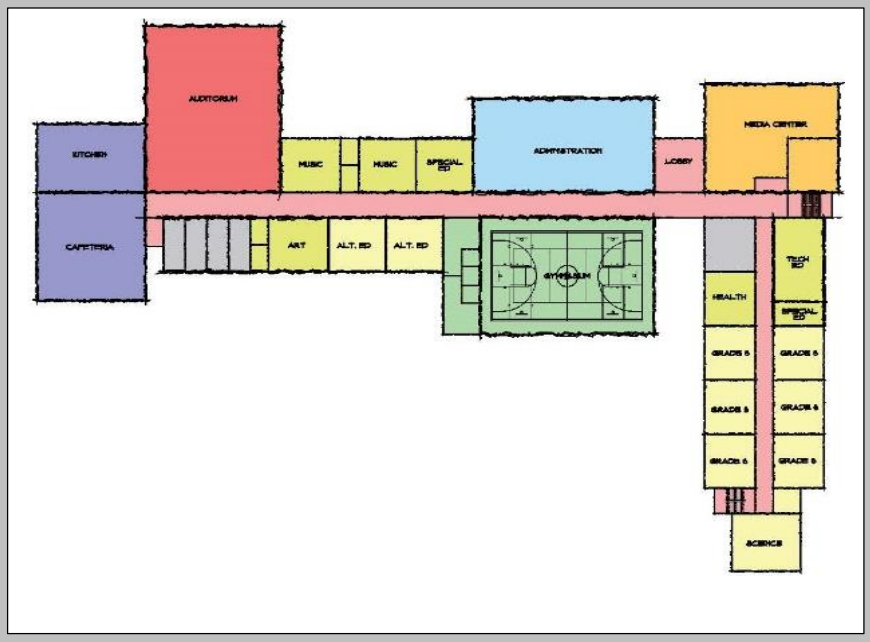
EDUCATIONAL SPECIFICATIONS



NEW CONSTRUCTION TO:

Oxford Middle School

Location to be determined

November 4, 2016

Approved by BOE on November 29, 2016

Project Overview:

Great Oak Middle School, originally constructed in 1967 with the 2 story building including a cafeteria and gym added in 1978, was originally designed as an elementary school but for decades has served the district as the one and only middle school. The school currently houses grade 6 through grade 8. It must be mentioned that this building has never been brought up to a middle school standard and is considerably programmatically inadequate. It has been determined through the Town of Oxford Facilities Study dated May 2016, that it is in the best interest of the educational program to construct a new middle school. Once the new middle school is constructed, the existing Great Oak School will be converted back to an elementary school for the Grade 3 thorough Grade 5 population that currently resides at Oxford Center School.

RATIONALE FOR THE PROJECT

This project proposes to build an entirely new middle school to align with the educational needs of the modern middle school. As the community has been living with an inadequate middle school for decades and the district is expanding their curriculum the town has come to decide this need warrants a new facility that accommodates a state-of-the-art educational experience.

The new middle school is proposed for several reasons. First, is the need to eliminate the current town elementary school, Oxford Center School as it in great disrepair? The current middle school is more fit as an elementary school and it shares a site with Quaker Farms School (Pre-K through grade 2) so the two will work together to create and idyllic campus setting for the entire elementary school population of Oxford. Second, is the need to improve the academics in the middle school. As many school needs have changed over the decades since the middle school was developed there is a greater need for Science, Engineering, Technology and Special Education. New teaching techniques and structures require a modern facilities designed to support these. Building new allows the town to start with an efficient, updated infrastructure fit for the needs of today and the future to improve the educational experience in Oxford.

LONG-RANGE EDUCATIONAL PLAN

Completing the new construction project for a New Middle School will enable the district to achieve many long-range plans:

- Provide safe and effective learning environments
- Ensure long-term stewardship of the building as the Board will continue to use and invest in the building for educational use for the foreseeable future, over 20 years.
- Create the best school safety and security plans and meet all of the SSIC recommendations.
- Provide the appropriate space to implement Scientifically Research-Based Interventions (SRBI) that deliver the appropriate support, resources, and materials in reading and math, and Positive Behavior Interventions and Supports (PBIS).
- Provide the appropriate space to implement an Early Intervention Process (EIP) and improve the effectiveness of Special Education programs.
- Provide the appropriate spaces to implement an inquiry-based science program at the elementary level.
- Provide the appropriate space to implement a researched-based Literacy/English Language Arts (ELA) and appropriate intervention programs.

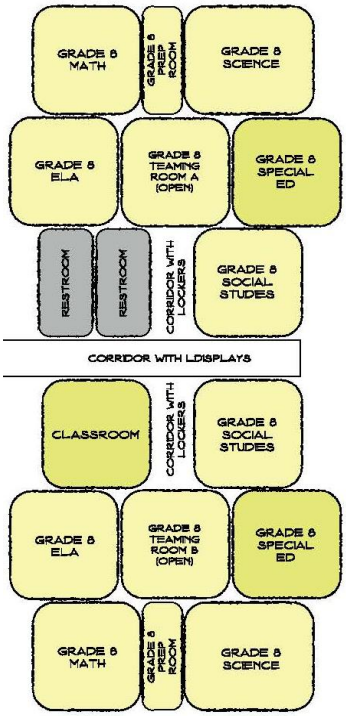
- Provide the appropriate space to implement research-based core math program and appropriate intervention programs.
- Provide the appropriate space to implement a comprehensive program for students with advanced learning needs.
- Accommodate events and communications to celebrate the achievements of students and staff.
- New core classroom instructional spaces.
- New secondary instructional spaces, art and music.
- New educational media center geared towards the 6-8 learners.
- Improve the school day schedule for lunch, recess, and recreation.
- New heating, and cooling and piping central systems to improve indoor air quality.
- New electrical systems and infrastructure to allow for technology in all instructional spaces.
- New roof structure for long term (20 year minimum) weather tight envelope.
- New secure and efficient windows.

LEARNING / EDUCATIONAL ACTIVITIES

The new school will be structured into age appropriate classrooms of approximately 25 students each. The School will be managed by a centrally located administrative center consisting of the principal, administrative staff, nurse's suite, guidance suite, storage and conference rooms. The main administrative offices will be located at the front adjacent to the entry and connected by a security vestibule. The overall layout of the building will organize the public functions to the front and general classrooms clustered per grade level in wings or on multiple floors. Allowing for the academic wings to be closed off from the remainder of the school will safely accommodate evening and weekend functions. The public areas shall welcome and greet visitors with displays, both digital and physical exhibit cases, to illustrate all of the student's work. The further explain the structure of the learning environment each grade is divided into two teams that will utilize common areas. These common areas support the teaching concept of Scientific Research-based Interventions (SRBI).

General Classrooms – ELA, Math, Social Studies, World Language, Team/SRBI, Health, Alternative Education

- General use classrooms for 6 thru 8 classes clustered together for academic efficiencies
- Space for 25 students in each classroom with handicapped accessibility
- Include 2 SRBI or team meeting rooms per grade, 1 for ELA and 1 for Math – flexible space for team meeting, individual and small instruction scattered throughout
- Electrical convenience power
- Cabinets for secured storage and project display/storage for learning materials
- 1 teaching station per classroom - Teacher's desk, chair, 4 drawer file cabinet, storage/wardrobe cabinet
- Integrated modern technology with 1:1 devices
- Floor outlets
- Include tables for group work instead of individual desks
- Overhead projection racks with screen
- White boards and tack boards
- VCT flooring and base and vitreous painted walls with acoustic ceilings and parabolic LED lighting with variable light level switching.
- Air conditioned and provided with adequate air ventilation to meet current codes



Typical grade level classroom cluster diagram

- Interconnected fire alarm system with horn/strobe notification
- Interconnected school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

Science Clabs – 2 per grade level with shared storage

- General science labs with adjoining classrooms for 6 thru 8
- Space for 25 students in each classroom with handicapped accessibility
- Uninterrupted science counter top space with cabinets for secured science storage.
- Teacher's lab station with instructional counter and desk area, chair, 4 drawer file cabinet, storage/wardrobe cabinet
- Project based room
- Student peninsulas and teacher demo station
- Classroom area with desks and chairs
- Overhead projection racks with screen
- Integrated modern technology with 1:1 devices
- White boards and tack boards
- Science storage room to support both labs with code compliance venting cabinets and fume hoods connected to each lab classroom
- VCT flooring and base and painted walls with acoustic ceilings and parabolic LED lighting with variable light level switching
- Air conditioned and provided with adequate air ventilation to meet current codes
- Interconnected fire alarm system with horn/strobe notification
- Interconnected to school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

Special Education Classrooms

- General support use classrooms clustered together for academic and service efficiencies
- Resource Room per grade level with handicapped accessibility
- CLP Classroom with washer, dryer, a kitchen with refrigerator, stove, oven, dishwasher and a living room set up connected to classroom
- Physical Therapy Room
- Occupational Therapy Room
- Speech and Language Room
- Cabinets for secured storage and project display/storage for learning materials
- Integrated modern technology with 1:1 devices
- Floor outlets
- Overhead projection racks with screen
- White boards and tack boards
- VCT flooring and base and vitreous painted walls with acoustic ceilings and parabolic LED lighting with variable light level switching
- Air conditioned and provided with adequate air ventilation to meet current codes
- Interconnected fire alarm system with horn/strobe notification
- Interconnected school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

Art Classroom

- Accommodate digital arts and a variety of general art classes

- Located on ground level
- Space for 25 students in each classroom with handicapped accessibility
- Computer area along wall
- Include ample storage space within the room and adjoining supply room for art materials
- Adjoining kiln room with shelving and proper venting
- 2-4 fee standing deep utility sinks with sediment traps dispersed through the classroom
- Add floor drain near clay area
- Electrical convenience power throughout perimeter
- Uninterrupted flat counter top space with storage cabinets and open shelving including deep and wide drawer shelving with suspension hardware
- Drying racks
- Teacher's desk, chair, 4 drawer file cabinet, storage/wardrobe cabinet
- Overhead projection and interactive whiteboard
- White boards and tackboards

- Integrated modern technology
- VCT flooring in Art Classrooms with vitreous painted walls
- Acoustic ceilings and parabolic LED lighting with variable light level switching
- Air conditioned and provided with adequate air ventilation to meet current codes
- Fire alarm system with horn/strobe notification
- School-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

Music Classrooms

- Accommodate band and chorus classes
- Space for 120 students in each classroom with handicapped accessibility
- The band & choral room should contain multiple floor levels
- One shared office for two teachers
- Storage of instruments available in an adjacent room
- Storage for equipment associated with band functions
- Appropriate sound management materials
- Sufficient egress for large equipment
- Storage of instruments to be available at the perimeter or in an adjacent rooms
- Incorporate new music technologies
- Electrical convenience power
- Uninterrupted flat counter top space with storage cabinets and open shelving
- Teacher's desk, chair, 4 drawer file cabinet, storage/wardrobe cabinet
- Overhead projection and interactive whiteboard
- White boards and tackboards
- Integrated modern technology
- Walls with appropriate sound management materials
- Acoustic ceilings and parabolic LED lighting with variable light level switching
- Air conditioned and provided with adequate air ventilation to meet current codes
- Fire alarm system with horn/strobe notification
- School-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

Technology/Robotics/STE(A)M/Engineering

- Space for 25 students in each classroom with handicapped accessibility
- Support Project Lead the Way
- Minimum of 2,000 square feet
- Adequate Electrical convenience power
- 25 Fixed computer stations
- Integrated modern technology
- Makers Space for Robotics and pre-engineering
- Uninterrupted flat counter top space with cabinets for secured storage and project display/storage for learning materials
- 1 teaching station per classroom - Teacher's desk, chair, 4 drawer file cabinet, storage/wardrobe cabinet
- Integrated technology with 1:1 devices
- Overhead projection racks with screen
- White boards and tack boards
- VCT flooring and base and vitreous painted walls with acoustic ceilings and parabolic LED lighting with variable light level switching.

- Air conditioned and provided with adequate air ventilation to meet current codes
- Interconnected fire alarm system with horn/strobe notification
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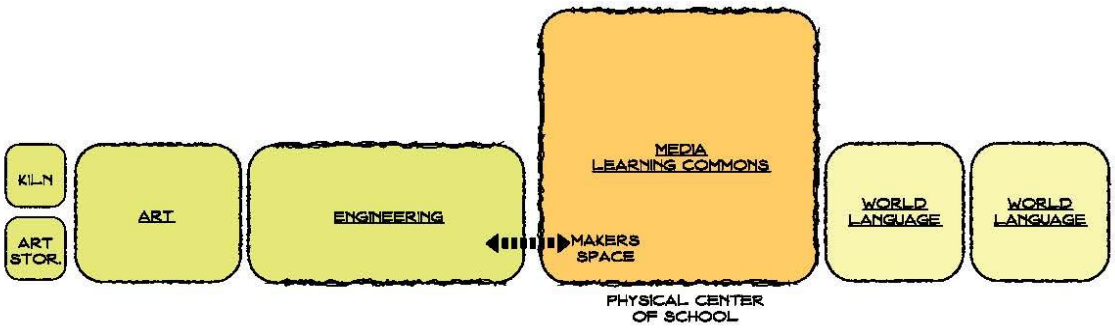
Media Center/Learning Commons



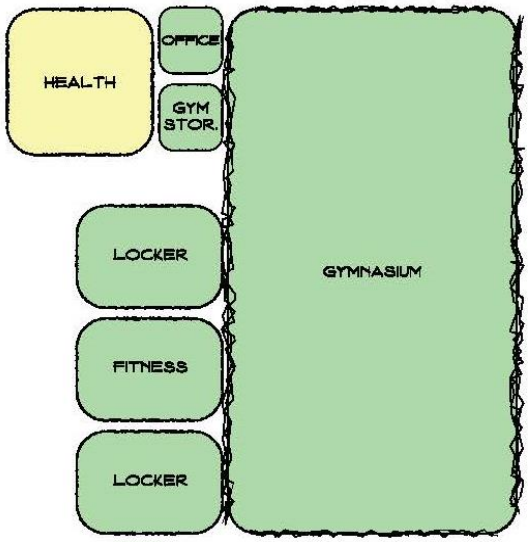
Media Center Diagram

- To serve 50+/- students, with one or two major entry points and emergency access
- Preferred location is at the physical center of the school
- Classroom capacity for two classes of students (50)
- One of these instructional spaces to be equipped with 24 computer stations
- Data jacks located throughout for student access to LAN and internet
- TV racks
- Library checkout/management area
- Space to house a collection of books with open sight lines possible for optimum adult supervision
- Shelving
- Seating for 24 students at six person tables
- Areas with comfortable seating
- Makers space
- Technology room for video production with a green screen for distance learning
- Television racks and CCTV ports for school and network broadcasts
- Workroom with electrical and data connections for high-speed copier

- Shelving
- Walls with acoustic treatment and parabolic LED lighting with variable light level switching
- Ample windows/natural light
- Air conditioned and provided with adequate air ventilation to meet current codes
- Interconnected fire alarm system with horn/strobe notification
- Interconnected school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

Gymnasium and Locker Room

- 1 full-sized gym
- Space appropriate to meet the needs of physical education program for both boys and girls
- Adjustable bleachers on both sides (enough to support entire student body - 480)
- Ropes, nets, rock climbing wall, basketball hoops, drop down batting cage
- Weight room/Fitness
- Padding on walls and floor for physical education programs
- Suspension equipment and/or storage rooms for pads
- Room dividing curtain/mesh to bisect the space for dual activities
- Modern storage for day to day use inside and outside
- Separate storage for extra curricula activities
- Male and female locker rooms with sufficient ventilation that adjoin the gym
- Physical education office to be shared with Health
- Wood floor suitable for running, ball sports such as basketball, kickball, etc.
- Tile floor at locker rooms, no showers
- High output LED lighting for efficiency and color correction for multipurpose activities.
- Acoustic deck and/or acoustic wall panels or suspended panels/clouds
- Fire alarm system with horn/strobe notification and voice evacuation as required by code
- Air conditioned and ventilated to current air-quality standards
- Interconnected school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code



Gymnasium Diagram

Cafeteria

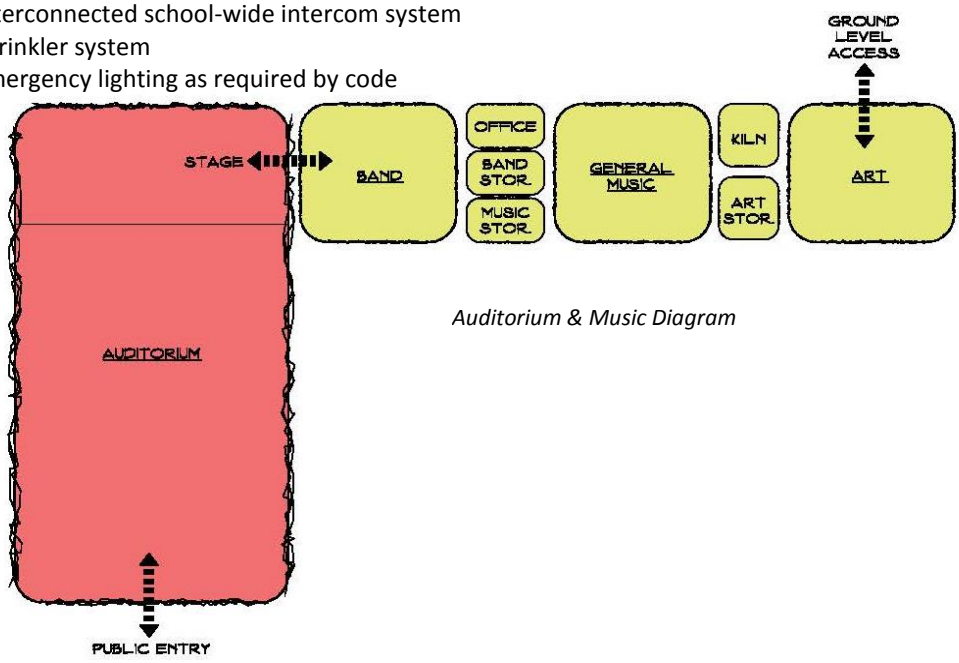
- Space to seat 180 students per lunch wave in three lunch waves
- Provide a full kitchen with servery and storage near receiving area for school
- Floors must be durable and washable, with slip resistant finish
- Provide windows with abundant natural light and create relationships to exterior
- Provide exterior dining
- Vitreous painted or masonry walls for durability and high lay-in ceilings, durable and washable
- High out-put LED lighting for efficiency and color correction for dining and multipurpose activities
- Portable cafeteria tables and chairs
- Convenience power for cleaning equipment and staff/visitor laptops
- Conveniently located data ports and jacks for LAN and internet use by staff, students and visitors

- Large projection screen and overhead LCD rack and LAN interconnection for presentations and communications
- Fire alarm system with horn/strobe notification and voice evacuation as required by code
- Air conditioned and ventilated to current air-quality standards
- Interconnected school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

Auditorium

- Space appropriate to meet the needs of theatrical arts and music program for both boys and girls.
- Space to assemble, present, and instruct the school population of 480 students.
- Separate entrance for public
- Stage suitable for musical and theatrical performances as well as special educational programs.
- Designed for flexible venue changes, and community use in the future.
- Lighting and sound systems to support the education and instructional use of the space.
- Provide Sound Booth
- Adequate technology including but not limited to a Projector and pull down screen at stage

- Acoustical treatment of wall and ceiling to support the use of the space
- Air conditioned and provided with adequate air ventilation to meet current codes
- Interconnected fire alarm system with horn/strobe notification
- Interconnected school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code



Auditorium & Music Diagram

ENROLLMENT DATA AND PROPOSED PROJECT CAPACITY

NESDEC Projections were provided to the district in December of 2015 and have been used to plan the future facilities within the district. Overall the projected enrollment in the district indicates a 2% to 4% decline each year over the next 10 years. The highest 8-year projected enrollment for the elementary grade 6-8 level occurs in 2017-2018 with the maximum at 480 students.

The student enrollment for the current middle school is 480 students which classifies the current building as undersized for its current use helping to make the decision to construct a new middle school. According to the Space Standards Worksheet a population of 480 students at grade 6 through grade 8 anticipates the maximum square footage of the school to be 80,640 square feet. The program is developed using this as a guideline while aligning it with the needs to create a better educational experience for these middle school students of Oxford.

Size of Facility and proposed project capacity

These specifications provide the components necessary to create a middle school to properly serve the 480 students, which is anticipated to occur in 2018. The current Space Standards do not align with the needs of the district to academically support these students. The new building design will likely exceed the allowable 80,640 net square feet. The current desired program totals at 91,896 net square feet. For decades, the middle school has been programmatically lacking and therefore insufficiently providing the educational tools needed for these students. A collaborative effort has been made to determine the spaces, sizes and relationships of the program needed to provide an educationally cutting edge state of art middle school facility for the students of Oxford. The following spreadsheet includes the components need to build this new school.

6-8 School - Proposed Architectural Program
Projected Enrollment: 480

Space Division	Quantity	Square footage	Subtotal
GENERAL CLASSROOMS			
Grade 6 (2 ELA, 2 Math 2 Social Studies)	6	800	4800
Grade 7 (2 ELA, 2 Math 2 Social Studies)	6	800	4800
Grade 8 (2 ELA, 2 Math 2 Social Studies)	6	800	4800
Science Labs (2 per Grade 6-8)	6	1300	7800
World Language	2	800	1600
Team meeting room/SRBI -ELA	3	400	1200
Team meeting room /SRBI - Math	3	400	1200
Alternative Education	2	800	1600
Health	1	800	800
TOTAL	24		**28,600**
SPECIAL SUPPORT			
General Art Classroom	1	1200	1200
Art Storage	1	150	150
Kiln	1	150	150
General Music Classroom	1	1000	1000
Music Storage	1	150	150
Band Classroom	1	1000	1000
Band Storage	1	150	150
Engineering/Tech Ed/STEAM	1	2000	2000
SPECIAL EDUCATION			
Resource Rooms - per grade	3	800	2400
CLP classroom	1	400	400
Speech & Language	2	400	800
Behavioral Classroom	1	800	800
OT/PT	2	400	800
TOTAL	9		**11,000**

6-8 School - Proposed Architectural Program
Projected Enrollment: 480

Space Division	Quantity	Square footage	Subtotal
MEDIA CENTER			
Office	1	150	150
Circulation Desk/Media	1	150	150
Book Stack Area	1	500	500
Work Table/Seating Area	1	600	600
Technology room	1	300	300
Resource Center/Learning Lab	1	600	600
Computer Resource Lab	1	800	800
Makers Space	1	650	650
Storage/Work Room	1	150	150
TOTAL	5		**3,900**
PHYSICAL EDUCATION			
Full-size gymnasium	1	6200	6200
Weights & Fitness	1	600	600
Equipment Storage	2	100	200
Locker Rooms	2	600	1200
Office	1	150	150
TOTAL	7		**8,350**
AUDITORIUM			
Seating Area	1	6000	6000
Stage with ramp	1	1500	1500
TOTAL	2		**7,500**
CAFETERIA			
Dining Room (2 lunch waves)	1	3360	3360
Kitchen	1	500	500
Servery	1	500	500
Dish Washing	1	200	200
Dry Storage	1	150	150
Refrigerator Storage	1	150	150
Freezer Storage	1	150	150
Office	1	120	120
Toilet	1	120	120

6-8 School - Proposed Architectural Program
Projected Enrollment: 480

Space Division	Quantity	Square footage	Subtotal
Loading Dock	1	100	100
Shipping and Receiving	1	500	500
TOTAL	3		**5,850**
ADMINISTRATION			
Main Office			
Front Lobby	1	500	500
Reception/Waiting	1	300	300
Secretarial Area	1	700	700
Work Area/Mail	1	150	150
Principal Office	1	150	150
Assistant Principal Office	2	150	300
Conference Room(s)	2	200	400
Student Records	1	150	150
Office Storage	1	150	150
Toilet	2	100	200
Guidance	3	150	450
School Psychologist	1	120	120
Speech Pathologist	1	120	120
PTA Storage	1	100	100
Faculty Lounge	1	600	600
Satellite Copy Area(s)	2	80	160
Book Storage	2	100	200
Nurse Suite			
Reception/Waiting	1	100	150
Office	1	120	120
Exam	3	120	360
Cot Area	1	400	400
Toilet(s)	2	100	200
Storage	1	100	100
TOTAL	10		**6,080**

6-8 School - Proposed Architectural Program
Projected Enrollment: 480

Space Division	Quantity	Square footage	Subtotal
BUILDING INFRASTRUCTURE			
Custodial Office	1	120	120
Custodial Work Area	1	200	200
Satellite Custodial Area	2	80	160
Student Toilets			
Boys	4	250	1000
Girls	4	250	1000
Staff Toilets	3	80	240
Public Toilets	2	250	500
Server Room	1	200	200
Satellite Data Rooms	2	100	200
Mechanical/Boiler Room	1	1200	1200
Electrical Closets	3	100	300
Water Room	1	180	180
TOTAL	25		**5,300**
CIRCULATION			
Gross Square Foot Factor	1.2	**76,580**	**15,316**
TOTAL			**91,896** 88%
State Space Standards for 480			80,640

DETAILED DESCRIPTION - BEFORE, DURING, AFTER AND SUPPLEMENTAL

Before Construction

This project will begin with design and all state and town approvals. The existing middle school building will remain in operation as the town's middle school until the new is ready to be occupied.

During Construction

This new construction will occur while the students remain at the existing building.

After Construction

Once the new building is complete the school will open for the next school year.

Supplemental

As the existing middle school furniture and equipment is dated and nearing the end of its useful life, it is anticipated that most furniture and equipment will be new and included in the FF&E phase of the project.

BUILDING SYSTEMS

This project will have an impact on the following systems:

- Security – The intent of this project would be to provide the essential architectural components such as vestibules and window glazing and sill heights along with technical systems such as security cameras. It will also incorporate the latest SSIC standards.
- Technology – The intent is to have the most current technology available and each room outfitted to support 1 to 1 devices.
- PA, Phones & Clocks – A modernized system will be incorporated into the design.
- HVAC– Highly efficient modern systems including cooling and ventilation will be incorporated into the design.
- Electric – Highly efficient modern systems including LED lighting and energy management systems will be incorporated into the design.

INTERIOR BUILDING ENVIRONMENT

- Ceilings and Walls – The intent of this project would be to provide the school with the best materials for efficiency and acoustics. Exterior and interior walls will be constructed with block and/or brick. Dropped acoustical ceilings will be installed in classrooms. Other spaces such as the gym, cafeteria and Media Center will likely have exposed ceilings with some acoustical clouds or portions of dropped ceilings.
- Plumbing – Highly efficient systems including low flush toilets and urinals will be incorporated into the design.
- Windows and doors – The project will be constructed with aluminum double or tripled glazed high efficient systems working with the SSIC guidelines. Exterior doors will be aluminum and interior will be solid core wood.

SITE DEVELOPMENT

The new site, which the district is in the process of selecting, will be designed first with safety in mind. For instance, building placement is determined through site analysis along with the SSIC guidelines to create a safe school. Traffic flow is one item that in older schools was overlooked so with a new site, traffic safety will be a primary objective. The first goal is to separate bus and vehicular traffic. At the front of the school, there will be two distinctive drop off and pick up areas for each, one to accommodate busses while the other will be for parents. The intent is to fit them both in at the front door and not require one to cross the other to improve the overall safety. Visitor parking, including handicap spaces, will also be located at the front. Staff parking may be located to side or further to the front. Covered walkways will greet pedestrians as they approach the building. The front office will have excellent visibility to these areas. The new site will also allow for full accessibility throughout the site from the building to the parking lots and to the fields and outdoor spaces. Baseball fields, soccer fields and a basketball court will be included in the project. These fields will be designed with proximity to the gymnasium and will be open to the community of Oxford. A new site will create other opportunities to incorporate outdoor learning environments, perhaps rain water collection, gardens and outdoor classrooms will be part of the site design.