EDUCATIONAL SPECIFICATIONS

NORTH HAVEN MIDDLE SCHOOL
GRADES 6 – 8

North Haven Public Schools
North Haven, Connecticut

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NORTH HAVEN MIDDLE SCHOOL

Preface

The purposes of the Educational Specifications, which are a vital part of the application approval procedure required by the State Department of Education, are intended for the following

- For the educational agency to justify the educational need for the proposed school building project

- For the educational agency to describe the instruction activities which a proposed school building project is to support and the types of spaces which will best accommodate program requirements

- For the State Department of Education to determine the nature, scope, feasibility and funding level of the proposed school building project

- For the fulfillment of the legal definition of educational specifications in C.G.S. Section 10-287c-1 (a) of the Administrative Regulations for building grant application:

> "a description of the general nature and purpose of the proposed school building project, which may include the applicant's long range educational plan and the relationship to the proposed project to such plan; enrollment data and proposed project capacity; the nature and organization of the educational program; support facilities; space needs; accommodation for educational technology; specialized equipment; and site needs, and any other supporting documents deemed necessary by the commissioner."

The Educational Specifications for a project such as this requires a great number of decisions that are sometimes far-reaching and often subject to modification. These specifications are subject to further refinement and revision until such time as the selected architect prepares bid documents.

While the specifications provide the foundation for a successful school design, the continued communications between the selected architects, the Building Committee and the Board of Education and staff is critical to the success of the building project. In this sense, the specifications create an opportunity for continued dialogue concerning the needs of the school that will lead to the most effective design.

Mission

The primary mission of the North Haven Middle School is to offer an educational program of excellence designed to meet the needs of youngsters entering a new age of development between the elementary grades and high school. It is a time of life of rapid physical, emotional, social and intellectual changes. North Haven Middle School will strive, together with the community, to provide equal opportunities to all students and develop their maximum potential, recognizing that each student is truly an individual with unique abilities and needs.

The educational programs at North Haven Middle School will help students acquire the attributes necessary for success in the complex, technological, information based, and rapidly changing world. Built on the belief that each child can and should experience the pleasure of learning and creating, the new building will provide opportunities for students, so that within the context of their age and individual abilities, they will:

- Acquire the ability to think and solve problems cooperatively as well as independently, and to use imagination and creativity to solve problems, create new knowledge, respond to new and unexpected information, and forecast consequences

- Acquire advanced knowledge and develop specific skills in a variety of academic areas, including reading, writing, calculating, and thinking

- Experience personal success, develop self-esteem and respect for others, and acquire interpersonal skills and habits of personal health and fitness

- Learn constructive and creative use of the tools of modern technology including the literacy skills

- Acquire the attributes necessary to become effective, problem-solving citizens of their changing communities and world

North Haven Middle School Mission Statement

It is the mission of North Haven Middle School, together with the community, to provide a comprehensive, creative and challenging educational experience that develops independence, social-emotional growth, and an understanding of a diverse society.

Educational Goals

North Haven Middle School has established goals and objectives that require periodic review in order to encourage continued growth of the administration, teaching staff, and student body. These goals and objectives are consistent with state and federal statutes and take into consideration the desires of the community. Additionally, they are defined in such a way that the degree of attainment in both the short and long range basis is understandable and measurable. The school district shares with the home and community the responsibility for the education and growth of each student and strives wherever possible to assist each student in achieving his or her goals. Goals for North Haven Middle School include:

- To develop in students the essential skill of lifelong learners
- To offer students academic, exploratory, and activity programs designed to meet the needs of early adolescents
- To provide an organizational pattern, which includes small communities for learning, interdisciplinary teaming, flexible grouping and integrated approaches to instruction.
- To foster an educational atmosphere that stimulates the growth of each student's personal responsibility, creativity, talents and gifts
- To assist students in learning, developing, and practicing effective interpersonal skills.

Educational Objectives

In order to direct and maintain a positive learning environment, the North Haven Public Schools have developed Educational Objectives that help focus attention and action on those areas most critical in the educational program. These objectives are not all-inclusive, but represent areas that are important for the continuing development of excellence in education at North Haven Middle School.

Meeting Student Needs

- To provide a program in which each student receives fair treatment and support in his or her quest for personal educational development
- To provide an atmosphere that motivates each student to realize his/her learning potential
- To provide a program in which each student can acquire a beneficial general education, including, but not limited to, competency in English, mathematics, science, and social studies
- To encourage students to participate in the full range of co-curricular activities

- To provide each student with an opportunity to attain the skills of effective communication, including the expression of ideas and feelings, through reading, writing, speaking, listening and critical technological literacy

- To provide a program in which each student can develop skills in critical and objective thinking, and in research, analysis, planning and evaluation processes

- To encourage in each student a feeling of pride in work and accomplishment, a sense of self-worth and personal dignity, and to develop an awareness of physical and emotional growth

- To encourage each student to learn the values of good citizenship and character, social cooperation, physical development and aesthetic appreciation, and to appreciate a pluralistic society

- To explore opportunities for each student to gain an awareness of a variety of career possibilities, and to be offered appropriate preparation and guidance.

- To be attentive to the unique educational needs of all students, including those with special needs

- To provide counseling services to students with special personal needs

Curriculum and Program of Instruction

- To provide a comprehensive, inter-disciplinary educational program that includes a range of learning opportunities and develops competencies in life skills

- To provide an instructional program suitable for each student, with academic guidance as needed

- To provide opportunities beyond the normal curricula structured programs for students at all levels including physical, intellectual and creative

- To continue to raise the standards of education in North Haven Middle School through systematic review and evaluation of all programs

- To use current technology such as computer science and graphic arts in a manner that will assist every student with employment opportunities or further education

Educational Staff

- To treat employees fairly and encourage open communication and mutual support for respected endeavors

- To encourage staff members to continue their professional growth, the enhancement of their skills and competencies and to offer opportunities for

such professional growth

- To encourage staff members to participate in developing the educational program and measuring its effectiveness

- To encourage in-service training programs designed to assist teachers, administrators and guidance counselors in dealing with the social, emotional, and academic needs of students

- To encourage teachers and building administrators to meet regularly and discuss educational and professional areas of mutual interest and concern

- To encourage communication between, and among, grade levels, schools, and departments

School-Community Communication

- To encourage community participation in school programs

- To offer staff, students, parents and community access to information concerning school affairs, so that common purposes may be understood and implemented

- To foster the understanding that schools exist for the benefit of all members of our society and that the whole community has an interest in the effectiveness of our schools

- To review annually the goals and objectives with the community and school staff to be sure that they are still viable and to promote measurable progress toward their achievement

Environment and Resources

- To develop a comprehensive, long-range plan for the most effective use of the schools and grounds

- To encourage the community to provide the resources necessary to meet the demands of a suitable program of education consistent with the Board's goals

- To provide that the physical condition of the schools supports the Board's educational and instructional objectives

- To develop a school facility that meets energy efficiency, use of natural lighting and recycled materials in design and construction.

Project Rationale

For the past several years the Board of Education and the town's First Selectman's Office have expressed concern about the overall physical condition of North Haven Middle School. Constructed in 1960, and renovated in 1986, the current facility does not have the capacity to meet current educational needs and building code requirements. The renovations in 1986 covered code upgrades and painting. The existing roof on the structure exceeds 25 years of age and is in need of total replacement, a project estimated to cost in the neighborhood of $3,000,000. The building's heating system is also in need of replacement. In general, the condition of the middle school is not conducive to a good, middle school program. The building's current capacity for present and future programming is limited.

The planning and ultimate construction of the new school or "renovate to new the existing building must provide the following educational needs:

- Improve electrical wiring increasing the availability of instructional technology necessary for 21st century classrooms, which is currently severely limited and inadequate to meet the learning needs of today's young adolescent.

- Design science classrooms to meet requirements of the STEM (Science, Technology, Engineering and Math) initiatives called for by state and federal governments.

- Upgrade antiquated science labs.

- Design adequate space for whole school activities to include an updated, enlarged auditorium, cafeteria and other common spaces.

Long Range Plan

The design and construction of a middle school to replace the existing school facility will complete the North Haven School Districts long range educational building plan of housing elementary students for pre-K to grade 5, middle school students in grades 6 through 8 and, high schools in grades 9 through 12. Replacing the aging current middle school with a new middle school will allow North Haven Public Schools to achieve the following:

- Improve academic programs for students in North Haven
- Ensure safe and appropriate learning environments of students
- Incorporate current teaching technology into the classroom curriculum.

Enrollment Data

The school district enrollment continues to decline slightly with an enrollment of 832 students in grades 6 through 8 in 2010-11 and 797 students in 2011-12. Projected enrollment over the next five years indicates enrollment in grades 6-8 will be approximately 700 students.

An enrollment report completed by Dr. Peter Prowda in April 26, 2012 estimated "an enrollment decrease of 18-19 percent going from 3,548 students in 2011 to about 2,890 students in 2021". In addition, the report projects an "8-year peak enrollment for school construction purposes will come in 2013 to 773 students".

The Project

Building Space Requirements

The new (or renovate to new) North Haven Middle School is to be constructed to house a student population of 800 students in grades 6 through 8 even though square footage eligibility from the State of Connecticut school construction grant is based on an estimated student enrollment of 773 which calculates eligible reimbursement square footage of 125,750. The current middle school consists of 142,352 square feet while this educational specification requests a new building of approximately 132,000 square feet that exceeds the allowable size for grant reimbursement by over 6,000 square feet. Classroom and program space areas identified below are estimated and may be revised as the design work progresses.

Facility Design

The school design is to support the mission and goals of the North Haven School District. As such, classrooms are to be organized by grade level.
The core academic curriculum for 6th, 7th and 8th graders includes language arts, mathematics, science, social studies, foreign language, art, music and physical education. Classrooms for 6th graders should be segregated from 7th and 8th graders into grade level teams which should provide a transition from self-contained classroom of the elementary school to the broader exploratory grades 7 and 8 program of the middle school. Classrooms should be grouped into teams of four – language arts, math, science, social studies and a general room each for world language, (reading, and special education).

Grade level teams should be in distinct and separate areas of the building. The ideal structure of team classrooms is for the social studies, reading and language arts and the mathematics and world language classrooms. The science class-labs, math and general classrooms should be adjacent to the language arts and social studies rooms. Grade 6 students leave the instructional cluster for art, physical education, music and other exploratory experiences.

School design should support the North Haven Public Schools mission, goals, school purpose and educational specifications.

- The design of the facility should support flexible use and be easily adaptable for changing educational needs and programs.
- The facility design should support the use of technology in a manner similar to other North Haven schools and be easily adaptable for wireless or other emerging technology throughout the building.
- The design of the facility should support the developmental needs of grades 6

through 8 students through the creation of small, grade-level specific learning communities arranged in classroom teams around the school's core facilities.

- The design of the facility should support flexible use and be easily adaptable for changing educational needs and programs.
- The facility should be designed to encourage and invite community access and use in a manner that minimizes disruption to the educational activities and spaces.
- The outdoor spaces should be designed as an extension of the educational program and the athletic/recreational programs offered by the town.
- Various sizes of meeting spaces should be distributed throughout the facility for flexible educational and community use.
- Indoor facilities should allow for maximum exposure to natural light and view of the natural setting, when appropriate.
- All areas should include acoustical treatment and should be designed to minimize transmission of sound.
- The design should provide for a year-round comfortable teaching and learning environment, including air-conditioning, climate control, air circulation and appropriate lighting.

It is important to note that the space requirements are for an anticipated enrollment for students in grades 6, 7 and 8. More important the juxtaposition of educational and related spaces in the building to support the educational mission and administration of the building will be determined through the early design stages of the project once a permanent design professional is retained by the Building Committee.

Basic Instruction /Regular Classrooms

General Classroom Requirements

The basic features of the general classroom are presented here and should be considered standard for all areas. More detailed specifications by subject area follow.

Regular classrooms of approximately 800 square feet should be designed to allow flexibility for different teaching/learning styles such as group work and independent study. Instruction in these rooms occurs in large and small groups as well as on an individual basis and includes the use of textbooks, smart boards, whiteboards, teacher-made materials, and a variety of media and technology, along with demonstrations, lectures, discussions, projects and guided and independent practice. General classrooms should be equipped as listed below, with additional equipment or room modifications, if required, specified under the appropriate section.

1. Classrooms should contain furniture and equipment most of which are generally movable and/or adjustable: student worktables, desks, chairs, teacher desk, mobile teacher presentation desk, teacher worktables and chairs.

2. Classrooms should contain a variety of storage facilities – lockable cabinets with file drawers, vertical storage coat closet, lockable storage closets, open shelving for books and other materials counters along one or more walls. Storage facilities may be built-in or movable.

3. Classrooms should contain a wide array of presentation modes: white boards, smart boards, (wall mounted) map rack track, classroom and hallway display boards, recessed projection screens, shelves for displays of student work, tack-board/mounting strips above whiteboards and U.S. flag.

4. Classrooms should contain the most state of the art student and teacher computers/or tablets enough to support teaching and learning in the year in which the school opens its doors. Computers and other appropriate technology tools should be available to all students for instruction and testing that is required by the State of Connecticut through the Smarter balance testing plan. Classrooms should also contain teacher technology-based presentation stations, i.e., document camera for instructional presentation on white boards, a wall mounted "flat screen" TV monitor, technology (i.e. computer or tablet) tables, overhead speakers which provide sound distribution throughout the room, and ample electrical outlets around each room. Also included within each classroom will be Smartboard technology with Smart response.

5. As technology continues to evolve and influence education, a technology study should be done during the building phase to ensure that the most state of the art technology is built into the school. Technology should be incorporated into every learning space and into all curricula. Secondly, infrastructure must be designed in such a way to allow access for

maintenance and upgrades as technology continues to evolve.

6. Classroom technology needs to be connected to a local area network (LAN) and wide area network (WAN) and be able to function in a wireless fidelity (WIFI) environment.

7. Instructor stations will be located in the front of the classroom and will have the following components: lap-top computer with DVD drive and docking station, document camera, telephone, sound amplification system with ceiling mounted speakers, projection screen, and touch screen control monitor panel.

8. Classrooms should use appropriate flooring throughout with industry standard product that is "glue-less", mold-mildew resistant and hypoallergenic. Classrooms should also have sun control blinds and window screens, lighting parallel to the front and back of rooms, standard acoustical ceilings, and two means of access/egress. Wall materials should be easy to clean and maintain.

9. Lavatory facilities and water fountains should be located within each grade level team. Lockers, large enough for the backpacks and coats of students in this age group, should be adjacent to classrooms.

10. Classrooms should be located to minimize travel time and minimize disruption of other general instructional classrooms for students both within the grade level cluster and to special areas including guidance suite, computer labs and the Library/Media Resource Center.

11. The front, side and back walls of the rooms should serve as presentation areas.

12. The location and configuration of all classroom educational technology equipment and systems will be consistent for all classrooms and laboratories to allow all teachers to use with ease and confidence.

13. Instructional computers used by the teachers should be similar to those in the classrooms. The similarity of technology throughout the school provides uniformity of functionality for maintaining the units and containing costs.

The classrooms should be large enough to accommodate seating for 20-25 students, a file cabinet, and a teacher station large enough to accommodate the equipment described above. Whiteboards will be located on at least two walls and one Smart board in each classroom. Also included should be lockable storage for teacher's personal items, storage shelves for books, and tack boards.

The 6th grade students are to be physically separated, to the extent possible, from the 7th and 8th graders. In addition, the 6th graders are to be grouped into 3 grade level teams consisting of 4 classrooms per team. The 7th and 8th grades will each have 3 grade level teams with 4 classrooms per team.

Language Arts/Reading/English

1. Program Objectives

The focus of the literacy program in grades 6-8 is to continue to develop reading, comprehension skills and strategies, to nurture wide reading for all students, and to develop student expertise in writing, including grammar and usage. In these grades, students also develop awareness, appreciation, and critical evaluation of literature and improve their skills in speaking, listening, and viewing.

2. General Description

Instruction in this area is often integrated with other subjects and tied closely to the library/media program for the encouragement of wide reading and instruction in information-accessing and research skills. The reading strand is designed to reinforce strategic reading and to provide students with the skills necessary to read a variety of texts independently for many purposes.

The writing strand of these grades concentrates on helping students become more skillful with the essential traits of writing (focus, organization, elaboration, and fluency) and provides direct and sequential instruction in conventions (spelling, grammar, and usage). Working both individually and in teams, students in language arts have wide opportunities to read, write, listen, view, speak, report, share, do projects, and make presentations.

All English/ language arts classrooms should have a minimum of 800 square feet. All reading classrooms should have a minimum of 400 square feet to host 10-12 students.

3. Activities to be Housed

The activities in language arts include large and small group instruction and individual seatwork. Students will read, write, discuss, do word processing, present, share, debate, dramatize, and conduct research, applying skills and content learned using materials available in the classroom, as well as through a wide range of technology resources (voice, video, and computer technology).

4. Persons to be Housed

Persons to be housed include language arts teachers, and up to 25 students. Other teachers or adjuncts (i.e., a reading consultant, special education teacher or tutor, paraprofessional) may share or support instruction with individuals or small groups within the regular classrooms.

5. Furniture/Equipment

See "General Classroom and Technology Equipment" Lists.

6. Special Requirements

All classrooms for the teaching of language arts and reading should be wired for voice, video and data retrieval and transmittal and have ample electronic outlets and ensure to include state of the art technology to enhance teaching and learning Reading classrooms should be wired similar to language arts classrooms. These classrooms require significant book storage, as well as flexibility in classroom design and specific reading areas.

Mathematics

1. Program Objectives

The focus of the mathematics programs in grades 6-8 is to continue to develop student skills in problem solving and computation as applied to a variety of mathematics topics including numbers, geometry, measurement, patterns, graphing, data analysis, probability, statistics and algebra.

2. General Description

In these three grades students develop their understanding and application of mathematical concepts through investigation of problems and direct instruction. A focus of the mathematics program is for students to communicate mathematically – to explain their strategies and reasoning in order to deepen their understanding. Topics presented in these grades are listed above. Opportunities for mathematical course acceleration are provided for selected students. Each mathematics classroom should include a minimum of 800 square feet.

3. Activities to be Housed

Activities to be housed include large and small group instruction, as well as individual and small group practice. Students read, explore using manipulatives, problem-solve, discuss, make models, measure, diagram, graph, and research, compute, and practice and apply mathematical skills learned. Many hands-on materials are used including hand-held calculators and computers.

4. Persons to be Housed

Persons to be housed include mathematics teacher and up to 25 students. Other teachers or adjuncts (i.e., a reading consultant, special education teacher or tutor, paraprofessional) may share or support instruction with individuals or small groups within the regular classrooms.

5. Furniture/Equipment

See "General Classroom and Technology Equipment" Lists. In addition, the mathematics classrooms will require whiteboards ruled with grids for rectangular coordinates, flat storage for large charts and drawings, and magnets on a steel whiteboard for graphing point and line.

6. Special Requirements

All classrooms for the teaching of mathematics should be wired for voice, video and data retrieval and transmittal and have ample electronic outlets. Ensure to include state of the art technology to enhance teaching and learning.

Science

1. Program Objectives

The focus of the 6-8 science program is to provide integrated scientific explorations in earth, life, and physical science through which students learn essential scientific understandings and become fluent with scientific inquiry and process. As students grow more skillful, they are able to generate scientific problems, conduct investigations, and communicate results. Middle school science tends to be more project-based with a wider variety of activities and focus less heavily on individual lab work.

2. General Description

At each grade, the science program emphasizes the integrated nature of scientific study while engaging students in hands-on and inquiry-based instruction to promote and sustain student interest. The science curriculum advances to progressively more complex investigations, requiring increasingly sophisticated skills. Earth science topics include the water cycle and landforms. Science skills are emphasized in all three grades including an introduction to the scientific method, observing, inferring, classification, and microscope work. Performance assessment tasks related to essential understandings measure student learning in each unit of science.

Science classrooms/laboratories should include two distinct areas – one for classroom instruction and one for lab activities. Each science classroom should include 1,200 square feet of instruction space. There needs to be a total of three science labs for sixth grade and six (6) science class-labs for 7th and 8th grade students. The classrooms should be set up as a combination classroom/laboratory divided layout. One side should be the laboratory stations which will need to fit small groups of up to four students. A general classroom set-up within the class lab is also required so students can go back to individual desks from laboratory work stations and stools. This portion of the classroom should separated from the laboratory stations by a half wall in the center of room. The design should allow for use as a general classroom when not in use as a science class lab.

3. Activities to be Housed

Activities include large and small-group instruction, individual and small group class work, and laboratory investigations. Students will read, write, take notes, discuss, compute, problem solve, research, observe, investigate, demonstrate, experiment and share findings, and otherwise practice and apply science concepts learned utilizing both materials available in the classroom as well as through technological resources (i.e. voice, video and computer and technology). More specifically, students may learn science through a range of experiences such as oral presentations, hands-on experiments, use of scientific materials, models, specimens, and live animals (i.e., fish, guinea pigs, gerbils, salamanders, snakes, etc.) audiovisual presentations, observations including the care and observation of animals, and varied project work.

4. Persons to be Housed

Persons to be housed include science teacher and up to 25 students. Other teachers or adjuncts (i.e., a reading consultant, special education teacher or tutor, paraprofessional) may share or support instruction with individuals or small groups within the regular classrooms.

5. Furniture/Equipment

The science classroom should be designed as "universal labs" to accommodate multiple science curricula providing opportunities for long-term, multi-disciplined student projects. Sciences are becoming more integrated with other disciplines and should be placed in a central location instead of in an isolated wing of the facility.

Classrooms should be equipped with a teacher demonstration table with a side sink and a detachable overhead observation mirror. The demonstration table should contain gas, water, air and electrical outlets and have a chemically resistant top.

Student furniture should include desks for large group instruction and lab tables/counters for experiments, with several types of storage above and below them. Counter height should accommodate students in this age range including handicapped height student station, natural gas or individual gas cartridges stored in locked cabinets and water should be provided in the lab counters. Counter tops should be chemically resistant. Student laboratory workstations should be on one side of the classroom, leaving the other side of the room for desks and chairs to accommodate full class presentation and general classroom use. The two sections should be separated by a half wall. Fume hoods should be considered if experimentation in science classrooms requires ventilation to the outside of the building.

Other requirements in the science room should match and extend that of the general classroom including: smartboard, whiteboards, wall surface/display boards, networked computer terminals and printers, computer tables, chemical shower/eye wash with floor drain, at least 8 sinks with rubber mats, hot and cold water at student heights in all lab and demonstration spaces, adjacent counter space, base cabinets with student level counter space, shelves, and lockable wall cabinetry above cabinets, storage cabinets with racks for storage of ongoing experiments, covered duplex electrical outlets with ground fault interrupter protection at frequent intervals around the perimeter of the room, recessed electrical floor outlets for computers, a wall jack for connections to both a LAN and WAN at each classlab station, WIFI access in all classrooms, and other electronic equipment, adequate ventilation, and required safety equipment (goggles, fire extinguishers, first aid kit, blanket, etc.) Floors near laboratory workstations should be spill-resistant and easily cleaned, and lighting should be designed so that it is uniformly glare-free and the room has darkening capabilities (all or partial).

Each science lab must be equipped with small science equipment (i.e. microscopes, kits, glass containers, weather units, etc.) to meet the curriculum needs for 6-8 science instruction.

Display space should be available in the room – a shelf for models, tackpanels, and whiteboards behind the demonstration table.

The science classroom should also contain plant habitats to be developed under natural and artificial lights, as well as herbariums, aquariums, and other animal housing, for which appropriate environments should all be provided. Easy access to a nature area on the site should be provided, and the nature site should be considered an extension of the science program.

6. Special Requirements

State of the art technological capability is essential to provide for experimentation including simulation, observation, measurement and data collection. Science classrooms, like general classrooms, should be wired for voice, video and data retrieval/transmittal. Each classroom should also be equipped with emergency shut-off controls for water, natural gas (if included in classrooms) and electric services near teachers' stations and close to doors, but not easily accessible to students. Adequate walk-in closets with adjustable shelving, storage cabinets (including one lockable, chemical resistant cabinet) should be adjacent to science classrooms. To the extent possible, southern daylight exposure for life science experiments and

plant growth is preferable.

Social Studies

1. Program Objectives

The overall objective of the social studies program is to assist students in understanding world cultures and increase their awareness of roles in society at large. It is expected that students will gain knowledge of history, civics and government, geography and economics; understand the interaction between and among history, the social sciences and humanities; and apply that knowledge and understanding as responsible citizens.

2. General Description

Instruction in this area is often integrated with other subjects and tied closely to the library/media program for the encouragement of wide reading and instruction in information-accessing and research skills. The reading strand is designed to reinforce strategic reading and to provide students with the skills necessary to read a variety of texts independently for many purposes.

All social studies classrooms should have a minimum of 800 square feet.

3. Activities to be Housed

The activities in social studies include large and small group instruction and individual seatwork. Students will read, write, discuss, word process, present, share, debate, dramatize, and conduct research, applying skills and content learned using materials available in the classroom, as well as through wide technology resources (voice, video, and computer).

4. Persons to be Housed

Persons to be housed include social studies teacher and up to 25 students. Other teachers or adjuncts (i.e., a special education teacher or tutor, paraprofessional) may share or support instruction with individuals or small groups within the regular classroom.

5. Furniture/Equipment

See "General Classroom and Technology Equipment" Lists.

6. Special Requirements

All classrooms for the teaching of social studies should be and wired for voice, video and data retrieval and transmittal and have ample electronic outlets. Each classroom is to include state of the art technology to enhance teaching and learning. These classrooms require significant book storage, areas to hang world maps, and flags as well as flexibility in classroom design.

It is anticipated that the following regular classrooms will be needed as follows:

Classrooms	Approx. Sq. Ft.	Grade Level
9 3	800 1,200	Grade 6 Grade 6 Science
2 6 2	200 800 400	Storage rooms in between classrooms Language Arts Grades 7 & 8 Reading Rooms Grades 6-8
6	800	Social Studies Grades 7 & 8
6	800	Math Grades 7 & 8
6 3	1,200 200	Science Grades 7 & 8 Storage rooms in between classrooms
1	400	6-8 Alternative Education classroom

World Language

1. Program Objectives

The world language curriculum provides learning opportunities for students to develop basic speaking, writing and verbal proficiency in a world language. Additionally students will gain an awareness of global interconnectedness and an appreciation of other cultures.

2. General Description

To facilitate this program, a Language Lab with individual learning stations will be required. This classroom will accommodate the latest recommended technology to provide guided-individual instruction including immediate feed-back with the ability to adapt to each students' workstation.

3. Activities to be Housed

The activities in world language include large and small group instruction and individual seatwork. Students will read, write, discuss, present, share, applying skills and content learned using materials available in the classroom, as well as through reinforcing skills in a world language lab.

4. Persons to be Housed

Persons to be housed include world language teacher and up to 25 students. Other teachers or adjuncts (i.e., a special education teacher or tutor, paraprofessional) may share or support instruction with individuals or small groups within the regular classrooms.

5. Furniture/Equipment

See "General Classroom and Technology Equipment" Lists.

6. Special Requirements

All classrooms for the teaching of world language should be wired for voice, video and data retrieval and transmittal and have ample electronic outlets and ensure to include state of the art technology to enhance teaching and learning. The world

language lab will require special electrical service for the individual student stations and the demonstration teacher unit. These classrooms require significant book storage, world maps, flags as well as flexibility in classroom design.

Classrooms	Students	Approx. Sq. Ft.	Subjects
6	20-25	800	World Language Classroom
1	25	1,000	World Language Lab

Specialized Instructional/Classrooms

Computer/Technology

1. Program Objectives

The primary focus of the Computer/Technology program is to develop in students an understanding of technology through the study and application of materials, tools and process in solving problems in communication, manufacturing, structural and transportation system. Computer/Technology classroom labs will also be used to support standards in content areas (including language arts, math, science, and social studies) for research, collaboration and production of student work.

2. General Description

To facilitate computer/technology programs, the computer lab should be equipped with a minimum of 25 student technology stations including printer/copiers. This lab classroom will accommodate the latest recommended technology to provide guided-individual instruction including immediate feed-back with the ability to adapt to each students' workstation.

3. Activities to be Housed

The activities in the computer/technology labs include group instruction using the latest technology and individual seatwork. Students will become proficient in the use of state-of-the-art technology and its applications throughout the curriculum subject areas.

4. Persons to be Housed

Persons to be housed include a teacher and up to 25 students. Other teachers or adjuncts (i.e., core academic teacher, a special education teacher or tutor, paraprofessional) may share or support instruction with individuals or small groups within the regular classrooms.

5. Furniture/Equipment

See "General Classroom and Technology Equipment" Lists.

6. Special Requirements

The classroom/lab for computer/technology should be carpeted and equipped with individual technology stations and adequate electrical outlets for 25 student

technology workstations and a teacher workstation. This lab should be equipped with technology equipment listed in the General Classroom and Technology Equipment section of this report.

Classrooms	Students	Approx. Sq. Ft.	Subjects
1	25	1,000	Computer Classroom/Lab

Visual Arts

1. Program Objectives

The program objective of the art education program is to help students develop an awareness, understanding and appreciation of art techniques and processes, art media, art history and to emphasize aspects of visual communication and critical thought. Students at all grade levels will produce, recognize, analyze and appreciate a wide range of art in a variety of media to produce creative work and self-reflection.

2. General Description

To facilitate visual arts programs, three classrooms should be equipped with a 25 student seating stations designed for art programs and a presentation area for the teacher. The use of indirect and natural lighting is an important consideration in the design of these spaces. Computer/technology equipment indicated in the general classroom list should be included in these spaces for animation and visual arts programs.

3. Activities to be Housed

The activities in visual arts classrooms include group instruction at large art tables and individual student's workspaces for small projects. Programs include painting, drawing, sculpture, pottery, animation, and photography.

4. Persons to be Housed

Persons to be housed include art teacher and up to 25 students. Other teachers or adjuncts (i.e., a special education teacher or tutor, paraprofessional) may share or support instruction with individuals or small groups within the regular classrooms.

5. Furniture/Equipment

See "General Classroom and Technology Equipment" Lists and "Specialized Equipment" List.

6. Special Requirements

All visual arts classrooms/labs should have hard surfaced floors with drains and an emergency eyewash unit. Adequate base and upper classroom cabinets sized to store classroom projects and two large sink is required in these spaces. Separate storage areas adjacent to the classroom for large projects and over-sized art supplies should include drying racks and large poster board size vertical project storage. A separate kiln room meeting all building and fire codes should be adjacent to the classroom equipped with pottery wheels.

Performing Arts

Music

1. Program Objectives

The curriculum for the music program is three pronged: general music, band and choral. The focus of the program is to develop in students an appreciation and knowledge of music to increase their enjoyment, critical analysis, creativity and cultural awareness. Acoustical treatment in these classrooms is essential to provide proper sound qualities for this program.

2. General Description

To facilitate music programs, one classroom should be equipped with a student capacity of up to 25 students. The classroom must include acoustical treatment with seating that is movable and flexible. A state of the art stereo sound system controlled from the teacher workstation, adequate musical instrument storage and state of the art computer/technology equipment indicated in the general classroom and specialized technology lists should be included in these spaces. This lab should be equipped with a student capacity of up to 25 students. In addition, a band room with storage is needed for students to learn and practice a wide variety of band instruments. Also, a choral room is needed for student instruction for singing. These rooms should be equipped to hold 60-80 students.

3. Activities to be Housed

The activities in music classrooms include group instruction and individual students practice spaces. Programs include band, chorus, general music studies and instrumental practice space.

4. Persons to be Housed

Persons to be housed include music teacher and up to 80 students as stated above.

5. Furniture/Equipment

See "General Classroom and Technology Equipment" Lists and "Specialized Equipment" List.

6. Special Requirements

Instrument storage (with shelving and storage for instruments, large equipment and sheet music) and separate storage for band uniforms and choral robes should be located immediately adjacent to the music rooms.

Practice rooms should be located adjacent to the band room.

Classrooms	Students	Approx. Sq. Ft.	Subjects
3	20-25	1,000	Art Room
2		250	Art Room/Kiln/Storage
1	20-25	800	General Music classroom
1	20-25	800	General Music lab
1	60-80	1,600	Band Room with storage
2	1-2	80	Practice Rooms
1	60-80	1,200	Choral room with portable risers

Applied Education

1. Program Objectives
The program objective of the applied education program is to give students an opportunity to explore, learn and to gain an understanding of applied technical and career education. These types of exposure will assist students as they prepare for high school.

2. General Description.
Applied Technology Education should use a modular and provide students with access to a variety of technical equipment and explorations through a laboratory.

3. Activities to be housed
Projects can include, but not limited computer drawings (CAD), architectural drawings, computer graphic designs, and computer animations. In addition, the curriculum would include a food and nutrition component where students will learn the components of cooking and nutrition

4. Persons to be housed
Persons to be housed include a teacher and up to 25 students in both the classroom setting and the labs.

5.Furniture/Equipment
Laboratories will include computer labs, a metal and wood shop and kitchen labs. The applied technology program should be a "hands-on" technology experience with equipment and software at each module. Students can complete different kinds of projects including wood and metal design. See "General Classroom and Technology Equipment" lists and "Specialized Equipment" lists.

This kitchen classroom space should be equipped with 3 or 4 student kitchen stations and one teacher station.

6. Special Requirements
The laboratories listed below should have proper flooring to support a variety of technology and student based projects for use.

Classrooms	Students	Approx. Sq. Ft.	Subjects
1	20-25	1,200	Applied Ed Laboratory-Project Room
1	20-25	1,000	Consumer Science-Kitchen

Special Education Resource Rooms

It is anticipated that within the student population there will be special need students who, to the extent possible, will be mainstreamed in the regular course of studies. Resource rooms strategically placed within the building will serve the 3 grades to be housed in the school.

Special Education Classrooms
Special education classrooms should include an intensive learning classroom, and a therapeutic classroom with adjacent therapeutic room. In addition, 1 classroom/lab for life-skills training with cooking area, that is handicapped accessible. This space should include a microwave, stove with controls located in the front of the unit, separate oven, refrigerator, sink a washer and dryer and adequate storage. This space must have direct access to a handicapped toilet.

Resource Rooms
The emphasis of the special educational program is the placement of special needs students in the least restrictive environment. Student learning objectives are with a prescribed curriculum at rates and depths appropriate to their potential and to develop skill levels where possible. Most students will be mainstreamed so that they may learn to function successfully in a regular school setting. Some student, due to their learning disabilities, will be placed in a self contained classroom.

Classrooms	Approx. Sq. Ft.	Subjects
1	800	Intensive learning services classroom
1	1,500	Life Skills Lab
3	500	Special Education Classrooms
1	700	Therapeutic classroom with adjacent therapeutic room

Library Media Center

The Library Media Center is a vital supplement to the school and supports the educational mission. Its location should be easily accessible to all grade levels Both students and staff will develop the ability to use information effectively by fully integrating the use of print and non-print resources in all curricula areas. A computer area adjacent to the library provides educational support and complements the focus of the Library Media Center.

Other spaces to support the Library Media Center include:

- Copy Room – to house a copier, supplies and space for processing large quantities of copies

- Office and Workroom – to provide shelving, tables, chairs and computer workstations. This room will be used to process new materials.

- General Storage – to house consumable supplies and equipment.

Area/Description	Approx. Sq. Ft.
Reading/Research Areas/Stacks	2,300
Project/Group Workroom Office/Workroom/Processing/Copying	200 200
Computer Area off library	1,000
Storage	200

Physical Education/Gymnasium

Physical Education/Adaptive Physical Education

The objectives of the educational program in physical education is to develop all students' health and well being by helping them to acquire lifetime physical fitness, recreation, sports and adventure-based activities. Health education is included as part of the curricula and provides opportunities for students to acquire the knowledge, attitudes and skills for maintenance of good personal health.

The gymnasium is to be divided into two teaching stations with a retractable wall divider. The main gymnasium must include adequate basketball nets that can be automatically lowered or raised, floor mounts for various sports nets, seating that does not obstruct play/court areas, handicapped seating area and floor stripping for all identified sports to be played in this facility. It is recommended the gymnasium floor be a hard wood mechanically fastened floor.

The auxiliary gym should be equipped as a teaching space and for general town and district use.

An additional space should be equipped as an adaptive physical education/physical therapy and fitness instructional space to provide instruction in body strength and development including climbing wall and ropes system, stationary bicycles, treadmill, and other physical therapy equipment required for identified students.

The 6 through 8th grade students will require a gymnasium for physical education programs including 400 box lockers for all students. In addition, 50 long lockers for use during gym classes. Three showers in both girls and boys locker room one being handicapped in both rooms.

Number	Approx. Sq. Ft.	Area/Space
1 1 1	8,060 4,300 1,200	Gymnasium/with divider Auxiliary gymnasium Adaptive PE/Fitness
2 1	900 600	Locker rooms/showers (6, 7 & 8th grade) Storage Room
2	300	Teacher Office/Storage/Shower

Health Offices (near administration offices)

Health Office

Program Objective

The function of the 6-8 health office is to provide quality health care and assistance to students and to offer preventative services as required.

General Description

The Health Office should serve the entire population of the 6-8 school. It should be staffed by a licensed, registered nurse who dispenses general health care and medication to students in need and conducts screenings and other preventative programs as required. The health office should have a total of approximately 604 sq. ft., which includes an office, a waiting area, an examining area, a toilet, a cot room with three separate areas for three cots and a storage closet.

Activities to be Housed

Activities to be housed include first aid and emergency care, health counseling, dispensing of medication, physical examinations including vision, hearing, height, weight, and scoliosis, conferring with students, teachers, and parents, telephone communication, and record keeping.

Persons to be Housed

Persons to be housed include one full time nurse, an assistant and students in need of health services.

Furniture/Equipment

The furniture and equipment for the health office should include separate and secure cabinets for medicine and supplies, secure cabinets for chart and records, refrigerator, examining table, resting cots, privacy screens, two sinks, scale, emergency equipment, desk and chair, small bookcase, additional comfortable seating, dedicated telephone line, intercom to all areas of the building, computer terminal networked to administrative computer services.

Special Requirements

The Health Office should be adjacent to administrative offices and to Pupil Services support areas. The Health Office should also be within view of students' pickup and drop-off area at the front of the building. Bathroom facilities for handicapped students, separate treatment rooms, an isolation area, and partitioned areas for ill student are necessities in the school Health Office. Floors in the Health Office should be tiled and easy to clean.

One health suite is recommended for the building with its location near the building administration offices, with easy access by parents.

Number	Approx. Sq. Ft.	Area/Space
1	125	Nurse's Office
2	50	Cot room
1	100	Exam room
1 1	64 100	Male/Female Toilet Ambulatory Private Toilet Room
1	75	Waiting/Circulation
1	40	Storage

Building Administration

Administration

Program Objectives

The focus of this area is to provide leadership, coordination, and support for the instructional program and for all related service in the 6-8 school. The leadership area should be open and inviting, as well as practical and efficient. It should function as the nerve center of the building and reflect in design the team approach, which is characteristic of the entire school.

General Description

General office space is required in the administration area for the school principal, assistant principal and clerical staff. Located near the main entrance, the complex should also include a public reception large enough to accommodate normal traffic of adults and students, a copier center, staff mailboxes, an information area, one conference room large enough for groups of ten to twenty (approximately 250 sq. ft.), a workroom/storage/kitchenette area of 250 sq. ft that includes a safe storage and 64 sq. ft for a unisex toilet. School administration offices should be approximately 250 sq. ft. for the principal's office and 64 sq ft for a toilet located in the office, 200 sq. ft. for each assistant principals' office, where one of the assistant principals office should be located on the second floor, 100 sq. ft. for the principal's secretary, an additional 75 sq ft for the secretarial support staff, and the general office/reception room should be approximately 150 sq. ft.

The lobby area should be equipped with display materials for student art/project work and for important notices, and the entire suite should support and facilitate communication between and among staff, administration, students, and parents.

Activities to be Housed

Activities to be housed include telephone and personal reception, preparation and distribution of materials, filing and record keeping, school-wide communication and communication to individual areas of the building, and conferences with students, staff, and parents, as well as preparation of refreshments for meetings.

School administration offices should be housed and support leadership functions of many types – planning, writing, reading, communication, conferencing, etc.

Persons to be Housed

The administrative complex should house two administrators, one principal's secretary, and additional office personnel. One of the assistant principals should be located on the second floor. There should be clerical support workstations in addition to the principal's secretary work area.

Furniture/Equipment

Furniture and equipment should include the following: a variety of visitor and office seating, a TV monitor in the reception area for daily announcements and events, built-in teacher mailboxes, work counter, bulletin boards(s) for teacher notices, public address system, telephone system, alarm system control panel, mobile communication devices for bus area monitoring, security and emergency communications (i.e., cell phones, walkie talkie's) copy machine(s) and other office machines, secure file cabinets and storage, networked computers for both school administration and office personnel, full kitchenette with sink and storage, coat closet, ample electrical outlets, a variety of glare-free lighting to accommodate office work, and unisex and handicapped-accessible restroom.

Consideration should be given to acoustics to ensure acoustical privacy in school administrators' offices, lavatory and other work areas.

The administrative offices should include ample desk and workspace; armchair, lockable file drawers, bookshelves, intercom, public address system, telephone, whiteboard(s), tackboard(s), and conference tables to fit groups of 6-8 adults with side arm chairs. The offices should be accessible to the general office/reception with glass panels included in the office doors.

A workroom/storage area, adjacent to the general office area, should be included in the administration complex to house office supplies and materials. The workroom should include ample open shelving, upper and lower cabinets, counters for office machinery, worktable(s), sink with upper cabinet storage, ample electrical outlets, etc.

Special Requirements

Consideration must be given in the administration complex to security. Secure storage of student records as well as night security system will be necessary. All administrative personnel should have access to central database of student demographic information, as well as other networked software. The rooms should be carpeted and decorated so as to be warm and inviting, and consideration should be given to natural lighting and ventilation and to visibility of the front entrance area.

Multipurpose Conference Room (Included in Administration Complex) – This is not the same as multipurpose general classroom to be featured as community access room)

Program Objectives

The purpose of the multipurpose conference room is to provide an area for

administration and supportive services to meet with staff and/or parents.

General Description

Frequent meetings of many types will be held in the multipurpose conference room—teacher and administration planning meetings, Planning and Placement Team (PPT) meetings, conferences with parents, etc. The multipurpose conference room should be approximately 250 sq. ft.

Activities to be Housed

Activities to be housed include meetings of groups of up to 20 people.

Persons to be Housed

Persons to be housed include groups from 2-20

Furniture/Equipment

Furniture and equipment for the multipurpose conference room should include a long conference table, side arm chairs, a recessed projection screen, outlets for electronic equipment, and an interactive smartboard and whiteboard. A clock, intercom, and telephone jack are also required. Display materials for student artwork should also be considered.

Special Requirements

The multipurpose conference room should be adjacent to the administrative offices and reception area.

The building administration will be located near the main entrance to the school. Its design and location should be the focal point upon entering the school. As this is a multi story building an assistant principals' office should be placed on the second floor. At minimum the area should contain the following:

Number	Approx. Sq. Ft.	Area/Space
1	250	Principal's Office
1	250	Conference Room (adjacent)
2	200	Assistant Principal
1	100	Principal's Secretary
1	75	Secretarial support
1	250	Storage/Workroom/kitchenette
1	64	Unisex toilet
1	64	Toilet with access only in Principals office.
1	150	Waiting Room

Guidance and Administrative Support

The guidance and support offices will be located in an office suite arrangement, i.e., near or adjacent to the administrative office. At minimum, the spaces should include the following:

Number	Approx. Sq. Ft.	Area/Space
3	100	Guidance Counselor
1	75	Secretarial support/file space
1	150	School Psychologist (shared services)
1	150	Social Worker (shared services)
1	200	Speech/Hearing /OT/PT (shared services)
1 1 1	250 200 100	Conference Space/PPT Group Meeting Room File Room

Cafeteria and Kitchen

<u>Cafeteria</u>

Program Objective

The purpose of the cafeteria program is to serve lunch daily for up to 800 grade 6-8 students in a pleasant, low-stress environment, which encourages good nutrition and appropriate social behavior. The cafeteria should also provide a useful large group meeting area for school and public use.

The purpose of the large assembly space is to provide a large group area for the purpose of dramatic and instrumental practices and performances, presentation of information and instruction, large-group instruction and meetings.

The cafeteria should serve as:

- A dining area for up to 800 students during the lunch period daily;
- Study area for large groups of students; and
- Large group meeting area for staff, students and community use.

General Description

The cafeteria represents a large-group area, which is used to provide breakfast and lunch to the students and for a variety of activities related to school and community functions. A middle school this size with the projected student enrollment of 800 will require a self-contained cafeteria with a full service kitchen for the preparation of lunches for the student body and faculty.

The square footage of the cafeteria should be large enough to service 3 lunch waves of students at approximately 275 students per lunch.

Activities to be Housed

Activities to be housed in the cafeteria include daily lunch for up to approximately 800 students and 75 staff members. In addition, the cafeteria may be used for large group student meetings, social events, and general community use and, therefore, must be designed to accommodate up to 350 persons in a meeting-type arrangement.

Persons to be Housed

Persons to be housed include up to 275 students with at least four supervisory personnel per sitting. When used as a large group meeting place, up to 350 persons may be housed in the cafeteria. The design of the cafeteria seating space must facilitate easy supervision of large groups of students (i.e., high visibility), and the design of the preparation/serving area must accommodate equal numbers of students efficiently.

Furniture/Equipment

The cafeteria must include tables and chairs to accommodate up to 275 students per lunch wave. The tables and chairs must be portable and designed to be stored for regular use of the area as a large group meeting area. T.V's, maximum of 6 for announcements and video presentations for both school and community use.

Special Requirements

The cafeteria should have easy access to the building loading dock and be accessible to the public. Additionally, the cafeteria will be equipped with fixtures and equipment (buffet bar/salad bar) for special events and meetings. Consideration should be given to security of all kitchen supplies and equipment.

Most important, the design, acoustics, and materials selected for the cafeteria should minimize noise during lunch sittings. Student and adult bathrooms must be located near the cafeteria, and easy access to the outside is desirable.

Kitchen

General Description Refer to Food Service Company for design requirements

The kitchen facility must have adequate space for food preparation and storage of supplies and equipment to service an estimated 800 students and up to 75 staff members per day. Three (3) student serving areas or food access and payments lines will be needed for efficient service. The kitchen facility will be designed to meet all local and State health and safety codes. Other spaces required to support the kitchen are as follows:

> Food Service Manager's Office – will include desk, chair and computer workstation and storage.

Storage – walk-in freezer and commercial refrigeration will be provided. Additional storage rooms will include one for storage of packaged/canned foods and one for storage of dry goods,
Rest Rooms – will be provided for staff along with lockers.
Serving Area – a food court area for serving will be provided. The cashier will utilize a computerized debit card system.
Scullery – will be provided for the return of dishes and utensils. Commercial dishwashers and sinks will be provided in this area, separate from the kitchen.

The kitchen serving area should be 1,700 sq. ft. with an additional dry storage space of 250 sq. ft. Office, locker space of 250 sq. ft and food storage of 600 sq. ft. completes this area. There should also be an area to store chairs and tables of approximately 400 sq. ft.

Furniture/Equipment

Kitchen equipment should include pot washing machine, steam tables, cold table, walk-in refrigerators, three compartment and vegetable utility sinks, hand washing sink, freezer(s), coolers (for milk), automatic slicer, food warmers, microwave and gas/convection ovens, gas range with hood and sprinkler system, mobile cabinets for condiments and silverware, rolling baker racks, appropriate small wares, steamer, racks for pots and pans, kettle, work tables, and food processor/cutter.

Service in the kitchen must include a water softener unit, counter spaces, ample shelving for all areas including storage, freezer and refrigeration areas, grease trap system, lighting and electrical (3 phase) outlets and a point-of-service cash register system.

Walk-In Freezer and Walk-In Refrigerator should have adequate storage for the student population. Both units should be adjacent to the kitchen area and located near the loading platform with access from outside of the building for delivery purposes. The units should also have convenient entrances inside the building to the kitchen. Commercial stainless steel shelving should be provided in both units.

The kitchen should be designed for maximum efficiency and maintenance, i.e., with glare/shadow-free lighting, sufficient ventilation, cooling and exhaust, easy to clean floor and surfaces, and the areas must be able to be secured from the dining area.

Area/Space	Approx. Sq. Ft.
Cafeteria/ 3 lunch waves	3,600
Dry/Food Storage Areas	850
Kitchen/Servery/Food Warmers/Cooler	1,700
Office, Toilet, Locker Spaces Receiving area Chair storage room	250 200 400

Auditorium

The auditorium should accommodate half of the student body projected at its highest level to be approximately 800 students, or 400 persons and be fully handicapped accessible and able to operate independently of the school. Special consideration must be given in the design of the auditorium and stage acoustics and the digital sound system. High quality, energy-efficient lighting and digital controls must be provided for the auditorium and stage. Stage and spot lighting will be provided above the auditorium seating area and will be accessed by catwalk.

Stage area should be equipped with standard acoustical curtain, appropriate lighting, roll-down screen, mounted video projection system and large screen display monitor with text decoders. All the sound and lighting shall be controllable from a single control booth location.

Auditorium should be wired with data and video cabling, multiple video-only outlets located throughout the auditorium, and a tiered seating area. The auditorium should be provided with a lobby and toilet facilities accessible to the general public without having to enter other areas of the school to gain access.

Ample storage will be provided in the stage area for constructed scenery, play props, concert piano, and other stage equipment.

Area/Space	Approx Sq. Ft.
Auditorium	3,581
Auditorium Stage	1,800
Coat Room/Closet/Lighting/ Ticket Booth	304
Storage	500

Faculty Spaces/General Purpose Rooms

Staff Workroom, Department Offices, Staff Dining

Program Objectives

The faculty workrooms, department offices and dining area is intended to provide space for teachers to meet, work and dine together collaboratively, prepare materials and lessons, communicate with parents by telephone, access to the administrative and student network, in a quiet area.

General Description

The teacher workrooms and dining area should be available to all members of the staff. They should provide comfortable, flexible seating, which permits groups of teachers to convene and collaborate about students and teaching. Flexible seating

for teacher dining should also be included as well as a materials preparation area and equipment so teachers may design, produce, and duplicate instructional materials. To the extent possible, the two functions of this area should be separated by design so that the dining area and work area function independently. Staff bathroom(s) should be included with the dining area.

Departmental offices will have desks, chairs, computer workstations, and small conference table with four chairs. The room shall also be provided with secure storage for files and miscellaneous supplies, phone with outside access, dry erase board and tack board.

Activities to be Housed

Activities to be housed include preparation of lessons, conferences with colleagues and teams, storage of materials, telephone communication with parents, and teacher meetings. Activities to be included in the material preparation area include researching and downloading from electronic databases, word processing, graphic design, production of paper copies or transparencies, duplication, lamination, binding, and creation of other display materials.

Persons to be Housed

Up to 75 staff may use the staff workroom in large or small groups or individually during the school day. Persons in the staff dining area include up to 25-30 per sitting.

Furniture/Equipment

The teacher workroom/dining area should include cabinets and filing cabinets, counter space, shelving for materials, whiteboards, display boards, networked computer terminals with printers, teacher tables and chairs for dining, secure materials supply closet, seating area and chairs, adequate outlets for portable electronic equipment, good lighting, and a phone with both outside and inside communication capability. A private area should be available for confidential phone discussions in the workroom area. The work dining area should be air-conditioned. Additional equipment for the workroom should include a copy machine, a wall-mounted video monitor with DVD, a wall screen, paper cutters, laminator, Scantrom ™ machine, and document camera projector with recessed screen.

The staff dining area should be equipped with versatile furniture for up to 25-30 persons, a kitchenette with a refrigerator, stove unit, sink, microwave oven, counter space and lockable storage.

Special Requirements

Teacher work area should be carpeted to ensure quiet conditions for lesson preparation, and the room should be wired for voice, video, and data/retrieval/transmittal.

Included in this area are the normal spaces dedicated to faculty use including copy/duplicating rooms strategically placed in the building. Also included are the

much-needed areas for book and teaching supply storage.

Area/Space	Total. Sq. Ft.
Faculty kitchenette	250
Faculty dining area	250
Faculty Copy Room/Faculty Workrooms	300
Department Offices (3)	300
Teaching Supply Storage (2)	200

Maintenance and Operations

Last, but not least, are the maintenance and operational requirements for the building. The expected square footage for the entire structure will be approximately 132,000 square feet when completed. This figure is based upon both instructional and non-instructional space required to support the educational program.

In addition to the spaces that follow, approximately 35% of the educational space is reserved for building systems (per report presented by Perkins Eastman, October 2013) that include corridor circulation, stair towers, riser shafts, appropriate student and staff toilets, an elevator and related common spaces.

Custodial Area

The custodians' area will include an office and storage rooms. The office will have a desk, chair, computer workstation, file storage, tack board, fire extinguisher and other safety equipment. A dedicated toilet and locker area for the custodial staff will be located near the custodians' office. Included in this area will be a sink for washing mops and other cleaning materials.

Storage areas will include shelving and provisions for the safe storage of chemicals (as required by OSHA) and cleaning equipment in addition to supplies for the school facility. Equipment to be stored includes floor polishers, carpet shampooers, extractors, vacuums, brooms, mops and other miscellaneous cleaning equipment.

Lavatories

Student and adult lavatories meeting ADA requirements will be located throughout the facility and located to support community uses. It is recommended that an exterior "industrial type" restroom to support students and community use of the athletic fields be considered. This restroom will not have access to the interior building.

Mechanical Rooms

Separate and lockable mechanical rooms shall be provided for the individual building systems and services.

Field House

A free standing structure outside of the middle school to house maintenance

equipment for the district shall be provided. In addition, it would be used as a space to also store seasonal athletic equipment.

The maintenance and operations space should be planned around the following space requirements:

Number	Approx. Sq. Ft.	Area/Space
1 4 1	500 50 400	Office/Shop Maintenance Area Data Rooms Data/Server Room
1 1	250 250	Storage Areas Receiving Area
1	140	Employee Locker Room and Toilets
1	700	Utility Area/Boiler/Electrical
1	100	Water Sprinkler Room
4	50	Custodian Closets
1	150	Elevator Machine Room
1	150	Elevator
1	5,000	Free standing field house

Community Uses

The North Haven Middle School will serve as a resource area for citizens of North Haven before and after school hours, throughout the year.

The building will be made available to the public from outside entrances so that there is no intrusion into instruction spaces in the evening and on weekends. The school should be designed to facilitate activities during the school year and throughout the summer months and school vacations periods,

Use of the building may include the following uses:

- Adult Education Programs
- Town Recreation and Parks Department Program
- Youth Groups
- Parent Committees and their activities
- Boy and Girl Scout groups
- Summer School offerings
- Community performances and productions
- Neighborhood and Town-wide Community meetings

BUILDING SYSTEMS

Integrated Electronic Communication System

The North Haven Public Schools recognizes the use of technology as an essential life skill. Through the integration of technology into existing and new curricula, all students will build a strong foundation in the use of technology as a tool to supplement and extend learning.

The primary means for moving technology forward has been to integrate essential technology skill instruction into the core curriculum at each grade level. Each classroom should have data connections for use by students and teachers. One data connection should be located adjacent to the teacher's work area in the classroom. The remaining data connections should provide adequate service for classroom technology. One data connection should be located near the video connection.

Common areas throughout the building (i.e. cafeteria, gymnasium, meeting spaces, teacher workspaces, etc.) should also incorporate data, technology connections and video connections for use with small or large groups.

Educational functions from all locations must include: Access to the library on-line system, access to external data sources thorough a monitored web-browser system and access to other areas in the building where students can receive instruction in groups or work independently.

As technology continues to evolve the middle school should be able to support state of the art educational technology throughout the school building. Mobile computer desks would allow for large group instruction or use in common learning spaces throughout the building. A wall mounted flat-screen TV monitor and ceiling mounted LCD projector should be provided in each classroom.

Each grade level will have two Computer on Wheels (COW) equipped with 25 laptop computers to extend learning opportunities in classrooms when entire class participation is necessary for group instruction. They will also be used for the required testing under the new state requirements. These laptop storage units should be lockable and provide electrical service to charge laptop computers when not in use.

Technology/Infrastructure

Technology and required infrastructure is an essential component of this middle school. It is recommended the technology requirements be included as a separate (phased) component to allow the most current applications be researched and considered for this school including delivery of instruction and administrative support systems. Adequate space for this system should include its own HVAC redundant cooling system and include:

- Office – a secure climate control room centrally located
- Point of Demarcation Room – to include a minimum of 8 feet of linear space on the wall designated as the point of demarcation for telecommunications service
- Distribution and Server Rooms – to house equipment racks and current industry standard wiring systems (including data, coaxial and fiber optic cabling systems)
- Data Run Rooms – secure rooms located strategically throughout the building to provide data runs in compliance with recommended cable lengths.
- Data Centers, server room and D-mark points should be located within the same area of the building and included on the generator system.
- Identified spaces as determined by the technology report.

Technology/Communications

Administrative functions from all locations indicated under Administrative, Health, Guidance/Pupil Services, must provide the following: access to the student information database, access to the financial and budgeting data, access to the worldwide web to perform research, electronic mail and document sharing capabilities.

Sufficient data connections must be provided for each administrator, guidance, nurse and office workstation area. One computer and shared printer/copier is recommended and administrators should be provided with networked laptop computers. It is recommended two networks are designed for this facility: one for student access and programs and the second separate network for all administrative functions.

Library/Media Center Technology

The Media Center should be equipped with an on-line automated card catalog system that is compatible with the system used in the North Haven Public Schools. Adequate data connections are required for student use – two data connections for the circulation desk and two for the librarian and clerical positions. Twenty-five networked computers or state of the art student workstations and networked copier(s) are required in the media area.

The library/computer lab should be equipped with adequate data connections to serve the 25 student technology workstations and printers required in this classroom/lab area. A wall mounted flat-screen TV monitor, smart board and ceiling mounted LCD projector should also be included in this classroom space.

Local Area Network (LAN), Wide Area Network (WAN) and Wireless Fidelity (WIFI) Requirements

The local (LAN), wire area (WAN) and wireless fidelity (WIFI) network systems must be installed according to the current State Board of Education Technology Specifications and is compatible with North Haven's existing network systems. It is recommended that a fiber optic backbone and recommended category five cabling be installed to support the networks. A server for student files, adequate hubs, secure racks and routers must be according to industry standards, in the building to ensure the network integrity is maintained. It is also essential that the network system allow for expansion and additional equipment as technology needs continue to evolve.

Electrical Requirements for Technology

It is essential that adequate electrical service be provided for all computer and smartboard equipment suggested in the building plan. It is recommended those industry standards for computer installations are incorporated into the building specifications. Electrical wiring and data server/hub rooms must be strategically located throughout the building to assure adequate wire and cable runs.

Each classroom area must be equipped with adequate electrical outlets for computers, printers, smart boards and other state of the art technology. Common learning spaces need electrical outlets where computers can be used and the Media Center and classroom/lab must be equipped with adequate outlets for the specified number of computers, printers, smart boards, copiers And other state of the art equipment.

Administrative, guidance, pupil personnel, teacher workspaces and offices, nurse's office must have adequate outlets for the specified number of computers, copiers and printers indicated.

Video System

Each classroom should be capable of remote media retrieval and be outfitted with a mounted flat-screen television, permitting reception from major television channels and from within classrooms. The video head-end system shall permit playback of videotaped (or Disc) materials throughout the school, from one central location. Provision for transmission of selected cable channels should be offered. Playback control should be provided in each classroom.

Communication System

The communication system should be a voice-over integrated with telephone and intercom capabilities for local and long distance service, public address, emergency service, internal private communications and voice mail capabilities.

Each classroom and other designated areas throughout the building should be equipped with an integrated communication system that allows for: receiving emergency and routine announcements; making local area calls from classroom phones and communicating with the school office, accessing voice mail service inside and outside the building, and directing emergency assistance calls to one or more designated areas.

Office and specific designated areas in the building should be equipped with the same integrated communication system listed above with additional services that: allow local and long distance calls, the ability to access voice mail system to modify school announcements from outside the school, the ability to switch all calls to specific telephone after hours with voice mail services, and back-up emergency power for telephone, voice mail and intercom services.

All spaces shall receive emergency call announcements. The intercom should provide for exterior building speakers.

Services provided by the installation of this system should include adequate service for future expansion of telephones throughout the school building.

Clocks and Bell System

All normally occupied areas shall have a clock showing hours and minutes connected to a master clock that also controls bells and/or chimes. The master clock shall automatically correct and adjust all clocks to the correct time. Clock system may be integrated with the other communications systems. Clock system shall be state of the art equipment, preferably Latham or approved equal.

Fire Alarms, Safety and Security

As security has become a significant part of the design of our schools, we must ensure that the school is properly equipped with a state of the art security system. The school should be designed in accordance with the State of Connecticut School Safety Infrastructure Standards issued in January of 2014. The school design should include but not be limited to state of the art video surveillance in and outside of the building, secured entryways, alarmed entryways, and panic buttons. Suggested to have an independent security survey prepared to ensure the school includes proper and state of the art security systems and to ensure that the building is designed and built with safety at the forefront. An independent review of items such as but not limited to, determining placement and types of windows and doors. Safety and security of our staff and students is equally important to our primary mission of education.

Additionally, the Middle School shall be equipped with state of the art, fully code-compliant fire detection, alarm, and sprinkler systems. Remote enunciator panels showing location of the source of the alarm shall be located near the administrative area and front door of the school and custodial office. Upon activation of an alarm, an evacuation signal shall be transmitted throughout the school and a signal transmitted to a central station monitoring service. Alarm system must meet all current codes including voice, light and alarm sound. The alarm shall signal until manually reset. Sprinkler heads shall be carefully located and positioned to prohibit tampering. Alarms shall be easily heard throughout the building and visual alarms shall be proved as per code. The building design shall meet the requirements of the current Connecticut Fire and Safety Code and any adopted amendments.

The systems will be integrated so that one monitoring agency protects the entire structure.

All required fire extinguishers should be placed into recessed cabinets with the doors to such cabinets equipped with audible local alarms.

The ability to "lock-down" all exterior entrance doors from one central switch located in the school central office must be considered to provide immediate response for staff and student safety.

Heating, Ventilating and Air-Conditioning (HVAC) System

The heating, ventilating and air conditioning system shall be carefully and thoroughly studied so that only the most reliable, flexible, and energy efficient system is provided. Alternative energy sources, including photovoltaic, fuel cell, geothermal and wind technologies must be investigated. Demand controlled ventilation is mandatory with CO2 sensors as part of the building automation system. Sensors must also allow the staff to monitor temperatures and humidity, radon, toxic volatile organic compounds, CO, CO2, CFM (outdoor air per person using ASHRAE guidelines), PM2.5 (particulate Matter 2.5 microns and less), PM10 (particulate matter 10 microns and less and ozone).

The HVAC and associated mechanical system will be controlled by a direct-digital control (DDC) building management system to provide temperature controls and energy management functions.

Air handling units will incorporate CO2 monitoring and outside air volume reset controls to maintain air quality and save on heating and cooling costs.

There must be a standby reserve capacity and redundancy to provide heat and hot water if the primary source fails or requires service during the heating season. An alternate source of hot water for domestic use shall be provided for summer operation so major heat source can be shut down during non-heating season.

Connection to external emergency power sources shall be provided (including code required automatic transfer switches) to keep vital building components and areas functioning in an emergency. Also to be considered are lightning and surge protection. All HVAC intakes should have the ability (either through the computer management system or an emergency switch) to be closed in case of any chemical or toxic release in the environment.

This facility should be designed with climate control features that should permit year-round use for instruction and community purposes. The facility should include central, school-wide air conditioning. A four pipe heating and air conditioning system allowing flexibility for fluctuations in temperature requiring switching from cooling to heating on a regular basis should be considered to maintain maximum comfort in the building.

Ventilation – The provision for heating, ventilation, and air conditioning (HVAC) is one of the most critical areas in the protection of students. The HVAC system in the middle school facility must have the following characteristics:

- Should be able to provide uniform temperature in all areas of the building.
- Should eliminate drafts and code areas.
- Should provide superior ventilation in all rooms, toilets and locker room spaces.
- Should eliminate noise in the classroom from the systems.

- Should be able to provide a varying degree of humidity control.
- Should provide unquestioned reliability.
- All units should be energy efficient.

Plumbing

Building shall exceed all minimum code requirements (including water-saving code standards and the American with Disabilities Act (ADA) for number and type of toilet fixtures, sinks, and drinking fountains. Water free urinals must be researched. Extra hand-washing stations must be considered.

All fixtures shall be heavy duty and vandal-resistant design and include automatic service for water closets, urinals and sinks in the student and faculty restrooms. Adequate clean outs shall be provided and all restrooms must have floor drains. Piping shall run in accessible pipe chases. Valves shall be ball valves. Local service valves and isolation valves shall be provided. Toilet partitions shall be heavy duty, vandal resistant, with high quality hardware. Fixtures shall be wall hung. Building shall be divided into sections with isolation and drain valves in each section.

Electrical Distribution

The electrical systems must be in conformance with the requirements of the most current codes and regulations and all applicable local authority requirements, including the School Facilities Unit:

- Connecticut State Building Code
- Connecticut State Fire Safety Code
- International Building Code (IBC)
- International Energy Conservation Code
- Illuminating Engineering Society Lighting Handbook (IESNA)
- NFPA
- ASHRA 90.1
- State Department of Education School Construction Program

Each normally occupied space shall be furnished with numerous electrical convenience outlets located throughout the space to permit flexibility of room layout and eliminate use of extension cords. Power in each classroom shall be from two sources, one for exclusive use of computers and the other for general use. Outlets in corridors and storage areas shall be located on not greater than 26-foot centers to permit easy use of vacuums and floor machines.

An adequately sized electrical service will be provided (approximately 3000 amp/3 phase service) as recommended by the design architect to meet the needs of the new/renovate to new facility.

Each electrical distribution panel shall have 25% expansion capacity to add

future circuits. Emergency lighting shall be by individual wall packs. No emergency ballasts or central systems permitted. All three phase motors shall have phase protections. All exit signs shall be LED type with cast housings and lexan lenses.

Emergency Generation System

An emergency generator will be installed and sized to meet the minimum requirements of the new facility. The generator should be sized to run 75% of the building at maximum load. Cafeteria, data center, main office, life safety equipment, gym and theater should all be on the generator. A room within the building should be designated for emergency operations and supported by the generator.

Health and Safety

Every consideration should be given to prevention of "sealed building syndrome," exposure to radon gas and other hazards. Adequate ventilation and air circulation, and use of non-allergenic interior finish materials should be priorities.

Hardware

All hardware shall be heavy duty. Keying shall be mastered with controlled using a magnetic card entry system. This type of system will allow the administration to allow staff entry as indicated on the magnetic key card.

All panic devices shall be rim type with removable mullions rather than vertical rod type. All doors such as stairwell doors, corridor smoke doors, etc., shall be held open with magnetic devices connected to the fire alarm system.

Elevator

The elevator will be of the size and capacity to accommodate an automatic floor-scrubbing machine, and movement of desks, furniture, and equipment in addition to required legal standards for handicap building occupants if a mulit level building is built.

Lighting

Overhead LED fixtures should provide the uniform light necessary for instructional areas. Several conditions must be avoided in order to protect the students in this population and create a more energy efficient facility:

- Full spectrum lighting instead of cool white shall be provided.
- Ballast selection (where indicated in the building) or placement shall be such to eliminate unwanted hum or other sounds
- Diffusers shall be selected to provide as glare-free light as possible.
- Outside lighting should be high-pressure sodium.

- All office, media center, computer labs and designated classrooms must be indirect lighting.
- Gym lighting should be energy efficient and provide white light
- Emergency lights should be dual lite or equivalent. All exit lights should have e/s fluorescent lamps.
- Light fixtures throughout the facility should be uniform to facilitate the economic purchase of replacement light fixtures.

Specifically defined areas should require incandescent lighting to simulate a home environment. These areas should be identified during the design phase of this project. In addition, the ability to provide lighting to various sections of the room may require switching other than that normally provided in the classroom. Light sensors should be installed for energy efficient operation. The latest in industry standards for lighting should be considered in the design and purchase of all lighting fixtures for this facility.

Acoustics

Because the program requires the utilization of several different activities to be conducted simultaneously in each room, special attention must be given to the acoustics, not only within rooms but between the rooms as well. It is extremely important to eliminate as much noise between the classrooms as possible. In addition, these multiple activities must be conducted within each class in order to meet the individual needs. As a result, utilization of a variety of sound absorption materials is required. As referenced in several sections of this document, several instructional and support areas require very specific sound control to provide programs in those areas.

Carpeting is a preferred floor covering in the administrative, office, media center, computer labs, and teacher offices. When carpeting is specified, it should be self-adhesive to eliminate the issue of adhesive odor and must be mold/mildew resistant – Collins and Aikman Carpet or equivalent is recommended for review in these areas.

Windows/Doors

One factor which must be taken into consideration in the design of the HVAC system is the provision of windows. Windows should be carefully studied in light of the stringent HVAC requirement of this facility. The provision of windows or glazing does, however, provide for heat loss and a vulnerable point in security. The provision of solar blocking glazing is extremely desirable and should be considered throughout the building.

Window frames and sash should be welded vinyl or similar so they should be maintenance free. The provision of glazing in the classroom is both an educational and a psychological enhancement because it provides visual relief and outdoor observation opportunities. The window system will have one-inch thermal and low-E glazing to improve the insulation value of the glazing and reduce solar gain. The aluminum/vinyl frames will be thermally broken to further reduce energy loss and all windows will be operable with screens.

It would be desirable to have windows that open (code egress where required) but within cost and energy conservation considerations. Windows must meet the State Department of Education requirement for use of "natural" light in spaces.

Exterior doors to be "Total Door" or equal and be thermally efficient doors and glazing.

Interior doors are to be solid core oak with compressed particle to assure hardware stabilization and windows sized to meet current code requirements.

Exterior Building Structure

Roof must be pitched to meet State of Connecticut and Building Code Requirements and should be four ply SBS product with 25-30 year warranty. Adequate roof overhangs should be provided to allow snow to fall from roof away from building, windows and exterior doors. Entrance areas of the building should be covered with a roof.

Exterior product should be brick.

Aesthetics

The building should have a unified interior design with attention to appropriateness, functionality, and durability of structural elements and furnishings, pleasing and practical colors and textures, noise control, and many recessed display areas for student work.

The exterior building should be brick to coordinate with the high school located adjacent to the middle school.

EQUIPMENT

The following section outlines the equipment and furnishings to be purchased as part of this building project. It includes all moveable, non-built-in equipment and it is by far not inclusive. It is included here as a general guide to the project. During the design phase of development, staff and administration will provide greater details as to the specific furniture and equipment requirement for the school. Most of the furniture selected should provide flexibility and ease or various teaching and learning configurations. Provisions should be made in the selection of equipment that accommodates handicapped students.

Consideration of manufacturers, models and colors will appear in the final bid package for Furniture, Fixtures and Equipment that is normally the final phase of the building project to be bid out in sufficient time to allow the purchase and installation of furnishing prior to the commencement of the operations of the new school.

Regular Classrooms

- Student desks and chairs
- Teacher's desk and chair
- Sound field audio system or equivalent throughout the entire school, all classrooms, specialized classrooms, offices, and all other spaces throughout the school
- Teacher technology workstation (movable)
- Activity tables with chairs
- Filing cabinets with locks
- Built in or portable book cases
- White boards and bulletin boards
- US Flag
- Hanging map hardware for appropriate rooms.

Student lockers should be located adjacent to classrooms and full length with one locker per student

Technology in Regular and Specialized Classrooms

The following list of recommended computer and technology equipment should be reviewed prior to purchasing to include the most current equipment available to meet instructional needs in regular and specialized classrooms.

- Mobile Teacher technology workstation
- Tablet PC/ Smart board
- Instructional Computer with Smartboard integrated into the internet and internal uses
- Student computers/ technology workstations as determined by the educational program needs and a separate technology study
- Document camera
- Shared Printer/Copier
- Wireless Access
- Clicker, Tablets
- Projector
- DVD/Video streaming Capability
- 2 Wireless Carts (COWS) including 25 technology workstations or latest technology for students in for each grade level

Specialized Instructional Classrooms

- Student desks and chairs with no wheels
- Work tables and student stools (art and some science rooms)

- Lockable teacher's desk and chair
- Filing cabinets with locks
- Lighted display cases for student art workMoveable clay cart
- Pottery wheels
- Deep paper drawers for storage
- Vertical slots for canvas board storage
- Art – demo table with overhead mirror
- In room and corridor display cases with track lighting
- White boards and bulletin boards
- Kilns with supporting equipment
- Storage and drying racks for art rooms
- Bookshelves
- US Flag
- Digital cameras
- Large paper cutters
- Color printer
- Limited built-in or portable book cases
- Piano – Grand piano for auditorium
- Portable Choral and band risers
- Computer tables with computers/master control for computer room
- Posture chairs with music stands
- Audio/video/cd and stereo systems
- Lockable Storage for musical instruments, risers, choir robes and dept. equipment for a 300 piece band.
- Storage for sheet music, literature, discs, tapes and other music supplies
- Sound Field System or equivalent
- State of the art theatre lighting and sound system.In music area, digital and webbased music capabilities
- Acoustic shells for the stage, labs and classrooms.

Special Education Resource Rooms

- Student desks and chairs
- Teacher's desk and chair
- Filing cabinets with locks
- Built in or portable book cases
- White boards and bulletin boards
- Smart board
- Document Camera
- US Flag
- Student computers as determined by the educational program needs

- Rocking chair
- Floor mats with hooks
- Dividers
- Private study carousels
- 2 stoves with hoods
- 2 ovens
- Sink
- Dishwasher
- Cook's counter
- Washer and dryer

Library Media Center

- Circulation Desk
- Bookshelves/ magazine and supporting racks
- Automated card catalog
- 5 book carts
- Display cases
- Round tables and chairs
- 2 Desk and chair for Media Director and teacher station.
- Four drawer files with locks
- Book storage shelving
- Activity tables
- Casual comfortable furniture for student reading
- US Flag – State of Ct. Flag
- Portable white boards
- Flexible and moveable furniture
- Latest technology and/or computers for internet access
- Tables for group work.

Physical Education/Gymnasium

- Wall and floor mats
- Separate P. A. System with speakers and microphone
- Scoreboard
- Six basketball hoops – full court basketball hoops will be retractable glass units – side court basketball hoops will be retractable metal units
- Four basketball hoops for the auxillary gym will be with retractable glass units.
- Lockers for all students
- Dividing wall in large gym.
- Desks and chairs for teachers

- Volley ball standards and other age appropriate equipment for physical education program
- An adventure-based activity climbing wall or other age-equivalent equipment Including required safety harnesses and helmets.
- Adaptive physical education activities including stationary bicycles, treadmills, weight training equipment, and other equipment to provide adaptive physical education and physical therapy to students.

Health Offices

- Nurse's desk and chair
- Three student cots
- Doctor's examination table
- Locked student medicine storage cabinet
- Four drawer lateral files with locks
- Office computer with printer
- Small lockable refrigerator for medicines
- Student chairs
- Bulletin and small white board
- Coat racks for staff and visitors

Administration

- Desks with ergonomic chairs
- Four drawer lateral file cabinets with locks
- Work tables
- Office computers with printers
- Multifunctional devices with scanning, faxing collating and networking capability
- School safe
- Storage cabinets with locks
- Conference table and chairs in selected areas
- Visitor Chairs and Tables
- Each administrator office should include a mounted TV
- Coat racks
- LCD projector/smartboard technology.
- Built in or portable bookcases
- State of the art technology including computers for staff ad technology for student use.

Guidance and Administrative Support

- Desks with ergonomic chairs
- Four drawer lateral file cabinets with locks

- Work tables
- Office computers with printers
- Separate fax machines
- Storage cabinets with locks
- Visitor Chairs
- Coat racks
- Built in or portable bookcases

Cafeteria and Kitchen

- Moveable tables for seating eight (8) students for three lunch waves, approximately 275 students per lunch wave
- Chairs with storage racks
- P.A. System with microphones and speakers
- 4 tv's for announcements.
- Bulletin boards
- Storage cabinets with locks
- Flags, State of Connecticut and National

Faculty Spaces/General Purpose Rooms

- Copiers with collating and network capability
- Kitchenette equipment: sink, microwave, refrigerator, coffee machine
- Computer stations with chairs
- Comfortable seating
- Tables and chairs
- Desks and chairs
- Shelving for storage of books and teaching supplies

Technology/Telecommunications

- Telephones and technology for the school will be comparable to that of the North Haven School District.

- It is recommended that a technology consultant be retained by the architect/design team to coordinate with the educational staff in understanding and developing the technology and telecommunication systems that will support educational program of the school. The approved school district Technology Plan must be included in this review process to assure continuity in implementing a new technology system for the middle school.

Noted below are the major items that listed elsewhere but included here in a special dedicated section.

- Office computers
- Classroom computers
- Office printers
- Classroom printers
- Smartboard with enhanced sound system
- DVD
- LCD Projectors
- Document Cameras
- Flat Screen TV
- Computer on Wheels (COW)
- Routers, hubs, servers and switches
- Telephones and switching equipment
- Presentation tables for instructional computer
- Related connecting cables and peripherals

SITE DEVELOPMENT

The building site must accommodate the academic requirements for playing fields, adequate land for traffic circulation and the ability for safety equipment to circulate around the property.

The current Middle School is built on a "campus" site including the high school and middle school property currently owned by the Town of North Haven and on a common parcel of land that now houses North Haven High School. The current site for the North Haven Middle School is 15 acres.

Placement of the building on the existing school site(s) must include the flow of traffic, bus circulation, student and parent drop off areas and parking lots and use of current athletic and playing fields located on the site(s). Depending on the outcome of the final plan design there may be space that will become available and its intended use can be altered. If some area of the site is available it can be converted into athletic fields that will fit the needs of the district and town overall.

It is important that these areas listed below are incorporated in the final design of the building:

- Adequate parking spaces in order to provide as parking space for the facility, administrative staff, custodial/maintenance staff, visitors, and volunteers. Extensive community use of the school on evenings and weekends should be anticipated. Visitor parking should be provided with consideration for access to community-use facilities. Since community use of the facility is important, parking and access for community use of the identified areas should be provided before, and after school hours. ADA requirements for parking and loading zones will also be addressed.

- Bus loading and unloading should enter and exit from an entirely separate loading and unloading area. No other traffic should be allowed in the bus loading and unloading area during that time when students are arriving and being dismissed form school. Weather protection should be provided for the students. Adequate loading area should be able to accommodate a caravan of required number of buses. The student waiting area should be paved the full length of the loading/unloading area to provide for student safety. Bus drivers should proceed directly to ample and suitable unloading area which are reasonable central to pupil destinations. Provisions must be made for a safe area for parent vehicular pick-up and drop-off areas. These loading and unloading areas should not be immediately adjacent to the school office.

- Distinct parking areas and traffic flow to accommodate buses during loading and unloading, delivery vehicles and access to loading dock, employee parking and visitor parking. There should be a separate parent pick-up area.

- All entrances and exists should be "one way" to ensure safety of students. Separate entrances and exists should be provided for bus students, walking students and students transported by parents.

- Walkways are required around the perimeter of the school. Student safety is a key concern in design of walkways as well as ADA compliance.

- Adequate lighting for evening use of the building along all sides of the school including walkways, and parking areas.

- Handicapped access per building code.

- All levels of the school shall be above grade. Windowless interior spaces shall be avoided.

- If interior courtyards are designed, they must be landscaped to be reasonably maintenance free and must be fully accessible.

- The entire site shall be landscaped to be pleasing for the schools' occupants as well as being easily and efficiently maintained. Use of deciduous local planting are recommended ensuring summer shade protection requiring minimal maintenance, preferably perennial plantings. Provisions must be made to accommodate snowplows and resultant snow piles.

- Site must be tested for radon and other possible containments.

- The site shall accommodate the physical education program of the school and appropriate community use after school hours. An asphalt recreation area adjacent to the Cafeteria is requested. Adjacent high school field will be shared with the Middle School.

Favorable features such as the existing high school facility with playing fields, parking and other natural features should be capitalized upon whenever possible, designing the building and exterior features accordingly. In addition, outside

storage area for the athletic equipment and maintenance equipment. The building structure should be located to minimize the length of utility runs. Roads, drive, walks, electrical service, entrances, sewers, water, gas and storm water drainage should have the shortest, practical runs.

Athletics

Fields and other athletics

The middle school campus currently includes a middle school softball field on the south side of the school building. At this time, the field is not able to be used and therefore, it is recommended that a synthetic turf field be installed in that area. This field would be a multipurpose field for the middle school program.

In addition, the academic wing of the current school will be demolished. It is recommended that 2 new synthetic turf fields be installed. The fields would be multi-purpose, CIAC soccer sized fields. The two fields would be fenced in, and lit for night use. The fields would be used by the middle school, high school and Town youth programs. In addition, the fields would include spectator seating to fit 1,000.

Middle school physical education classes use the 6 lane track at Vanacore field. It is recommended that the 6 lane track and event area be resurfaced.

ENVIRONMENTAL CONSIDERATIONS

To ensure that the environment for learning and working is safe, effective, efficient, and aesthetically pleasing, the building shall have an open, inviting atmosphere, characterized by natural light, adequate ventilation, open spaces and functional effectiveness in all design features, furnishings, and equipment. Alternative flooring material must be investigated with cost options including ceramic, poured PVC, terrazzo, carpeting and finished concrete.

General Considerations

Every entry way shall have a hard floor finish and recessed mats. Main lobby flooring should be hard surfaced terrazzo or similar durable product. The entrance and all visitors must be visible to main office personnel. All outer doors other than the front entrance must prevent access from the outside during the school day as well as after school hours. The floor plan should minimize the length of travel between team clusters and shared common spaces. To enhance security and help prevent theft, access to community areas such as the gymnasium, cafeteria, and the lecture room must be segregated from the rest of the building.

Windows

All windows shall be operable, with screens. Classroom windows should include room-darkening shades. Windows should abate loss of heat through the used of argon and low “E” options.

Lighting

All lighting shall be designed to maximize students' learning and personal comfort and minimize energy consumption. Indirect lighting should be considered in office, conference, media and classroom areas.

Health and Safety

Every consideration should be given to prevention of "sealed building syndrome," exposure to radon gas and other hazards. Adequate ventilation and air circulation, and use of non-allergenic interior finish materials should be priorities.

Aesthetics

The building should have a unified interior design with attention to appropriateness, functionality, and durability of structural elements and furnishings, pleasing and practical colors and textures, noise control, and many recessed display areas for student work.

GREEN BUILDING COMPONENTS

Where possible, the design of the school shall incorporate the latest in energy and environmental design, with specific attention to:

Erosion & Sedimentation Control

An erosion and sedimentation control plan for the project site during construction in order to control erosion to reduce negative impacts on water and air quality. Employ strategies such as temporary and permanent seeding, mulching, earth dikes, silt fencing, sediment traps, and sediment basins.

Light Pollution Reduction

Provide site lighting criteria to maintain safe light levels while avoiding off-site lighting and night sky pollution in order to eliminate light trespass from the building site, improve night sky access, and reduce development impact on nocturnal environments.

Energy Efficiency and Atmosphere Concerns

- Design of the building systems to maximize energy performance in order to achieve increasing levels of energy performance above the prerequisite standard as well as to reduce environmental impacts associated with excessive energy use. Use a computer simulation model to assess the energy performance and identify the most cost effective energy efficiency measures.

- Estimate the energy needs of the building and investigate opportunities to engage in a green power contract with the local utility in order to encourage the development and sue of grid-source energy technologies

on a net zero pollution basis. Green power is derived from solar, wind, geothermal, biomass, or low-impact hydro sources.

- Model the energy and water systems to predict savings in order to provide for the ongoing accountability and optimization of building energy and water consumption performance over time. The building should be designed with equipment to measure energy and water performance.

Materials & Resources

A project goal should be established for recycled content materials and then identification of materials and material supplies that can achieve this goal, in order to demand the building products that have incorporated recycled content materials, therefore reducing the impacts resulting from the extraction of new materials. Local indigenous materials should be researched.

Indoor Environmental Quality

- Attention should be given to the design the HVAC system to provide capacity for indoor air quality monitoring to sustain long-term occupant health and comfort.

- The design of the HVAC system and building envelope should be such to optimize air change effectiveness in order to provide for the effective delivery and mixing of fresh air to support the health, safety, and comfort of building occupants. Air change effectiveness can be optimized using a variety of ventilation strategies.

- Controllability of systems should be designed with occupant controls for airflow, temperature, and lighting that will provide a high level of individual occupant control of thermal, ventilation, and lighting systems to support optimum health, productivity, and comfort conditions. Strategies to consider include task lighting, operable windows, and under-floor HVAC systems with individual diffusers.

- Considerations should be made to provide for a thermally comfortable environment that supports the productive and healthy performance of the building occupants, by establishing temperature and humidity comfort ranges and design the building envelope and HVAC system to maintain these comfort ranges.

- The school is to be designed to maximize day lighting and view opportunities, in order to provide a connection between indoor spaces and outdoor environments through the introduction of sunlight and views into the occupied areas of the building.

Project Budget

The cost estimate for this building project, as required by the State Department of

Education, was prepared by a professional estimator and included with this document. In keeping with the State Department of Education's intent of making schools unique and inviting to attract and retain students, the design and construction of the new school building or renovate to new existing middle school should be well thought out and well constructed to meet the requirements of an educational building in the 21st Century.

At the time of submittal of these Educational Specifications and ancillary support documents, it is important to note that the citizens of North Haven will have a referendum in June 2014 to vote on the future of the middle school project. The Town voted affirmative the authorization to issue bonds, notes and temporary notes for the construction, furnishing and equipment of a new school, Grades 6-8, in the amount of $???. Information provided by design architect

Since Town funding was provided prior to the final Educational Specifications and approval by the Board of Education, preliminary schematic drawings and cost estimates were developed within the Town's authorized funding.

Appendices

North Haven Middle School Floor Plan

New construction square footage calculation

Estimated square footage detail for new building

Enrollment Report