, activities room exposed structure; Heating — 3 zone forced hot water system, convectors classrooms, unit heaters activities room; Plumbing — Standard fixtures, sink cabinets with bubbler each classroom; Sprinkler system — extension of existing sprinkler system; Electrical — fluorescent lighting fixtures classrooms and activities room; Ventilation — mechanical ventilation classrooms, toilet rooms and activities room Equipment — in wall folding tables and spectator seating in activities room.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Cost</th>
<th>% of Total Cost</th>
<th>Cost Per Sq. Ft.</th>
<th>Cost Per Cu.</th>
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<td>$156,629.00</td>
<td>100.</td>
<td>$10.08</td>
<td>$.62</td>
</tr>
</tbody>
</table>

TOTAL VOLUME: 241,834 cu. ft. — TOTAL AREA: 15,532 sq. ft. —
DATE OF BID: March 27, 1959.

Alexander J. Majeski, A.I.A., Architect - Bedford, N. H.
WHITNEY - WESTON CORP., FRANCONIA, N. H.
GENERAL CONTRACTOR
HOULE ELECTRIC SHOP  
Littleton, N. H.  
18 Main Street  
Tel. 4-2301  

Electrical Contractor  
For New  
LISBON  
ELEMENTARY SCHOOL  

Designed By  
Alexander J. Majeski, A.I.A.  
Bedford, N. H.  

Plumbing - Heating  
Ventilating  

Lisbon Special  
Elementary School  

By  
Fitzmorris Plumbing  
and Heating, Inc.  

WHITEFIELD, N. H.  
Tel. 7-2503  

WHITNEY - WESTON  
CORPORATION  
Franconia, New Hampshire  
RESIDENTIAL and INDUSTRIAL CONTRACTORS  
NATIONAL HOME BUILDER—DEALERS  

General Contractor  
for  
LISBON ELEMENTARY SCHOOL  
1959  
Tel. VA 3-5503
WEST HIGH SCHOOL
Manchester N. H.

RAYMOND ELEMENTARY SCHOOL
Raymond N. H.

KoeWer & Isaak, AIA Architects
Roycraft Construction Co., General Contractor

Alexander J. Majeski, AIA Architect
Gamache Construction Co., General Contractor

DURACRETE
BOX 217A MANCHESTER
Manufacturers of...
THE PYRAMIDS ARE SYMBOLS OF STRENGTH and STABILITY

THE STORY OF THE THREE LITTLE PIGS ILLUSTRATES THE SECURITY of MASONRY

OBVIOUSLY STUDENTS WILL BE BETTER EDUCATED IN AN ATMOSPHERE OF STRENGTH, STABILITY and SECURITY

AND ALMOST UNBELIEVABLY . . . MASONRY IS THE MOST ECONOMICAL ACCEPTABLE MODERN CONSTRUCTION

In Fact it's Permanently Beautiful!

BLOCK CO. NEW HAMPSHIRE the Masonry Products
Littleton Elementary School

REQUIREMENTS:

To enlarge facilities to provide a total of two kindergartens and 18 classrooms for grades one through six.

DESCRIPTION:

New second story facilities provided. Eight classrooms, all purpose room, teachers' room, health room, boys and girls toilets, two storage rooms.

CONSTRUCTION DATA:

Steel frame with bar joists, poured gypsum roof deck, 20 year tar and gravel roof, masonry exterior walls, covered with curtain wall paneling. Aluminum ribbon windows and glass block, fiber tile ceilings, hollow metal plastered interior partitions, asphalt tile floors on plywood over existing plank roof, ceramic tile floor finish and tile wainscot in toilet rooms. Zoned hot water heating, incandescent lighting, exhaust ventilation system and sprinkler system installed throughout building and new addition. Public address system throughout entire school.

TOTAL COST OF ADDITION: $188,000.00
$9,000.00 of total estimated cost of renovations for existing building.


Dirsa and Lampron, A.I.A., Architects - Manchester, N. H.

CLINTON M. CLOUGH, LITTLETON, N. H.

GENERAL CONTRACTOR
E. E. BIGELOW
LITTLETON, N. H.
222 Main St. Tel. 4-3334

Electrical Contractor

for
LITTLETON ELEMENTARY
SCHOOL ADDITION
ST. MARY'S IN THE MOUNTAIN
CLASSROOM ADDITION
LITTLETON, N. H.

Plumbing - Heating
Ventilating

at
Littleton Elementary School
and
St. Mary's School at Littleton

by
A. G. CYR
HEATING and PLUMBING
Littleton, N. H.
Tel. 4-5812

CLINTON M. CLOUGH
CONTRACTOR AND BUILDER
LITTLETON, NEW HAMPSHIRE
TEL. 4-2025

GENERAL CONTRACTOR
for
Littleton Elementary School
and
St. Mary's School at Littleton
St. Mary's-in-the-Mountains, Littleton

MATERIALS:
Foundations — concrete; Exterior walls, lower level — granite fieldstone, upper level — wood stud and clapboard; Floor, lower level — vinyl asbestos tile over concrete slab on grade, upper level — vinyl asbestos tile over 4" concrete slab on steel beams; Stairhall, entry, and link flooring — quarry tile; Roof — twenty year bond tar and gravel over wood plank over laminated wood beams; Ceilings — mineral acoustical tile; Partitions — elm plywood over gypsum board; Heating — circulating hot water from heat exchanger from existing boiler plant, individual room controls; Ventilation — complete system for both floors; Electrical — fluorescent fixtures for all classrooms.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Cost</th>
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UPPER FLOOR — 3,555 square feet; LOWER FLOOR — 3,139 square feet; TOTAL — 6,694 square feet.

Carter and Woodruff, A.I.A., Architects - Nashua, N. H.

CLINTON CLOUGH, LITTLETON, N. H.
GENERAL CONTRACTOR
Industrial Arts Building, Manchester Central High School

See Page 48 for Photo and Description
Highland School - Manchester

DESCRIPTION:

Two classroom addition to the existing school. Reinforced concrete footings and foundation; exterior walls brick veneer with concrete block backup; concrete footings and piers to receive new columns and steel beams at interior east wall, to receive steel joists at second floor and roof; first floor slabs on drainage fill; second floor, concrete slabs on metal deck over steel joists; roof steel joists and Tectum deck; year bonded roofing; asphalt tile floors; acoustical plaster ceilings; metal door bucks, solid core birch doors; steel windows; all walls and tissue painted; fluorescent lighting fixtures; heat system extended; mechanical ventilation.

<table>
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Andrew C. Isaak, A.I.A., Architect - Manchester, N. H.

GAMACHE CONSTRUCTION CO., INC., MANCHESTER, N. H.
GENERAL CONTRACTOR
FURNISHED and INSTALLED

Curtain Walls At:—
WEST HIGH SCHOOL, MANCHESTER
PEASE A. F. B. ELEMENTARY SCHOOL

Aluminum Windows At:—
ST. JOSEPH'S SCHOOL, SALEM
INDUSTRIAL ARTS BUILDING, MANCHESTER
HIGHLAND SCHOOL, MANCHESTER
LISBON SCHOOL, LISBON
BEDFORD MEMORIAL SCHOOL, BEDFORD

GAMACHE CONSTRUCTION COMPANY
INCORPORATED
346 CENTRAL STREET MANCHESTER, N. H.
NA 3-0262

General Contractor
FOR

HIGHLAND SCHOOL
Manchester, N. H.
DESCRIPTION:
As shown on drawings, this addition to Manchester Central High School was erected to replace the Corey Building which was away from the school site and on the border of being condemned structurally and inadequate as to space requirements for school enrollment. It was completed at a construction cost of $252,000.00 exclusive of equipment. Much of the present equipment will be used in the new building and additional new equipment is being purchased by the City to make this industrial arts building one of the most modern school shop in the State. It will also be the most complete industrial art shop in the State.
The auto shop will be used as a carpentry shop at present until the new Memorial High School is completed and provisions have been made so that this room can be used both as a carpentry shop in the future. The other shops included in this building include a drafting room with a large wood shop, a printing shop, an electrical shop, and a machine shop. Each shop has its instruction areas for lectures, each shop has the most modern and complete equipment or provisions made to receive a most complete technical shop.

The construction is very simple and inexpensive. Masonry exterior walls of brick to match existing building, cinder concrete masonry back units painted. All interior partitions are cinder concrete masonry units with steel frames and hollow metal doors. The heating system is taken from the present building, electrical constitutes a fluorescent lighting fixture system, fire alarm system, communication and bell system tied into present system. The roof construction is bar joists exposed with gypsum decking and tar and gravel bonded roof. All windows are aluminum projected type. So of the shops have sky domes of plastic included a few interior rooms have same. All rooms have aluminum trim chalkboards and bulletin boards.

Leo P. Provost, A.I.A., Architect - Manchester, N. H.
HARVEY CONSTRUCTION CO., INC., MANCHESTER, N. H.
GENERAL CONTRACTOR
J. SCANLON & CO.,
Incorporated
61 Amherst Street
Manchester, N. H.
Phone NA 2-3324

testing Inspection Consultation
for
INDUSTRIAL ARTS BUILDING
CENTRAL HIGH SCHOOL
MANCHESTER
Controlled Concrete Inspection
Welding Inspection
Soil Borings and Load Tests
Concrete Core Drilling

New York, N. Y. Plainfield, N. J.
New Haven, Conn.

STEEL ERECTED
at
INDUSTRIAL ARTS BUILDING
Central High School
WEST HIGH SCHOOL
Addition
MANCHESTER, N. H.

MANCHESTER ROOFING CO., INC.
117 Second Street
WALTER J. WARNER
NA 2-6639
Manchester, N. H.

ROOFING CONTRACTOR

for
West High School, Manchester
Industrial Arts Building, Manchester
Pease A. F. B. Elementary Addition
Bedford Memorial Elementary Addition
Sanbornton Elementary Addition
Manchester West High School Additions and Alterations

DESCRIPTION:
A bond issue in the amount of $700,000 provided $610,000 for construction, alteration and fees. The remaining $90,000 was applied towards the furnishing of equipment.


The alterations involved the ground floor of the existing building. The existing Manual Arts were converted to classrooms, the girls locker changed to art room, the old cafeteria and boys locker altered to home economics, the existing gymnasium floor raised to provide a new cafeteria. The open space between the existing gymnasium and manual arts was roofed and constructed to provide a cafeteria kitchen.

The additions contain electrical, machine, automotive, two wood-working and graphic arts rooms including storage, office and toilet facilities on the ground floor. The second contains physics, chemistry, biology, laboratories and two lecture rooms, boys and girls shower and ladies rooms. The new gymnasium accommodates approximately 800 spectator capacity.

The main entrance to the new building is through the court area from Conant Street. Over the court the new library, conference and study halls are built.

COST OF CONSTRUCTION: $600,000 — SQ. FT. AREA: 42,400 — SQ. FT. COST: $11.88.

Koehler and Isaak, A.I.A., Architects, - Manchester, N. H.
ROYCRAFT CONSTRUCTION CO., INC., MANCHESTER, N. H.
GENERAL CONTRACTOR
A FINE SCHOOL BUILDING
BY
ROYCRAFT CONSTRUCTION
COMPANY, INCORPORATED
55 Nelson Street Manchester, N. H.

The Manchester West High School Addition

Michael's
Floor & Wall Coverings
353 Spruce St. Tel. NA 2-7422
MANCHESTER, N. H.
Suppliers and Installers of
ASBESTOS and VINYL FLOORING
at
Industrial Arts Building
Central High School
and
West Side High School Addition
Manchester, New Hampshire

R. C. Peabody Co., Inc.
Plumbing • Heating • Sprinkler
Contractors
Sales • Installation • Service
720 Union St. Dial 3-3578
Manchester, N. H.
Plumbing - Heating Ventilating
for
Manchester West High School
Highland School, Manchester
Nute High School and Milton Elementary School, Milton

(See page 78 for Milton Elementary School)

DESCRIPTION:
Reinforced Concrete Foundations; Reinforced, Dampproofed Concrete Floor Slabs; Structural Steel Frames; Precast Concrete, Insulating, Roof Decking; Twenty Year Bonded Roofing; Lead Coated Copper Flashings; Aluminum Sash and Curtain Walls; Brick Facing with Cinder Tile Backing; Cinder Tile Interior Partitions; Wood Stage and Gymnasium Floors; Asphalt Tile Floors in Classroom Areas; Ceramic Tile Floors in Toilets; Acoustical Tile Ceilings; Steel Interior Doors and Frames; Incandescent Lighting; Thirty-Two (32) Plumbing Fixtures; Hot Water Heating System with Existing Building connected to New Boiler at High School; Hot Water Heating System in Grammar School Addition. Forced Ventilation System Both Buildings.

<table>
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<th>Cost</th>
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NEW HEATING SYSTEM EXISTING
HIGH SCHOOL BUILDING.............13,000.00
NEW SPRINKLER SYSTEM EXISTING
HIGH SCHOOL BUILDING.............4,285.00
TOTAL....................................$263,302.00

TOTAL VOLUME: 408,422 cu. ft.—TOTAL FLOOR AREA: 23,321 sq. ft.—CEILING HEIGHTS: Elementary School 10'-8"; High School Classrooms 10'-2"; Auditorium - Gymnasium 18'-0" under steel.

Irving W. Hersey Associates, A.I.A., Architects - Durham, N. H.

THE MAXAM COMPANY, PORTSMOUTH, N. H.
GENERAL CONTRACTOR
Tectum Roof Deck
Tectum Ceilings
Chalk Board
Toilet Partitions
Moveable Partitions
and
Modern Fold Doors
Have Been Supplied for Many of New Hampshire Schools By:

THE BADER COMPANY, INC.
ACOUSTICAL and PARTITION CONTRACTORS

699 Pine St.  
Burlington, Vt.
130 Crescent St.  
Rutland, Vt.
Route No. 8  
Beck Road
Concord, N. H.
431 Turner St.  
Auburn, Maine

R. H. KEIR
Plumbing and Heating
292 Main St.  
Tel H0mestead 6-2301
GORHAM, N. H.

Plumbing and Heating
for
Nute Academy, Milton, N. H.
and
North Stratford High School

The
maxam
Company INC.

GENERAL CONTRACTORS
Portsmouth, N. H.
GEneva 6-9000

QUALITY CONSTRUCTION
with
Skill
Integrity
and
Responsibility

GENERAL CONTRACTORS
for
NUTE HIGH SCHOOL ADDITION
MILTON ELEMENTARY SCHOOL ADDITION
At MILTON, N. H.
Unitarian-Universalist Church Class Rooms, Nashua

MATERIALS:
Foundations — concrete; Exterior walls — 4" brick and 8" concrete block back up; Window walls — ¼" plate glass and wood clapboard panels in wood frames; Lower floor — vinyl-asbestos tile over concrete slab on grade; Upper floor — vinyl tile over 2½" concrete slab on steel joists; Stairs and entry — terrazzo; Roof — twenty year bond tar and gravel over wood joists and sheathing; Ceilings — fiber acoust tile over gypsum board; Partitions — gypsum board on wood stud, concrete block, brick entry and chapel, and walnut plywood minister; Heating — gas fired low pressure steam system with individual room controls; Plumb — individual classroom sinks and toilets for youngest children; Sprinkler system — complete concealed wet system.

<table>
<thead>
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UPPER FLOOR — 4,438 square feet; LOWER FLOOR — 4,258 square feet; TOTAL: 8,696 square feet.

Carter and Woodruff, A.I.A., Architects - Nashua, N. H.
A. TAYLOR CORPORATION, CONCORD, N. H.
GENERAL CONTRACTOR
SCHLAGE HARDWARE
at
ALVIRNE HIGH SCHOOL ADDITION
HUDSON
UNITARIAN-UNIVERSALIST
CLASS ROOMS, NASHUA
PLUS MANY MORE
Furnished By
TREAT
Hardware Corporation
82 Essex St., Lawrence, Massachusetts
Hardware - Industrial Supplies
Paints - Building Materials
"You'll Find It At Treat's"
Established 1859
MEMBER

A. TAYLOR CORPORATION
General Contracting
74 SOUTH STATE ST.
CONCORD, N. H.
CA 5-2917

General Contractor
for
Unitarian - Universalist
Class Rooms
Nashua, N. H.

COMMERCIAL • INDUSTRIAL
RESIDENTIAL

CONNIE'S CEMENT FLOOR CO.
J. "Connie" Griffith
uncook, N. H. Dial HU 5-9444

Ionolithic • Granolithic • Metallic
Cement Floors
at
SALISBURY ELEMENTARY
SCHOOL ADDITION
UNITARIAN-UNIVERSALIST
CLASS ROOMS
Nashua, N. H.

Serving the Architects,
Contractors, and Engineers of
New England

LATHAM PLUMBING & HEATING CO.
35 Boston St., Lynn, Mass.
Tel. LYNn 5-1669

Plumbing and Heating
Contractors
for
UNITARIAN - UNIVERSALIST
CLASS ROOMS
Nashua, N. H.
New Elementary School, Newington

DESCRIPTION:
Reinforced Concrete Foundations; Reinforced, Dampproofed Concrete Floor Slabs; Structural Steel Frame; Precast Concrete, Insulating, Roof Decking; Twenty Year Bonded Roofing; Lead Coated Copper Flashings; Aluminum Sash; Brick Facing with Cinder Tile Backing; Cinder Tile Interior Partitions; Asphalt Tile Floors; Ceramic Tile Floors andDados in Toilets; Acoustical Ceilings; Steel Interior Doors and Frames; candescent Lighting; Twenty-One (21) Plumbing Fixtures including the Sewerage Disposal System; Hot Water Heating System; Forced Ventilation System.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Cost</th>
<th>% of Total Cost</th>
<th>Cost Per Sq. Ft.</th>
<th>Cost Per C</th>
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TOTAL COST OF BUILDING $104,068.00 100.0 $11.80 0.2

TOTAL VOLUME: 136,224 cu. ft. — TOTAL FLOOR AREA: 8,812 sq. ft.
CEILING HEIGHTS: Classrooms 10'-2"; Activities Room (Under Steel) 18'-0".

Irving W. Hersey Associates, A.I.A., Architects - Durham, N. H.
S. E. Laperle and Sons, Exeter, N. H.
GENERAL CONTRACTOR
Plumbing and Heating

at

Pollard School, Plaistow
Simonds High School, Warner
Newington Elementary, Newington
Woodbury High School, Salem
New Hampton Elementary, New Hampton

Serving Northern New Hampshire in Domestic, Commercial and Industrial Installations

91 Bisson Ave.  Laconia, N. H.
Tel. Laconia 706
This Addition also includes remodeling the present Kitchen and enlarging one of the class­rooms into a Multi-Purpose Room in the present Community School.

CONSTRUCTION MATERIALS:
Footing and Foundations — concrete; Walls above Foundations — Sand struck brick backed up with load-bearing concrete block; Rear Walls to be of exposed concrete block; Floor Construction — Re­inforced integral waterproofed concrete slab on earth with floor covering of asphalt tile; Roof Construction — 2 x 14" roof rafters, boarded, 1" insulation, 20-year bonded tar and gravel roof; Flashing — 16 oz. copper; Windows — Metal, lower metal windows in classrooms to have j block above; Interior Partitions — Concrete be­ painted; Door Bucks — Metal trim and door combination, 16 ga.; Doors — Outside, white painted, birch veneer, solid-core, flush doors; Roofs — Acoustical tile units, 12" x 12"; Heating — Forced hot water, vulcan radiation, zone temperature controlled; Ventilation — known by the Wheeler system; outside air through wind and taken out through classrooms by electric operated fans in roof, galvanized iron ducts; Plumbing — Standard, meeting all plumbing code and requirements; Sewerage — Distribution system to septic tank and leach field meeting State requirements; Electric — Fixtures, fluorescent, flush lighting, Wiring, Romex.

ITEM | Cost | % of Total Cost | Cost Per Sq. Ft. | Cost Per C
--- | --- | --- | --- | ---
STRUCTURE | $52,190.50 | 75. | $ 9.37 | .9
PLUMB., HEAT., VENT | 13,620.00 | 20. | 2.52 | .2
ELECTRICAL | 3,688.00 | 5. | .74 | .6
TOTAL COST OF BUILDING | $69,498.50 | 100. | $12.63 | $0.7

TOTAL VOLUME: 87,000 cubic feet — FLOOR AREA: 5,500 square feet — BID OPENING DATE: July 14, 1959.

Alfred T. Granger Associates, A.I.A., Architects and Engineers
Hanover, N. H.
ROLFE CAMP COMPANY, INC., FRANKLIN, N. H.
GENERAL CONTRACTOR
MILLWORK
For
Proctorsville
Elementary School
Proctorsville, Vt.

— Furnished by —
JOHN F. CHICK
& SON, INC.
SILVER LAKE, N. H.
Tel FOrest 7-4611

Fabricated Steel Products Co., Inc.
Agents for
Ceco Steel Products Corporation

STEEL JOISTS - ROOF DECK
STEEL SASH - ALUMINUM SASH
REINFORCING MESH
DUR-O-WAL

Warehouse and Office
115 Old Colony Avenue
Wollaston 70, Mass.
Mayflower 9-5218

THE
ADDITION TO . . .

New Hampton Community School
at
New Hampton, N. H.

is being constructed
by
CAMP CONSTRUCTION COMPANY
Bow St., Franklin, N. H.
Tel. 752-R

Roofing Contractor
For
NEW HAMPTON ELEMENTARY SCHOOL
New Hampton, N. H.

D. G. HOULE CO., INC.
BONDED ROOFERS

Roofing - Siding - Sheet Metal
No. Commercial St. Manchester, N. H.
Dial NA 2-9163
Plaistow Addition and Alterations to Pollard School

DESCRIPTION:
Structural Steel Frame; Pre-cast Concrete, Insulating, Roof Decking; Twenty Year Bonded Roofing; Lead Coated Copper Flashings. Aluminium Sash, Brick Facing with Cinder Tile Backing; Cinder Tile Interior Partitions; Asphalt Tile Floors; Acoustical Tile Ceilings; Steel Interior Doors and Frames; Incandescent Lighting; Eleven (11) Plumbing Fixtures; Extension of Existing Hot Water System; Extension of Existing Forced Ventilation System.

<table>
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<th>Cost</th>
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<td>PLUMB., HEAT., VENT</td>
<td>7,745.00</td>
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<td>ELECTRICAL</td>
<td>2,454.00</td>
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<td>.46</td>
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<tr>
<td>TOTAL COST OF BUILDING</td>
<td>$50,785.00</td>
<td>100.0</td>
<td>$9.44</td>
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</tbody>
</table>

TOTAL VOLUME: 60,525 cu. ft.—TOTAL FLOOR AREA: 5,380 sq. ft.—
CEILING HEIGHT: Classrooms 10'-2".

Irving W. Hersey Associates, A.I.A., Architects - Durham, N. H.
S. E. LAPERLE AND SONS, EXETER, N. H.
GENERAL CONTRACTOR
Roofing Contractor
— for —
Pollard
Elementary School
Plaistow, N. H.

LETOILE ROOFING CO.
8 Lancaster St. DRake 2-4031
Haverhill, Mass.

Roofing and Sheet Metal Work
of every description

MacArthur and Sons
Penacook, N. H.
88 So. Main St. Dial PL3-4411

Painting Contractors
— for —
Salisbury
Elementary School

BETTER FLOORS
Leo A. Laflamme, Prop.
10 Prospect St. Dial NA 2-8813
MANCHESTER, N. H.

We had the pleasure of installing
FLOORING
at
Pollard School, Plaistow, N. H.
McClellan School, Rochester, N. H.
Alvirne High School, Hudson, N. H.

"Manufacturers of Quality Millwork"
WE ARE PLEASED TO HAVE FURNISHED
Detailed Millwork
for
LACONIA ELEMENTARY SCHOOL
SALISBURY ELEMENTARY SCHOOL
UNITARIAN - UNIVERSALIST CLASS ROOMS
NASHUA, N. H.

CONCORD LUMBER CO.
Dial CA 5-5557 Concord, N. H.

"Over Half a Century of Service
to Local Builders"
Elementary School, Proctorsville, Vermont

CONSTRUCTION MATERIALS:

Exterior Walls — Concrete footings and foundations; Gym Walls — Concrete block; School Portion — concrete block to underside of window sills; the stud walls are covered with California Redwood; Interior Walls — Concrete block painted; Roof Construction — School Portion — Exposed 4 x 14" Douglas Fir with Tectum roof deck. Multi-Purpose Room — Tectum panels over long-span joists; Ceilings — Corridor ceilings furred and covered with 12 x 12" acoustical tile units; Floors — Reinforced concrete slab on earth with plastic tile flooring; Roof—Tar and gravel; Windows — Structural Wood Sash; Steel Sash in Multi-Purpose Room; Heating — Forced hot water, room temperature controlled; Ventilation —To meet State requirements. Air conditioning units in classrooms; Multi-Purpose Room, Kitchen and Toilets ventilated and electrically controlled; Electric — Incandescent and fluorescent and flush lighting; Wiring, Romex; Plumbing — Standard school sizes.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Cost</th>
<th>% of Total Cost</th>
<th>Cost Per Sq. Ft</th>
<th>Cost Per Cu. ft</th>
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<td><strong>$0.76</strong></td>
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TOTAL VOLUME: 238,750 cubic feet — FLOOR AREA: 14,489 square feet — BID OPENING DATE: May 2, 1959 — CEILING HEIGHTS: 10'-0" in Classroom Portion; Corridor—8'-0"; Multi-Purpose Room 17'-0" to bottom of trusses.

Alfred T. Granger Associates, A.I.A., Architects and Engineers
Hanover, N. H.

R. E. BEAN CONSTRUCTION CO., INC., KEENE, N. H.
GENERAL CONTRACTOR
ROOFING AT —
Proctorsville, Vermont
ELEMENTARY SCHOOL
by
Brattleboro Roofing
and
Sheet Metal Co., Inc.
40 Years Experience
154 Elliot St., Brattleboro, Vt.

BARRITT ROOFING IS
OUR SPECIALTY

DAVID L. HOWLAND
Westmoreland, N. H.
Tel. EXport 9-4434
Plumbing - Heating
Ventilating
CONTRACTOR
for
Elementary School
PROCTORSVILLE,
VERMONT

R. E. BEAN CONSTRUCTION CO., INC.
40 Carpenter Street – Keene, N. H.

GENERAL CONTRACTOR
for
ELEMENTARY SCHOOL
Proctorsville, Vermont

INDUSTRIAL — COMMERCIAL — RESIDENTIAL BUILDING
McClelland Elementary School, Rochester

DESCRIPTION:
This project consisted of adding seven classrooms to a school completed in 1957. A music room, toilet rooms, janitor's room and storage rooms were also included in the addition. Construction features include the following:
Foundations—concrete; Walls—brick veneer air space, masonry block; Partitions—structural glazed tile wainscots, masonry block above, glazed partitions between corridor and classrooms; Roof—long-span steel deck; Ceilings—acoustical type steel deck; Flooring—asphalt tile except ceramic tile in toilets; Lighting—fluorescent troffers in steel deck troughs; Heating—oil-fired hot water system, unit ventilators.

Tracy and Hildreth, A.I.A., Architects - Nashua, N. H.

DAVID W. DAVISON, MANCHESTER, N. H.

GENERAL CONTRACTOR
M. B. Foster Electric Co.
Telephone GEneva 6-5606 - 07
69 Albany Street
PORTSMOUTH, N. H.

Electrical Contractor

for
McCLELLAND SCHOOL
ADDITION
ROCHESTER, N. H.

DAVID W. DAVISON

Telephone NA 4-4041
MANCHESTER, NEW HAMPSHIRE

General Contractor

for
McClelland Elementary School
ROCHESTER, N. H.

PLEASANT STREET
ELEMENTARY SCHOOL
LACONIA, N. H.

has a

BONDROOF
McClelland Elementary School Addition
Rochester, N. H.

has a

JOHNS-MANVILLE
BONDROOF

R. H. ROWE, INC.

Exeter, N. H.

7 Water St.
Tel. PR 2-5112

Painting Contractors

for
McClelland Elementary School
Rochester, N. H.
St. Joseph's Parish School, Salem Depot

DESCRIPTION:
Eight completed classrooms on second floor (upper grade); eight rooms on first floor (lower grade); level unfinished. Principal's office, teachers' room on each floor; health room; storage rooms each floor; locker and shower rooms; auditorium and gymnasium; kitchen store rooms; lobby, mens', womens', boys' and girls' toilet facilities; toilet facilities between first and second grade classrooms to accommodate the young children. The auditorium-gymnasium is designed to serve parish functions without interfering with the scholastic wing. Parking and play areas are to the west of the building. Future construction includes finishing the classrooms of the first floor area and adding a third floor convent.

MATERIALS:
In all cases were chosen for a minimum maintenance and are as follows: Footings and foundations—reinforced concrete; Exterior Walls—load bearing concrete block and brick veneer; Interior Walls—load bearing concrete block; first floor concrete slab on drainage fill; second floor and roof (future third floor), concrete slab on metal decking over steel joists; maple auditorium and stage floors; ceramic tile in all toilet rooms; acoustical ceilings, Keenes cement plaster in toilet, shower, kitchen and boiler rooms; exposed insulrock auditorium on steel frame; 20 year bonded metal door frames; solid core birch doors; walls painted; aluminum entrances; aluminum sash; reinforced concrete stairs; fabricated metal stairs; chalkboards and cork tackboards, aluminum frames; metal toilet partitions; fire extinguishers; automatic ventilation; forced water heat, three zones, individual room controls; gravity roof ventilators; fluorescent lights in all classroom and kitchen; incandescent lighting in corridors, stairs, auditorium, stage, locker and shower rooms, lobby and toilet rooms; emergency lighting throughout; complete plumbing facilities including septic tank and disposal field; clock and program system; fire alarm system.

Andrew C. Isaak, Architect, Manchester, N. H.
CARON CONSTRUCTION CO., INC., MANCHESTER, N. H.
GENERAL CONTRACTOR
Eckhardt & Johnson, Inc.

Plumbing & Heating Contractors
213 Hanover St. Tel. NA 2-7493

MANCHESTER, N. H.

Plumbing - Heating Ventilating

at
SALTMARSH BUILDING
(Classrooms and Library)
PINKERTON ACADEMY
Derry, N. H.
and
ST. JOSEPH'S SCHOOL
and AUDITORIUM
Salem, N. H.

CARON CONSTRUCTION CO., INC.

General Contractors and Builders

161 BAKER STREET PHONES: 2-4073 — 2-8475
MANCHESTER, NEW HAMPSHIRE

GENERAL CONTRACTORS

for

St. Joseph’s School
Salem, N. H.

Elementary School Addition
Sanbornton, N. H.
DESCRIPTION:
Reinforced Concrete Foundations; Reinforced, Dampproofed Concrete Floor Slabs; Structural Steel Frame; Precast Concrete, Insulating, Roof Decking; Twenty Year Bonded Roofing; Lead Coated Copper Flashings; Aluminum Sash; Brick Facing with Cinder Tile Backing; Cinder Tile Interior Partitions; Plywood Panelling on walls of entrance vestibule, Wood floor in Physical Education Room; Asphalt Tile Floors in Class Room Areas; Acoustical Tile Ceilings; Steel Interior doors and Frames; Flourescent Lighting; Ninety (90) Plumbing Fixtures; Hot Water Heating System. Forced Ventilation System.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Cost</th>
<th>% of Total Cost</th>
<th>Cost Per Sq. Ft</th>
<th>Cost Per Sq. Ft</th>
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TOTAL VOLUME: 812,613 cu. ft.—TOTAL FLOOR AREA: 39,800 sq. ft.—CEILING HEIGHTS: Basement 8'-0"; First Floor 11'-4"; Second Floor 10'-1"; Shop 10'-10"; Physical Education 18'-1" Under Steel.

Irving W. Hersey Associates, A.I.A., Architects - Durham, N. H.
BLANCHARD STEBBINS, INC., MANCHESTER, N. H.
GENERAL CONTRACTOR
Wills & Hill
INCORPORATED

Representing

GENERAL BRONZE CORP.
(Permatite Aluminum, Bronze and Stainless Steel Windows and Curtain Walls)

CONCRETE PLANK CO., INC.
(Light Weight Nailable Concrete Roof Plank)

THE WILLIAM BAYLEY CO.
(Aluminum & Steel Windows, Curtain Wall Systems)

WILLIS STEEL CORP.
(Steel Double Hung Windows)

ABBOTTSFORD CO.
(Rolling Steel Doors)

MILWAUKEE STAMPING CO.
(Toilet Partitions)

Telephone HUBbard 2-6490

Chalk and Tack Board
by
Gotham Chalk Board and Trim Co.

Folding Gates
by
Western Wire and Iron Works
at
Woodbury High School, Salem
Littleton Elementary School
McClellan Elementary School, Rochester

New England Building Specialties Inc.
KENmore 6-2813
55 Boylston St. Boston, Mass.

FRANCIS P. CONNOR & SON, INC.

Plastering Contractor
for

St. Joseph’s School — Salem
Woodbury High School — Salem
Saltmarsh Building,
Pinkerton Academy — Derry
Pease A. F. B. School
St. Paul’s School — Concord
Sawyer Hall,
Colby Junior College — New London

12 John Street Dial TU 2-0451
NASHUA, N. H.

GRADE-AID

MODULAR MOBILE ALL STEEL CLASSROOM EQUIPMENT

GRADE-AID products have been installed or specified for the following New Hampshire schools:

<table>
<thead>
<tr>
<th>School Type</th>
<th>School Name</th>
<th>Architect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School</td>
<td>Unitarian Universalist Church School</td>
<td>Franklin, Alfred T. Granger Associates</td>
</tr>
<tr>
<td>Elementary School</td>
<td>Dalton School</td>
<td>Dalton, Alexander Majeski</td>
</tr>
<tr>
<td>Elementary School</td>
<td>Berlin School Addition</td>
<td>Berlin, Alexander Majeski</td>
</tr>
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<td>Elementary School</td>
<td>Raymond Elementary School</td>
<td>Raymond, Alexander Majeski</td>
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<td>Elementary School</td>
<td>Lisbon School</td>
<td>Lisbon, Alexander Majeski</td>
</tr>
<tr>
<td>Elementary School</td>
<td>Deer School</td>
<td>Deer, Perley F. Gilbert Associates</td>
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<tr>
<td>Elementary School</td>
<td>Bedford School</td>
<td>Bedford, Alexander Majeski</td>
</tr>
<tr>
<td>Elementary School</td>
<td>Keene School</td>
<td>Keene, John E. Haffner Associates</td>
</tr>
<tr>
<td>Elementary School</td>
<td>Palace School</td>
<td>Palace, Irving W. Hersey Associates</td>
</tr>
</tbody>
</table>

School Equipment Manufacturing Corp.
46 Bridge Street, Nashua, New Hampshire
Subsidiary of The Maine Manufacturing Company
"Serving New Hampshire schools and industry since 1874"
Salisbury Elementary School

DESCRIPTION:
Reinforced Concrete Foundations; Reinforced, Dampproofed Concrete Floor Slabs; Structural Steel Frame; Wood Roof Frame and Asphalt Shingles; Lead Coated Copper Flashings; Aluminum Sash; Brick Facing with Cinder Tile Backing; Cinder Tile Interior Partitions; Acoustical Tile Ceilings; Asphalt Tile Finished Floor; Steel Interior Door Frames; Fourteen Plumbing Fixtures Including Installation of Artesian Well Pump; Incandescent Lighting Fixtures; Hot Water Heating System; Forced Air Ventilation.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Cost</th>
<th>% of Total Cost</th>
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<td><strong>TOTAL COST OF BUILDING</strong></td>
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<td><strong>$0.54</strong></td>
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TOTAL VOLUME: 82,859 cu. ft. — TOTAL FLOOR AREA: 4,361 sq. ft.
— CEILING HEIGHT: 10'-0".

Irving W. Hersey Associates, A.I.A., Architects - Durham, N. H.

ARMAND ROUX CONSTRUCTION CO., LACONIA, N. H.

GENERAL CONTRACTOR
Sanbornton Central School

FACILITIES PROVIDED:
Three classrooms, health room, teacher’s room and enlarged kitchen facilities.

CONSTRUCTION DATA:
Concrete foundation, framed concrete floor slab, brick and cinder block exterior walls, cinder block interior partitions, asphalt tile floor finish, fiber tile ceiling, TRI-DEK roof sheathing on wood joists, 20 year, tar and gravel roof, aluminum windows, zoned hot water heating, exhaust ventilation fluorescent lighting.

TOTAL COST OF ADDITION $45,053.00
DATE OF BIDS: November 14, 1957.

Dirsa and Lampron, A.I.A., Architects - Manchester, N. H.
CARON CONSTRUCTION COMPANY, INC., MANCHESTER, N. H.
GENERAL CONTRACTOR
DESCRIPTION:
Reinforced Concrete Foundations; Reinforced, Dampproofed Concrete Floor Slabs; Structural Steel Frame; Precast Concrete, Insulating, Roof Decking; Twenty Year Bonded Roofing; Lead Coated Copper Flashings; Aluminum Sash and Curtain Walls; Brick Facing with Cinder Tile Backing; Cinder Tile Interior Partitions; Reinforced Concrete Vault for Town Office; Asbestos Tile Floors; Ceramic Tile Floors in Toilets; Acoustical Tile Ceilings; Steel Interior Doors and Frames; Incandescent Lighting; Twenty (26) Plumbing Fixtures Including the Sewer Disposal System and Part of the Artesian Pump Installation; Hot Water Heating System; Forced Ventilation System.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Cost</th>
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</table>

TOTAL VOLUME: 149,954 cu. ft. — TOTAL FLOOR AREA: 9,802 sq. ft. — CEILING HEIGHTS: Classrooms 10'- 2"; Activities Room (Under Steel) 18'- 0".

Irving W. Hersey Associates, A.I.A., Architects - Durham, N. H.

J. M. CONSTRUCTION CO., INC., MANCHESTER, N. H.
GENERAL CONTRACTOR
JAMES F. HOWE
PLUMBING and HEATING
Kezar Falls, Maine
Tel. Cornish 167-R
Plumbing - Heating
Ventilating
for
FARMINGTON HIGH SCHOOL
STRAFFORD ELEMENTARY
and
ELIOT, MAINE SCHOOL

J. M.
CONSTRUCTION COMPANY, INC.
John McGranahan, President
551 Valley St. Tel. NA 4-0291
MANCHESTER, N. H.

General Contractors
for
NEW STRAFFORD ELEMENTARY SCHOOL

TRI-STATE IRON WORKS
Steel Structures
Designed and Fabricated
ARCHITECTURAL and ORNAMENTAL
GULLY HILL ROAD, P. O. Box 99
Concord, N. H.

STEEL
for
SIMONDS HIGH and ELEMENTARY
Warner, N. H.
NEW ELEMENTARY SCHOOL
Strafford, N. H.

PHONE
Concord CA 4-4642
Manchester NA 3-7635
Agriculture and Science Building, Thetford, Vermont

DESCRIPTION:
Foundations—reinforced concrete; Exterior Walls—block, brick veneer with block back up, steel and glass curtain wall; Framing over Shop—longspan joists with steel deck; Framing over Labs and Classrooms—longspan metal deck; Roof—insulated, 20 year tar and gravel; Floor—dampproofed concrete slab on earth; Floor covering—vinyl asbestos tile except in shop; Interior partitions—painted concrete block; Doors and bucks—hollow metal; Ceilings—acoustical tile except in Shop; Lab furniture and cabinet work—wood, custom built; Heating—oil fired hot water, window line radiation with fresh air unit ventilators. Shop—overhead unit heaters; Lighting—fluorescent strip.

<table>
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<td>$.38</td>
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TOTAL VOLUME: 130,860 cu. ft.—FLOOR AREA: 8,324 sq. ft.—DATE OF BID: April 17, 1959.

W. Brooke Fleck, A.I.A., Architect, - Hanover, N. H.
HALL BROTHERS CO., RANDOLPH, VT.
GENERAL CONTRACTOR
"It's the Mayor - he laid the cornerstone then decided he liked the work"

Randall Company, Inc.
RUTLAND, VT.
2 So. Main St. Tel. PROspect 3-2791

Plumbing - Heating and Ventilating for
Thetford Academy Agriculture and Science Building
THETFORD, VERMONT

HALL BROTHERS COMPANY
12 No. Main Street
Randolph, Vermont
Phone 8-5644

General Contractor for
THETFORD ACADEMY AGRICULTURE and SCIENCE BUILDING
Thetford, Vermont

RELIABLE, CONSCIENTIOUS, ABOUT OUR BUILDING CONSTRUCTION
North Stratford Addition and Alterations to High School

DESCRIPTION:
Reinforced Concrete Foundations; Reinforced, Dampproofed Concrete Floor Slabs; Structural Steel Frame; Precast Concrete, Insulating, Roof Decking; Twenty Year Bonded Roofing; Lead Coated Copper Flashings; Aluminum Sash; Brick Facing with Cinder Tile Backing; Cinder Tile Interior Partitions; Asphalt Tile Floors in Toilets; Acoustic Tile Ceilings; Steel Interior Doors Frames; Incandescent Lighting; Twelve Decking; Twenty Year Bonded Roofing; Lead Plumbing Fixtures; New Boiler for Hot Water Heating System in New Addition and Existing Building; Forced Ventilation System.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Cost</th>
<th>% of Total Cost</th>
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<th>Cost Per C</th>
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TOTAL VOLUME: 180,730 cu. ft.—TOTAL FLOOR AREA: 10,981 sq. ft.
—CEILING HEIGHTS: Shop 10'-8"; Corridor 7'-2"; Classroom 9'-3"; Activities Room (Under Steel) 18'-0'.

Irving W. Hersey Associates, A.I.A., Architects - Durham, N. H.
KENNETH E. CURRAN, INC., LITTLETON, N. H.
GENERAL CONTRACTOR
Addition and Alterations to Symonds High and Elementary School, Warner

**DESCRIPTION:**
- Reinforced Concrete Foundations; Reinforced, Impervious Concrete Floor Slabs; Structural Steel Frame; Precast Concrete, Insulating, Roofing; Twenty Year Bonded Roofing; Leadted Copper Flashings; Aluminum Sash; Brick veneer with Cinder Tile Backing; Cinder Tile interior Partitions; Asphalt Tile Floors; Acoustic Tile Ceilings; Steel Interior Doors and Frames; Incandescent lighting; Thirty (30) Plumbing Fixtures; Heating—High School Building Extension of Existing Steam System; Elementary School Conversion of Steam to Hot Water for New Addition Only; Forced Ventilation System.

<table>
<thead>
<tr>
<th>ITEM</th>
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<td>$88,096.00</td>
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<td>$8.81</td>
<td>$0.692</td>
</tr>
<tr>
<td>UMB., HEAT., VENT.</td>
<td>17,150.00</td>
<td>15.5</td>
<td>1.72</td>
<td>0.134</td>
</tr>
<tr>
<td>ELECTRICAL</td>
<td>5,112.00</td>
<td>4.7</td>
<td>.51</td>
<td>0.04</td>
</tr>
<tr>
<td><strong>TOTAL COST OF BUILDINGS</strong></td>
<td><strong>$110,358.00</strong></td>
<td><strong>100.0</strong></td>
<td><strong>$11.04</strong></td>
<td><strong>$0.866</strong></td>
</tr>
</tbody>
</table>

TOTAL VOLUME: 127,309 cu. ft. — TOTAL FLOOR AREA: 10,000 sq. ft.
- CEILING HEIGHTS: Elementary School 9'-3"; High School Classrooms 9'-3"; Shop 12'-4".

Irving W. Hersey Associates, A.I.A., Architects - Durham, N. H.

ANDRE COURCHESNE, MANCHESTER, N. H.

GENERAL CONTRACTOR
ADDITIONS & ALTERATIONS TO
ELEMENTARY SCHOOL BUILDING
MILTON, N.H.

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