

Educational Program Specifications - Overview

The North Stonington BOE central offices will relocate to the existing Wheeler high school after the completion of the Wheeler Middle and High School addition and renovation project at the existing Gymnasium building. The central office program space will include the following spaces:

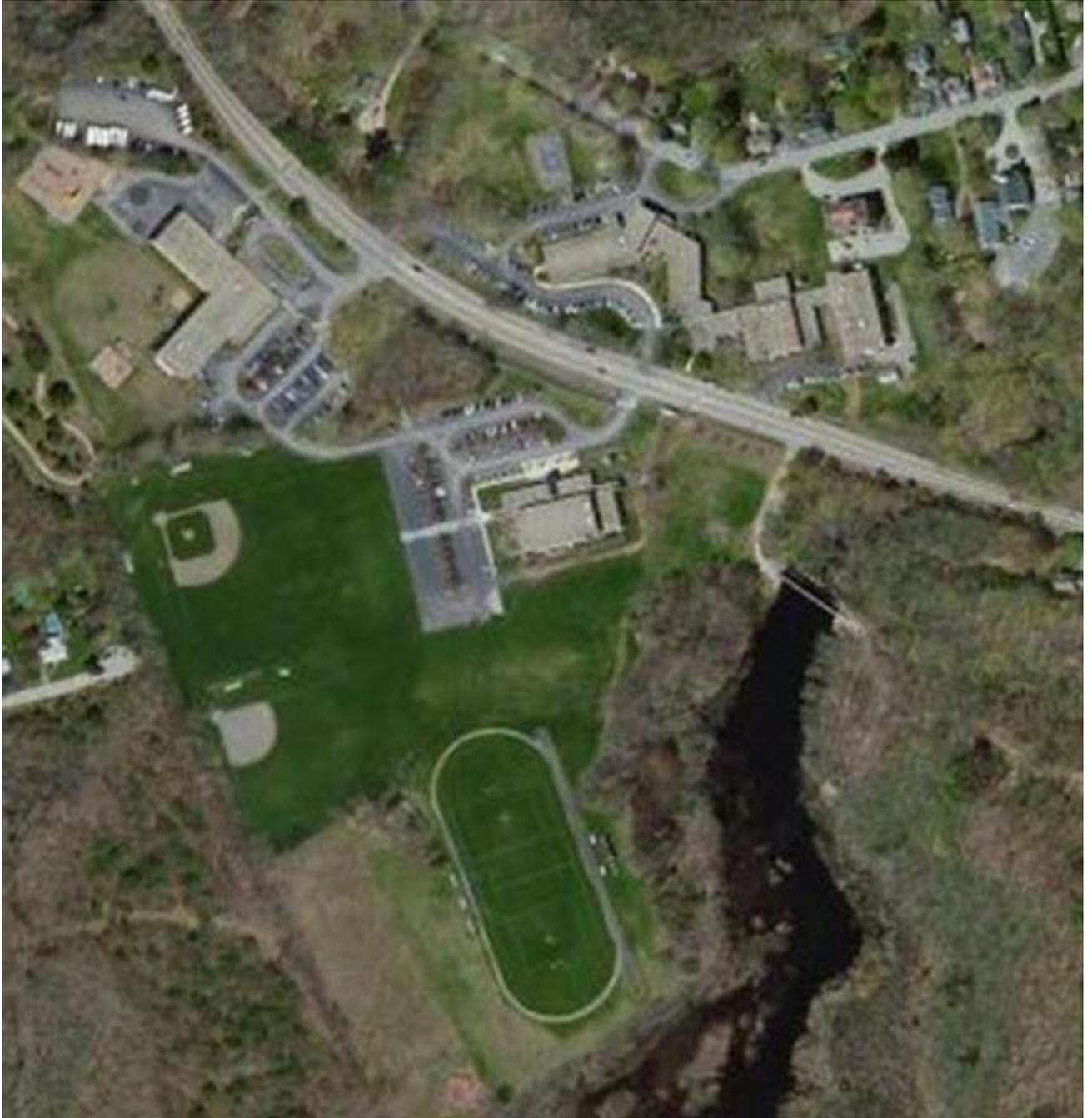
1. Superintendent's Office and Support spaces
2. Business Office and Support spaces
3. The IT / Technology offices, Storage and workrooms
4. Special Education and Student Services offices and conference rooms
5. Special education record storage
6. Facilities Management and Support including district wide storage and maintenance
7. Professional Development Space
8. Board of Education Meeting room
9. District wide record storage
10. Public Toilets
11. Staff toilets
12. Mechanical, Electrical and Technology Infrastructure spaces including the central server room.

The central offices will relocate the existing furniture and equipment to the new central office building at the east side of route 2.

The project scope is for the removal and replacement of the existing roof for the space that will house the central offices. The extent of the space is identified on a floor plan and roof plans. The roof is over 20 years old and is fully eligible for state reimbursement.

North Stonington Public Schools

Facilities Study & Educational Specifications



Wheeler Middle and High School

June 1, 2016

Quisenberry Arcari Architects, L.L.C.
318 Main Street Farmington, CT. 06032

Table of Contents

Acknowledgements

Project Overview.....Tab - 1

Executive Summary

Project Goals

Project Priority Consideration & Process

District's Mission & Vision Statement

Elementary School - Long Range Plan

Regional Information and Climate Data

Existing ConditionsTab - 2

Architecture and Interiors

Building Systems and Infrastructure

Site and Site Utilities

Enrollment Projections.....Tab - 3

Enrollment Summary

Educational Program Specifications.....Tab - 4

Educational Program Specifications

1. ACADEMIC

- English / Language Arts
- Social Studies
- Science
- Mathematics
- World Language
- Business
- Business and Language Labs

2. TECHNOLOGY EDUCATION, PERFORMING & VISUAL ARTS

- Music
- Art
- Graphics Arts & CADD

3. ASSEMBLY & COMMUNITY USE

- Media Center
- Cafeteria and Servery
- Auditorium / Assembly
- Physical Education and Health

4. ADMINISTRATION & STUDENT SERVICES

- Administrative Offices
- Student Support Services
- Health/Nurse
- Guidance

5. FACILITY MANAGEMENT & SUPPORT

- Boiler Plant / Mechanical / Electrical Infrastructure
- Facilities Offices & Building Storage

Wheeler Middle & High School

Facilities Study & Educational Specifications

June 1, 2016

Planning Concepts.....Tab - 5

Energy Conservation and Sustainable Design
Codes – Building, Fire/Life Safety, ADA
Technology - North Stonington Public Schools Technology Plan
Security & Safety
Furniture Furnishing and Equipment
Community Use
Flexibility & Agility
Student Display
Site Analysis/Evaluation

- Land Use Requirements
- Site Selection
- Site Circulation

Concept designs
Construction Phasing
Project and Construction Schedule

Financial Data.....Tab - 6

Project Budget Estimates
State Reimbursement Estimates

Appendix.....Tab - 7

A - NESDEC – Enrollment Projections 2011 – Projected to 2020
Glossary
Project Team

Acknowledgements

Board of Selectmen

Mr. Shawn P. Murphy– First Selectman
Mr. Nicholas H. Mullane, II
Mr. Mark Donahue

Board of Education

Mr. Robert Carlson – Chairperson
Mr. David McCord – Vice-Chairperson
Mr. Walt Mathwich – Secretary
Dr. Darren Robert
Ms. Christine Wagner
Mr. Alex Karpinski
Mr. Phil Mendolia
Ms. Julia Buzzee

Administrative Team

Mr. Peter Nero - Superintendent of Schools
Ms. Kimberly Allen – Business Manager
Mrs. Kristen St. Germain– Principal
Mr. Ryan Chaney – Associate Principal
Ms. Veronica o. Wilkison – Principal
Ms. Kelly Gonzalez – Secretary
Mrs. Sue Costa – Special Education
Mr. Greg Pont – Director of Technology
Mr. Guy Boucher - Director of Maintenance & Operations

Educational Specifications Committee

Mr. Peter Nero - Superintendent of Schools
Ms. Kimberly Allen – Business Manager
Mrs. Kristen St. Germain – Principal
Mr. Ryan Chaney – Associate Principal
Mrs. Sue Costa – Special Education
Ms. Veronica O. Wilkison – Principal
Mr. Christopher – Principal
Mrs. Sue Costa – Special Education
Mr. Greg Pont – Director of Technology
Mr. Guy Boucher - Director of Maintenance & Operations
Ms. Veronica o. W - Principal
Ms. Roberta McCarthy – Administrative Assistant

North Stonington School Modernization Project Committee

Mr. Michael Urgo - Chairperson
Mr. Michael Anderson
Mr. Walter Mathwich
Mr. Michael Osborn
Mr. Mark Perkins, Jr
Mr. Jay Peterson
Ms. Pamela Potemri
Mr. David Sellins
Mr. Daniel Spring

Existing Conditions Summary

North Stonington Public Schools selected Quisenberry Arcari Architects in October of 2011 to conduct a facilities study and complete an evaluation of their school facilities. The purpose of the evaluation is to provide a basis for developing a master plan for Elementary, Middle and High School. The Design Team has reviewed the Wheeler High School Middle School, the Board of Education and combination Gymnasium/Auditorium facility, and the North Stonington Elementary School, as well as the athletic fields, roads and walkways. The site visits to evaluate the existing conditions took place during October thru December, 2011 timeframe. The Wheeler Middle School-High School and Elementary School buildings were originally built more than 35 years ago with additions, renovations, and isolated upgrades in the ensuing years. The most recent substantive project, was undertaken in 1995, and included re-roofing, code upgrades, interior upgrades to corridors, computer spaces, special needs space, library, kitchen and toilet facilities; new classrooms, administrative and guidance space to connect the two schools. A new gymnasium, performance and music facility on the southwest side of Route 2 with a new tunnel for safe access across the State highway was constructed in 1995, however the exterior walls and many classrooms remained untouched in the renovation and the electrical and heating systems were upgraded only on an as needed basis. Over the past three years additional improvements have been made to the boiler plants at each school and the chimneys have been replaced at the Central Office and Elementary school Facilities.

Some of the Key facility and program related concerns at the North Stonington Elementary School include:

- Non -addressable fire alarm systems
- Inadequate ventilation
- Appropriate Security based on the new state guidelines
- Inadequate space for the kitchen and cafeteria.
- Appropriate space for the middle school classrooms
- Inadequate space for music and remoteness of the program space.
- Insufficient support space for mandated special education programs
- Appropriate program adjacencies.
- Code violations

The design team recommends a comprehensive plan to address all educational, maintenance, and regulatory issues to meet the Town's needs through the middle of the 21st Century. The design team will recommend options including cost effective approach to upgrades. The facilities study would include renovation, additions, or replacement of existing facilities and will require additional planning activities by the School Committee and Town. The facilities plan may be undertaken in a phased or comprehensive way. Probable project costs can only be generated through a District-defined proposed scope of work

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Existing Conditions Wheeler Middle and High School

Site

Vehicular Circulation and pavements

- Provide additional HC space at HS & MS parking lot.
- Provide a storage/maintenance building, with electricity, water and toilet facilities for the fields and site.
- Repair broken bituminous curbing at Gymnasium/Auditorium parking lot.

MS & HS Outdoor Sport & Recreation facilities usage:

- Provide an additional field (baseball or softball with the outfield doubling as a soccer or lacrosse field) in the cleared area to the west of the track for additional athletic area.
- Consider the construction of at least four (4) tennis courts behind the Gymnasium, Auditorium.
- Construct a pedestrian pathway across the wetland to allow student access to the town fields on Rocky Hollow Road.
- Provide code compliant HC accessibility to the athletic fields

Drainage, Irrigation, Field Maintenance

- Repair gutters and leaders
- Direct water from roof overhangs without gutters away from entries
- Consider irrigating some or all of the athletic fields

Building Access:

- Provide a covered and secure walkway to connect tunnel to Wheeler Middle & High School.
- Provide a covered and secure walkway to connect tunnel to Gym/Auditorium Building.
- Provide Handicapped access across Route 2, to connect the north and south sides of the site.
- Re-grade walkway or provide a compliant handrail at the non-conforming slope on the north side of the Middle School
- Provide an accessible ramp to the North entrance

Exterior Building Envelope

- The exterior of both the Middle and High School buildings should be upgraded as follows:
- All of the caulking should be removed and replaced
- The original window systems of the 1950 and 1964 buildings should be replaced with new.
- Modifications to the interior back-up wall should be considered as part of the replacement project.
- The new windows should have extruded aluminum thermally broken frames with a high performance finish, insulated, low-e, tempered glazing which would offer the greatest energy efficiency and long term performance should be installed.
- Re-pointing of the masonry veneer is recommended.
- The wood fascia and moldings should be scraped, repaired and repainted.
- The pre-cast concrete elements of the Middle School should be repaired, restored and/or replaced.
- The steel lintels and adjacent damaged masonry should be removed and replaced.
- Sand and re-paint all exposed steel structure.

- Stabilize the exposed tectum roof deck overhangs at the M.S.
- All original exterior hollow metal doors of the 1950 and 1964 buildings should be replaced
- All original exterior louvers of the 1950 and 1964 buildings should be replaced.
- Exterior concrete stairs should have the railing finishes repaired and repainted and the abrasive metal nosing replaced.
- The cast in place structural elements and concrete entry canopies at the High School should be cleaned and coated to prevent further damage from the elements.

Route-Two Tunnel:

- Exterior concrete stairs should have the all the abrasive metal nosing replaced.
- Consideration should be given to providing protection for pedestrians between the tunnel and buildings.
- Verify that the current conventions regarding tunnel use are in compliance with applicable codes.

Roof

- When doing future re-roofing work, provide tapered insulation under the roof membrane to direct water to the drains.
- Clean, snake out and test down spouts and underground storm drain system.
- Inspect the perimeter of the roof twice a year. Pull back stone ballast from the edge of the building and clean the gutters.
- Clad wood fascia boards with aluminum to provide maintenance free 20 year Kynar finish.
- Repair, re-point and make water tight all of the masonry surfaces.
- Overlap copings at joints and make water tight with a sealant.
- Remove wires and cables to eliminate tripping hazards on the roof.
- Pipe the secondary overflow drains to daylight which will them provide notification to custodial staff if and when there is a problem with the primary roof drainage system.

Middle School General

- Re-paint all walls as required.
- Replace all carpet floors.
- Replace all interior room signage.
- Verify that the corridor/classroom doors and frames are 45 minute rated and bear the proper UL labels.
- Verify that the corridor/classroom door magnetic hold open devices are tied-into the fire alarm system and operate freely.
- Verify that the corridor walls are one hour rated and have all penetrations properly sealed with U.L. tested assemblies. This is only required if sprinkling of the building is not anticipated in the short term.

Main Entrance Lobby

- Repair/replace VCT floors.
- Replace all interior signage and provide clear directional signage.
- Provide a secure covered walk to the tunnel under Route Two.

Main Administration Office Nurse

- Refinish wood casework.

Wheeler Middle & High School

Facilities Study & Educational Specifications

June 1, 2016

- Re-work the space for proper access and control to the school nurse, copier and staff mailboxes.
- **Develop new or reassigned space to house the school nurse.**

Main Guidance Office/Career Center

- Repair any cracks in the gypsum board walls and re-paint.
- Re-work the space for proper access and furniture placement.
- Additional space for career and education research should be considered.

Library Media Center

- Modify and/or replace the main circulation desk and study carrels to be handicapped accessible.
- Repair and stabilize the cracking walls.
- Provide transfer grilles and/or supplemental unit heaters in the interstitial space.

Cafeteria

- **Replace surface mounted light fixtures.**
- **Replace all VCT floors.**
- **Replace the original window system.**
- **Replace exterior window treatments.**
- **Provide acoustic treatments for this space.**
- **Enlarge seating area as required for student population Kitchen/Servery**
- **A renovation and addition of this entire area is recommended due to the inadequate size and in order to bring all components into compliance with current sanitary code**

Typical Middle School Corridors

- Replace all water coolers with handicapped accessible models.

Typical Middle School Classroom

- **Re-paint all ceilings and walls.**
- **Replace pendant/surface mounted light fixtures.**
- Replace all carpet floors with new VCT.
- Replace wood and plastic laminate casework. .
- Repair the egress window insect screens to allow free operation.
- Replace the original window system
- Replace exterior window treatments.

Typical Middle School 1950 Wing Classroom

- The recommendations regarding original window system, mechanical systems, electrical and communication systems, as well as accessories are similar to the 1964 classroom wing, except to the degree renovation and upgrades have occurred for particular program needs. The recommendations for 1950 spaces below are similar with the additional recommendations as noted. Consider demolishing and rebuilding this structure.

Typical Middle School Science Classroom-1 950

- The science rooms should be completely renovated to meet modern science educational standards.
- Replace and/or repair VCT floors.
- Replace old ceilings and fixtures
- Replace all windows
-

Middle School ComputerLab-1950

- Replace ceiling
- Replace lighting and Finishes
- Revise educational space layout to meet current technology utilization.

Middle School Consumer Science Classrooms-1950

- Replace all casework, plumbing fixtures and appliances.
- The consumer science room should be completely renovated to meet modern educational standards.

Middle School OT/PT and Special Education Classroom

- Replace all casework, and equipment
- The special education instructional spaces should be completely renovated to meet modern educational standards

Middle School Art Classroom

- The classroom should be completely upgraded to meet modern instructional standards for art
- The art classroom should be relocated to be more proximate to the classrooms and other support spaces.
- The art new studio/classroom 'should be established in a completely renovated area in order to meet modern educational standards.
- Replace and/or repair VCT floors.
- Provide new casework.
- Refer to the typical H.S. classroom notes for balance of recommendations.
-

M.S. Faculty Room

- The faculty room should not be in the same space as the electrical panels
- Refer to the typical administrative spaces for balance of recommendations regarding windows, and finishes.

Typical Middle School Student Toilets

- Replace light fixtures
- Replace fixtures, accessories and layouts to meet full ADA compliance.

Typical Middle School Staff Toilets

- Abandon the toilet rooms located in the 1950 classroom wing. Replace fixtures, accessories and revise layouts to meet current ADA compliance, similar to the toilet rooms renovated in 1995.

Wheeler Middle & High School

Facilities Study & Educational Specifications

June 1, 2016

Mechanical Rooms

- Renovation of this room to meet all current code standards should be included in any mechanical upgrade, Refer to the MEP portion of the report for additional information.
- Door hardware to room should have knurled surfaces on all lever handles.

Interiors High School

- Replace all interior room signage.
- Repaint walls per requirement of maintenance plan
- • Verify that the corridor/classroom doors and frames are 45 minute rated and bear the proper U.L. labels.
- Verify that the magnetic hold open devices are tied-into the fire alarm system.
- Verify that the corridor walls are one-hour rated and have all penetrations properly sealed with UL tested assemblies. This is only required if sprinkling of the building is not anticipated in the short term.

Typical High School Corridors

- Replace all water coolers.

Typical High School Classroom

- Replace or paint all ceilings or replace ceiling finishes in 1964 rooms.
- Replace pendant/surface mounted light fixtures in 1964 rooms.
- Replace wood and plastic laminate casework in 1964 rooms.
- Replace the original window system in 1964 rooms.
- Replace exterior window treatments in 1964 rooms.
- Consider creating additional larger sized classrooms

Typical High School Science Classroom/Lab

- Replace all casework.
- Replace pendant mounted light fixtures. -
- Clean out the storage/preparation rooms of old chemicals and properly dispose.
- Refer-to the typical H.S. classroom notes for balance of recommendations regarding windows finishes.
- The science rooms should be completely renovated to meet modern educational standards.

High School Art Classroom

- Provide a two-hour room around the kiln area with a new exhaust system. This can be reduced to one hour if the building is sprinklered.
- Provide art display in the corridor and inside the classroom for both 2D and 3D art.
- Create a distinct zone for the potter's wheels.
- Remove the electronic equipment to protect from ceramic dust.
- Provide acoustical treatment inside the classroom.

High School Computer Labs and Head End Room

- Provide appropriate ventilation and cooling for the computer Head-end room

-
- Refer to the typical H.S. classroom notes.

High School Special Education Classrooms

- Refer to the typical 1964 H.S. classroom notes for recommendations.

H.S. Faculty Room

- Provide furnishing and equipment to encourage interaction
- Organize space for multiuse

H.S. Wood Shop

- Renovate / repurpose space for a technology education program

H.S. Metal Shop

- Renovate / repurpose space for a technology education program

Typical High School Student Toilets

- Replace light fixtures.
- Replace fixtures, accessories and layouts to meet full ADA compliance.
-

Typical High School Staff Toilets

- Provide additional toilet rooms to serve the staff.
- Provide fixtures, accessories and revise layouts as required to meet full ADA compliance

High School Stairs

- Remove and replace the handrails and guardrails to meet the current codes.
- Verify that the stair enclosure has the required fire rated walls.
- Revise the stair nosing coverings to comply with current code requirements.
- Remove all improper stored materials from the stair enclosure.

High School Elevator

- Address all ADA compliance items in the elevator cab and all landings

Structure

Middle School 1950

A portion of the masonry above and adjacent to some the openings should be removed and a further investigation of the condition be conducted. Repair procedures for the masonry and lintels will be developed from the investigation. The condition of the steel angles can be assessed at the same time. We recommend that monitors be installed at the cracks to determine if they are continuing to move. The monitors will be read every month for a period of at least 6 months and the information recorded. Remedial work will be recommended based upon the information gathered. Consider demolition of this structure in future master-planning

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Middle School 1960

The peeling paint and corrosion must be removed and repainted with a corrosive resistant paint.

High School 1964

A portion of the spalled concrete should be removed and the concrete cleaned of loose debris. The exposed sections of the structural girders and columns must be evaluated for further damage. The condition of the concrete should be viewed by a representative of a concrete restoration firm such as "Sika". They will assist in indicating the proper repair products to correct the condition to prohibit additional destruction from the freeze-thaw cycles. The brick masonry which contains cracks and is exhibiting movement must be removed and replaced with a "soft" joint between the buildings. This will allow the buildings to move independently.

High School Former Gymnasium

Areas of the damaged brick should be removed where cracking and movement have occurred. The anchorage of the masonry and damage to wall due to water intrusion must be documented. Based on the investigation, an evaluation of the warts and possible repair procedures will be provided. Spalling brick must be tested to evaluate the extent of damage to the bricks and the strength of the brick. At the time of the results of the testing, we will determine the appropriate remedial work.

Chimneys

The chimneys have been reconstructed in 2011 & 2012.

Mechanical and Electrical HVAC and Plumbing

Replace the entire building mechanical systems with new high efficiency systems that meet high performance building standards adopted by the State of Connecticut. This will include replacing the existing ductwork, hot water supply and return piping systems and controls insulation. Plumbing fixtures not replaced during the 1996 renovation should be replaced. Provide new automatic temperature control systems (remove existing pneumatic controls). Provide a new sprinkler system for the entire facility.

Electrical

Replace the following systems

Power distribution based on updated power requirements in all instructional spaces. Air conditioning the entire facility should be considered. Provide a lighting protection system

Fire alarm and Communications System

Modify or replace the following systems as required by occupant/renovation needs:

Fully addressable fire alarm system.

PA and Clock system

Telephone system

Data network

Utilities

Replace pole mounted transformer with pad mounted transformer if new service is brought in for expansion and renovation needs.

Gym/ Auditorium/Administration Building Recommendations

Exterior Envelope Recommendations

- All of the sealant should be removed and replaced with new.
- Clean the masonry
- Re-paint all exposed steel deck and structure at the entrance canopies.

Roof Recommendations

- Install prefabricated guard rails at the access hatch.
- Install manufacturer's prefabricated flashing boots at the vent stacks.
- Provide 20 oz. lead coated copper thru wall flashing at all wall flashing conditions.
- Thru wall flashing must be installed by removing CMU in alternating 2'-0" long sections in order to maintain structural integrity of rising walls.
- Change material of the standing seam roof at the entry
- Install gutter to prevent water from dripping off the red copper and onto the masonry.

Interiors - Typical Rooms and Individual Spaces Recommendations

- Re-paint all walls as required by maintenance plan District Administration Offices
- Expand as required for additional office, conferencing and storage space.

Gymnasium/ Auditorium

- Replace corridor borrowed lights
- Provide additional acoustic treatments for this space.
- Provide additional stage support space and upgrade the rigging and lighting.

Chams Classroom

- Provide additional acoustical treatment if music function is to be continued.

Band Room

- Provide additional acoustical treatment to improve acoustics
- Provide additional storage in order to return practice rooms to original use (as required)
- Provide adequate acoustical treatment to practice rooms

Public Toilets

- Replace fixtures, accessories and revise layouts to meet full ADA compliance.
- Provide urinal screens in the men's room.
- Replace plastic laminate lavatory counter.

Locker Rooms

- Extend the CMU wall construction to underside of structure.
- Replace fixtures, accessories and revise layouts to meet full ADA compliance.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

- Provide urinal screens in the men's room.
- Replace the plastic laminate lavatory countertops.

Mechanical Rooms

- Refer to the MEP portion of the report for additional information
- Door hardware to room should have knurled surfaces on all lever handles.

Structural Recommendations

We would recommend that a monitor be installed at both wall locations to record any possible movement in the cracks over a 6 month period of time. Based upon the information gathered, we will provide suggestions for repairing masonry walls. The exposed metal roof deck must be cleaned of all corrosion, primed and painted with a corrosive resistant paint.

Mechanical and Electrical

Perform a program of regular maintenance and repair.

Educational Program Specifications - Overview

Overview of Program Format

The educational programming section for the Wheeler Middle & High School study is organized into five sections. Each section identifies program and support spaces that are programmatically related. All spaces within the facility are identified in one of the following sections:

1. Academic Classroom & Support Spaces
2. Technology Education, Performing & Visual Arts
3. Assembly and Community Use
4. Administration and Student Services
5. Facilities Management and Support

A space utilization program is provided in the beginning of each section indicating the name of each space, the number of the spaces required and the size of the space. Following the space program are diagrams that show the relationship and adjacencies of the proposed program spaces. Informational data sheets are provided for each space. The information on these pages is provided as a starting point for the architectural design team. Further review with the school for final room layout, furnishings and fixtures will be required prior to the development of the final design.

1. **ACADEMIC**
 - English / Language Arts
 - Social Studies
 - Science
 - Mathematics
 - World Language
 - Business
2. **TECHNOLOGY EDUCATION, PERFORMING & VISUAL ARTS**
 - Music
 - Art
 - Technology Education
 - Computers/Prototypical Resource Lab
3. **ASSEMBLY & COMMUNITY USE**
 - Media Center
 - Cafeteria and Kitchen
 - Assembly / Gymnasium & Auditorium Combination
 - Physical Education and Health
4. **ADMINISTRATION & STUDENT SERVICES**
 - Administrative Offices
 - Student Support Services
 - Health/Nurse
 - Guidance
5. **FACILITY MANAGEMENT & SUPPORT**
 - Boiler Plant / Mechanical / Electrical Infrastructure
 - Facilities Offices & Building Storage

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

PROPOSED FIRST FLOOR PLAN



PROPOSED SECOND FLOOR PLAN



Educational Program Specifications – English/Language Arts

Program Objectives

Each student takes two years of Language Arts at Wheeler Middle School.

Each student who graduates from Wheeler High School needs to successfully earn 4.0 credits in English.

Language Arts standards mandate that students, by the end of 12th grade, should have developed proficiency, confidence, and fluency in reading, writing, listening, speaking, and viewing to meet the literacy demands of the 21st century. Although we understand that the development of language is a life-long process, the extent to which students become proficient in these skills while at Wheeler is vitally related to their future abilities to function independently and productively in life. Specifically, students should be able to read and respond in personal, literal, critical, and evaluative ways to literary, informational, and persuasive texts. They should also produce written, oral, and visual texts to express, develop, and substantiate ideas and experiences. Students will use the language arts to explore and respond to classic and contemporary texts from many cultural and historical periods. They also will recognize their own strengths and weaknesses in Language Arts. Since language itself is an important means of giving shape to experience and knowledge of expressing human hopes and feelings, students shall be instructed in the ways in which language functions and in ways of controlling and using language. The English/Language Arts Department at Wheeler is tasked with managing the Senior Project graduation requirement.

Program Goals

Instruction in Language Arts involves the 21st Century Learning Expectations of writing effectively, reading effectively, speaking effectively, problem-solving effectively, and thinking critically. The goals of the English/Language Arts program include the following:

- A. Development of skills which are basic to most other subjects studied and useful, if not vital, to success in our highly verbal culture;
- B. Development of an understanding about literacy tradition which comprises the subject matter unique to English, the broad cultural heritage of the English-speaking people – religious, technological, political, sociological and artistic;
- C. Development of the powers of comprehension and coherence and fluency in expression;
- D. Presentation of literary works that promote humanistic attitudes, aesthetic appreciation, critical evaluation, and civic pursuits;
- E. Development of critical judgment techniques through practice and awareness of the way language shapes our world.

Program Courses

- A. Grade 7 Language Arts (at least one co-taught class)
- B. Grade 8 Language Arts (at least one co-taught class)
- C. Grade 9 English (Honors, Academic & General)
- D. Grade 10 English (Honors, Academic & General)
- E. Grade 11 English (Academic & General)
- F. Grade 11 Advanced Placement/ECE
- G. Grade 12 English (Academic & General)
- H. Grade 12 Advanced Placement/ECE

Program Activities to be Accommodated

Activities to be housed include large and small group instruction and class work. Students will discuss, read, write, word process, present, dramatize, and conduct research, applying skills and content learned through the utilization of material available in the classroom, as well as through the technological resources of voice, video, and print media. Each classroom must be large enough to accommodate students working in small and large groups. Space

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

must allow for teacher supervision of small groups and acoustics must be appropriate to control the noise level. All students are also required to meet individually with teachers in conference; therefore, appropriate quiet space should be provided. The English/Language Arts classroom should function as a general classroom with full audiovisual/technology capabilities supported with the necessary electrical and network infrastructure. Natural light, multi-level lighting and individualized environmental control should be provided in each space.

Space Occupancy and Design Criteria

The English/Language Arts Department classrooms include the students and English/Language Arts Department teachers. Depending on the course, a special education teacher, paraprofessional, or a reading/writing resource teacher may share space for the instruction of small groups or individuals within the regular classroom. The following is a partial list of design elements that should be incorporated into all instructional spaces:

- The classroom configuration should maximize flexibility and interaction within and among the instructional areas for development of teaching teams and student learning.
- Each classroom should have the capability for multiple computers and/or laptops.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas, which should be connected to an audio-visual system and a computer.
- Ceiling height and windows should maximize natural light and accommodate daylight.
- Sidelites must be provided adjacent to all classroom doors.
- Cabinets and casework appropriate to the instructional classroom function should be provided. General classrooms should be provided with a minimum of 12 linear feet of casework, while specialty spaces should be designed to accommodate the program requirements.
- Special consideration should be given for sound transmission to minimize sound infiltration into the adjacent space.
- Whiteboards and Bulletin Boards should be provided in each instructional space.

Current Space Limitations:

Lack of storage space (primarily in the Middle School Classrooms) and appropriate school-wide workroom.

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility or building new to meet the program objectives established for Wheeler High School/Middle School. The classroom should be designed to provide the department flexibility in the assignment of rooms based on enrollment in particular courses.

Design Concept: First Floor Plan

Program Requirements

The English/Language Arts Department space requirements will include classrooms. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching styles and disciplines. All furniture will be evaluated for life expectancy and all furniture and/or equipment that do not meet the State DOE requirements for “renovate as new” will be replaced. The following pages identify specific requirements for each space.

English/Language Arts Classrooms

Quantity: 5 (2 Middle School – 3 High School)

Proposed SF: 1 spaces of 500 SF for 12 to 15 Students in New addition.
 1 spaces of 625 SF for 12 to 15 Students in New addition.
 2 spaces of 675 SF for 15 to 18 Students in New addition.
 2 spaces of 700 SF for 18 to 20 Students in New addition (Middle School)

Space Design Concept

The classroom should be designed for an integrated approach to technology accommodating multiple furniture arrangements and classroom configurations. A folding partition would be installed between the 500SF and 625SF rooms. The space should function as an office for the teacher and study hall for students.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction.

Loose Furnishings

Modular rectangular tables with chairs – 15 to 20 in each space depending on the size the space.
 Circular tables for small groups with chairs – Optional arrangement
 Mobile computer stations no – wireless computers throughout building
 Teacher Desk and Chair yes – 1 of each required
 Lateral/vertical file cabinet yes – 1 four drawer required in each classroom

Fixed Equipment

Acoustical treatment yes – Meet State acoustical requirements
 Marker/white board yes – 1 at 12 linear feet
 Tack board & display boards yes – 2 at 4 linear feet
 Projection screen/surfaces yes – white board will be utilized
 Flag Bracket & Flag yes – one in each room
 Display and book shelves yes – along one wall / 15 linear feet of shelf space
 Tall wardrobe and storage cabinet yes – along one wall 3 linear feet total
 Fixed cabinets and accessible work surfaces yes – along one wall 9 linear feet of upper and lower cabinets total

Finishes

Floor material: VCT
 Base material: Rubber / Vinyl
 Wall material: Block / Sheetrock finish: Paint
 Ceiling material: Acoustical Tile height: 8'-0" minimum
 Hardware: ADA compliant
 Lighting Multi-level energy efficient LED direct/indirect
 Windows Operable with blinds/shades - Maximize natural light
 Fire extinguisher & suppression per code

Special Requirements

Specialty lighting No
 HVAC systems including Air Conditioning Yes
 Natural and indirect/direct Lighting Yes Provide daylighting options in each space

Technology

Power outlet - floor and walls yes – as appropriate
 Media projection system yes – Utilize existing systems
 Interactive White Board Utilize existing systems
 Voice, video and data ports yes – phone / intercom and data
 Security yes
 Portable sound system yes
 Technology equipment yes – per the district's technology plan
 Wireless & Hard wired Network yes – per the district's technology plan
 Integrated public address & clock system yes

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Social Studies

Program Objectives

Each student takes two years of Social Studies at Wheeler Middle School.

Each student who graduates from Wheeler High School needs to successfully earn 3.0 credits in Social Studies.

The *National Council for Social Studies* has defined a vital social studies curriculum which promotes civic competence, enabling young people to develop the ability to make informed and reasoned decisions as part of a culturally diverse and democratic society. Through an integrated study of the social sciences and humanities, students will achieve an understanding of the history of the Western world and the United States and the effects on their lives; understanding of the history and culture of other portions of the world; understanding of the operations of our representative government and their roles in it; and the ability to effectively communicate their ideas orally and in writing. The Wheeler social studies curriculum focuses on learning opportunities that enable students to think critically, integrate significant facts, concepts, and generalizations from history and social science into their own experiences and research skills.

Program Goals

Instruction in social studies involves the 21st Century Learning Expectations of writing effectively, reading effectively, speaking effectively, problem-solving effectively, and thinking critically. The goals of the social studies program include the following:

- A. Development and understanding of socialization which is aimed at helping a student to become an effective member of social groups and society in general;
- B. Development of decision-making skills aimed at helping the student to make effective use of intellectual skills in reaching decisions about their social concerns and appropriate responses to those discoveries;
- C. Development of a clear sense of citizenship aimed at helping students understand their role and processes of a representative-democratic government;
- D. Development of knowledge acquisition skills aimed at helping students acquire and utilize information and intellectual skills provided through social science curriculum.

Program Courses

- A. Grade 7: World Cultures
- B. Grade 8: United States History
- C. United States History (General, Academic & Honors)
- D. World History I: Foundations of the Modern World (General, Academic & Honors)
- E. World History II: Twentieth Century World History (General, Academic & Honors)
- F. Civics
- G. “The Social Being” – Social Psychology
- H. Advanced Placement Government and Politics
- I. Advanced Placement United States History
- J. History Through Film
- K. Contemporary Social Issues in America

Program Activities to be Accommodated

Activities to be housed include large and small group instruction and class work. Students will discuss, read, write, word process, present, dramatize, and conduct research, applying skills and content learned through the utilization of material available in the classroom as well as through the technological resources of voice, video, and print media. Each classroom must be large enough to accommodate students working in small and large groups. Space must allow for teacher supervision of small groups and acoustics must be appropriate to control the noise level. All students are also required to meet individually with teachers in conference; therefore, appropriate quiet space

should be provided. The social studies classroom should function as a general classroom with full audiovisual/technology capabilities supported with the necessary electrical and network infrastructure. Natural light, multi-level lighting, and individualized environmental control should be provided in each space.

Space Occupancy and Design Criteria

The Social Studies Department classrooms include the students and Social Studies Department teachers. Depending on the course, a special education teacher, paraprofessional, or a reading/writing resource teacher may share space for the instruction of small groups or individuals within the regular classroom. The following is a partial list of design elements that should be incorporated into all instructional spaces:

- The classroom configuration should maximize flexibility and interaction within and among the instructional areas for development of teaching teams and student learning.
- Each classroom should have the capability for a large number of computers.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas, which should be connected to an audio-visual system and a computer.
- Ceiling height and windows should maximize natural light and accommodate daylight.
- Side-lites must be provided adjacent to all classroom doors.
- Cabinets and casework appropriate to the instructional classroom function should be provided. General classrooms should be provided with a minimum of 12 linear feet of casework, while specialty spaces should be designed to accommodate the program requirements.
- Special consideration should be given for sound transmission to minimize sound infiltration into the adjacent space.
- Whiteboards and Bulletin Boards should be provided in each instructional space.

Current Space Limitations:

Lack of storage space (primarily in the Middle School Classrooms) and appropriate school-wide workroom. The lay-out of the current space, forces one department to “split” within the high school. All three high school classrooms should be near each other which will foster collaboration.

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility or building new to meet the program objectives established for Wheeler High School/Middle School. The classroom should be designed to provide the department flexibility in the assignment of rooms based on enrollment in particular courses.

Design Concept:

Program Requirements

The Social Studies Department space requirements will include classrooms. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching styles and disciplines. All furniture will be evaluated for life expectancy and all furniture and/or equipment that do not meet the State DOE requirements for “renovate as new” will be replaced. The following pages identify specific requirements for each space.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Social Studies Classrooms

Quantity: 5 (2 Middle School – 3 High School)

Proposed SF: 1 spaces of 500 SF for 12 to 15 Students in New addition.
1 spaces of 625 SF for 12 to 15 Students in New addition.
2 spaces of 675 SF for 15 to 18 Students in New addition.
2 spaces of 700 SF for 18 to 20 Students in New addition (Middle School)

Space Design Concept

The classroom should be designed for an integrated approach to technology accommodating multiple furniture arrangements and classroom configurations. A folding partition would be installed between the 500SF and 625SF rooms. The space should function as an office for the teacher and study hall for students.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction.

Loose Furnishings

Modular rectangular tables with chairs – 15 to 20 in each space depending on the size the space.

Circular tables for small groups with chairs – Optional arrangement

Mobile computer stations no – wireless computers throughout building

Teacher Desk and Chair yes – 1 of each required

Lateral/vertical file cabinet yes – 1 four drawer required in each classroom

Fixed Equipment

Acoustical treatment yes – Meet State acoustical requirements

Marker/white board yes – 1 at 12 linear feet

Tack board & display boards yes – 2 at 4 linear feet

Projection screen/surfaces yes – white board will be utilized

Flag Bracket & Flag yes – one in each room

Display and book shelves yes – along one wall / 15 linear feet of shelf space

Tall wardrobe and storage cabinet yes – along one wall 3 linear feet total

Fixed cabinets and accessible work surfaces yes – along one wall 9 linear feet of upper and lower cabinets total

Finishes

Floor material: VCT

Base material: Rubber / Vinyl

Wall material: Block / Sheetrock finish: Paint

Ceiling material: Acoustical Tile height: 8'-0" minimum

Hardware: ADA compliant

Lighting Multi-level energy efficient LED direct/indirect

Windows Operable with blinds/shades - Maximize natural light

Fire extinguisher & suppression per code

Special Requirements

Specialty lighting No

HVAC systems including Air Conditioning Yes

Natural and indirect/direct Lighting Yes Provide daylighting options in each space

Technology

Power outlet - floor and walls yes – as appropriate

Media projection system yes – Utilize existing systems

Interactive White Board Utilize existing systems

Voice, video and data ports yes – phone / intercom and data

Security yes

Portable sound system yes

Technology equipment yes – per the district's technology plan

Wireless & Hard wired Network yes – per the district's technology plan

Integrated public address & clock system yes

Educational Program Specifications - Science

Program Objectives

Each student takes two years of Science at Wheeler Middle School.

Each student who graduates from Wheeler High School needs to successfully earn 3.0 credits in Science.

The United States has set a national goal for the achievement of scientific literacy by all students. Scientific Literacy allows students to participate effectively in the discussion of scientific issues that affect society and to strengthen skills that are important in everyday life (e.g. thinking critically, solving problems). The *National Science Education Standards* outline the expectations of a science curriculum. Students must know and apply basic scientific knowledge in life, physical, earth, and space sciences. Throughout this diversity of subject matter, there are common themes of energy, matter, systems, change and continuity, process, and society. Students should have many opportunities for inquiry and investigation: making observations, posing questions, using research, analyzing data, and proposing explanations. A critical combination of content and process is necessary to achieve these goals, which can be accomplished by maximizing laboratory use and providing a laboratory-centered science experience. Under the newly drafted National Science Curriculum, the science program shall incorporate the greenhouse and technology to expand and enrich student learning opportunities. All Grades 6 thru 12 will need the full "traditional" lab environment with the support facilities, including storage and preparatory rooms.

Program Goals

Instruction in Science involves the 21st Century Learning Expectations of writing effectively, reading effectively, speaking effectively, problem-solving effectively, and thinking critically. The goals of the Science program include the following:

- A. Development of laboratory use and a laboratory-centered science experience for all students;
- B. Development of critical judgment techniques through practice and awareness of the sciences;
- C. Development of problem-solving skills aimed at helping students to make effective use of intellectual abilities in reaching decisions about their social concerns and appropriate responses to those discoveries.

Program Courses

- A. Grade 7 Science
- B. Grade 8 Science
- C. Integrated Science (General, Academic & Honors)
- D. Biology (General, Academic & Honors)
- E. Chemistry (General, Academic & Honors)
- F. Advanced Placement Biology
- G. Advanced Placement Chemistry
- H. Academic Physics
- I. Astronomy
- J. Forensics
- K. Current Issues in Science
- L. Oceanography
- M. Environmental Issues

Program Activities to be Accommodated

Activities to be housed include large and small group instruction along with the ability to apply and experience the scientific theory through experiments in a laboratory environment. Students will read, discuss, write, and conduct research, through the utilization of materials available in the Lab-Classroom (clabs) as well as the technological resources of voice, video, and print media. The facilities must be designed to be adaptable to all the curricula. All science courses will be taught with an emphasis on investigation.

Space Occupancy and Design Criteria

Wheeler Middle & High School

Facilities Study & Educational Specifications

June 1, 2016

The Science Department classrooms include the students and Science Department teachers. Depending on the course, a special education teacher, paraprofessional, or a resource teacher may share space for the instruction of small groups or individuals within the regular classroom. The following is a partial list of design elements that should be incorporated into all instructional spaces:

- The classroom configuration should maximize flexibility and interaction within and among the instructional areas for development of teaching teams and student learning.
- Each classroom should have the capability for a large number of computers.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas, which should be connected to an audio-visual system and a computer.
- Ceiling height and windows should maximize natural light and accommodate daylight.
- Sidelites must be provided adjacent to all classroom doors.
- Cabinets and casework appropriate to the instructional classroom function should be provided. General classrooms should be provided with a minimum of 12 linear feet of casework, while specialty spaces should be designed to accommodate the program requirements.
- Special consideration should be given for sound transmission to minimize sound infiltration into the adjacent space.
- Whiteboards and Bulletin Boards should be provided in each instructional space.

Special Space Occupancy and Design Criteria

As science rooms will be designed or renovated to meet the needs of the different science disciplines, each room should be designed for flexibility for changing programs and course demand. Where possible, labs should be multifunctional and able to accommodate Biology, Chemistry, Physics, or the Integrated Science programs. All of these science rooms should meet current OSHA regulations.

- Chemistry rooms need ample storage for student balances, the wide range of equipment and supplies, models and goggles.
- Biology and Chemistry rooms need ample storage for microscopes, the variety of teaching supplies and chemicals, models, goggles, and other collections.
- Integrated science rooms need variable size storage cabinets with adjustable shelving to house the wide range of equipment.
- Physics rooms need storage for the wide range of equipment and supplies.
- Science classes periodically need access to computer stations, where students can individually use instructional software. Science classes may need to go to the library to use resources there.
- All spaces need quiet ventilation appropriate for science rooms. Immediate fume removal should be available overhead in the lab areas. Some windows should open to the outside and be screened. Each room or group of rooms requires separate prep and storage areas that support the science being taught in the adjacent lab. Each prep room has a combination of shelf, cabinet, and drawer storage. Each has at least one sink with access to gas, water, and electricity. Counter space must be adequate.
- These prep rooms should be designed to also function as offices for the teachers.
- The biology prep area needs space and lighting for plant growth and electrical outlets to run an aquarium. Adequate storage of preserved materials and commonly used biological supplies will be close by. This prep area should be close to and on the same floor as the biology labs.
- The chemistry prep area needs adequate storage for commonly used supplies as well as ready access to storage facilities designed for acids, bases, and other chemicals used. This chemical storage area needs appropriate ventilation so that acid storage cabinets do not corrode. This prep area should be close to the chemistry classrooms/lab and should be on the same floor.
- All science classroom/labs should have non-slip vinyl tiles or a similar non-slip finish.
- Drains shall be provided at all labs where eye wash and body Showers are installed.

Special Furniture and Equipment

- Student lab work will be performed on impermeable, chemical-resistant surfaces.
- A portable handicapped lab station that is fully operational needs a designated spot in all classrooms.
- The student lab stations should include gas jets, deep sinks, hot and cold water faucets, and electrical outlets.
- The sinks should have screened drains and a water trap that is chemically resistant and easily cleaned.
- Master gas and electrical shutoff should be provided in each room.
- Electrical outlets should have ground fault protection.
- Each room shall have a space for spill control materials and a chemical power and eyewash that drains to an outlet.
- Each room should have the required safety equipment (eye goggle sanitizing cabinet, fire extinguisher, fire blanket, and first aid kit).
- All storage and closets will be lockable.
- Each room will have bulletin boards, wall space for charts, and a teacher demonstration area.
- There should be room for a standard two-student table beside each demonstration table.
- Each room needs space for networked computers and printers with nearby terminal and electrical outlets.
- Each room needs two wall mounted video monitors to allow all students to see at least one monitor clearly from his or her seat.
- Each science room needs white boards or marker boards, a chemical fume hood, a full-sized acid/chemical storage cabinet, and a regular refrigerator or one located under the counter.
- Rooms where advanced biology and chemistry classes are held require an explosion proof refrigerator and multiple fume hoods.

Current Space Limitations

The Current, the science laboratory casework layout and class/lecture area configuration at Wheeler Middle and High School do not meet the standards established by National Science Teachers Association and the National Science Supervisors Association. The book “Pathways to the Science Standards – High School Edition” is a guide to the implementation of National Science Standards. The standards focus on establishing a Laboratory and Classroom environment that addresses both safety and educational standards in the design of a Science Classroom. ADA, NFPA, OSHA and other code requirements must also be addressed in each space. A 21st. Century typical classroom will include casework/cabinets as well as technology to allow students access to the latest research in the specific subject area. The existing space and condition for the science program are severely lacking in all regards. The sizes and layout of the existing laboratory facilities are inadequate and accessibility is limited. Appropriate space, equipment and an updated mechanical system design is needed for the classrooms, preparatory and chemical storage rooms

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility or building new to meet the program objectives established for Wheeler High School/Middle School. The two Middle School classrooms should be designed with flexibility to meet the various requirements of the science program; they are outlined below. The High School lab-rooms should be designed with specific disciplines in mind, but also have the flexibility so that electives can be taught in the space depending upon enrollment and requirements.

Design Concept Program Requirements

The Science Department space requirements will include 3 classrooms at the high school, 2 Integrated Science Rooms in the Middle School, chemical and general storage rooms, and prep rooms. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching styles and disciplines. All

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

furniture will be evaluated for life expectancy and all furniture and/or equipment that do not meet the State DOE requirements for “renovate as new “will be replaced. The following pages identify specific requirements for each space.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Chemistry Science Clabroom /Classrooms and Lab

Quantity: 1 (High School)
Proposed SF: 950 to 1,000 SF Each New Space

Space Design Concept

The clabroom should be designed with technology integrated into each instructional workstation including the lab stations. All utilities (Air, Gas, Water, and Power) will serve each lab station and data access will be designed to accommodate a variety of technologies. An Interactive Whiteboard will be located to provide access and use at the lecture and lab zones of the clabrooms. All casework will meet the National Science Education Standards and provide opportunity for multiple furniture arrangements and lecture configurations. The prep rooms, storage room for equipment and chemicals and project storage will be provided in and adjacent to each clab. Safety and environmental comfort will be a priority in all laboratory and support spaces.

Program Activities

Support a number of teaching styles, including lectures, lab work, small group and individual instruction.

Loose Furnishings

Modular rectangular tables with chairs – 20 seats
Mobile computer stations no – wireless computing throughout building
Teacher Desk and Chair
Lateral file cabinet
Lab Chairs

Fixed Equipment

Acoustical treatment yes
Marker/white board (Multiple) yes
Tack board & display boards yes
Projection screen/surfaces yes
Display and book shelves yes
Tall wardrobe and storage cabinet yes
Fixed cabinets and accessible work surfaces yes
Gas yes at each lab station
Sink yes at each lab station
Power yes at each lab station
Air yes at each lab station
Eyewash & Body Shower yes with floor drain
Fume Hood yes
Specific Equipment for program yes – see equipment requirements

Finishes

Floor material: Polished Concrete
Base material: Rubber / Vinyl
Wall material: Block / Sheetrock finish: Paint
Ceiling material: Acoustical Tile height: 8'-0" minimum
Hardware: ADA compliant
Lighting: Multi level direct/indirect
Windows: Operable with blinds/Room darkening Shades - Maximize natural light
Fire extinguisher & suppression per code

Special Requirements

HVAC systems including Air Conditioning and direct exhaust
Operable windows

Technology

Power outlet – floor, Casework and walls yes – as appropriate
Media projection system yes
Smart boards yes
Voice, video and data ports yes – phone / intercom/PA system and data
Security yes
Portable sound system yes
Technology equipment yes – per the district's technology plan
Wired & Wireless network yes – per the district's technology plan

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Integrated Science Classrooms

Quantity: 2 (Middle School)
Proposed SF: 750 to 850 SF Each

Space Design Concept

The clabroom should be designed with technology integrated into each instructional workstation. All utilities (Air, Gas, Water, and Power) will serve the instructional space and date access will be designed to accommodate a variety of technologies. Interactive Whiteboards will be located to provided access and use at the lecture area. All casework will meet the National Science Education Standards and provide opportunity for multiple furniture arrangements and lecture configurations. The prep room, storage room for equipment and chemicals and project storage will be provided in and adjacent to each clab. Safety and environmental comfort will be a priority in all laboratory and support spaces.

Program Activities

Support a number of teaching styles, including lectures, lab work, small group and individual instruction.

Loose Furnishings

Modular rectangular tables with chairs – 20 each
Mobile computer stations no – wireless computing throughout building
Teacher Desk and Chair
Lateral file cabinet
Lab Chairs

Fixed Equipment

Acoustical treatment yes
Marker/white board (Multiple) yes
Tack board & display boards yes
Projection screen/surfaces yes
Display and book shelves yes
Tall wardrobe and storage cabinet yes
Fixed cabinets and accessible work surfaces yes
Gas yes - at designated areas
Sink yes - at designated areas
Power yes - at designated areas
Air yes - at designated areas
Eyewash & Body Shower yes with floor drain
Fume Hood and/or Laminar Flow No
Specific Equipment for program yes – see equipment requirements

Finishes

Floor material: Polished Concrete
Base material: Rubber / Vinyl
Wall material: Block / Sheetrock finish: Paint
Ceiling material: Acoustical Tile height: 8'-0" minimum
Hardware: ADA compliant
Lighting Multi level direct/indirect
Windows Operable with blinds/Room darkening Shades - Maximize natural light
Fire extinguisher & suppression per code

Special Requirements

HVAC systems including Air Conditioning and direct exhaust
Operable windows

Technology

Power outlet – floor, Casework and walls yes – as appropriate
Media projection system yes
Smart boards yes
Voice, video and data ports yes – phone / intercom/PA system and data
Security yes
Portable sound system yes
Technology equipment yes – per the district's technology plan
Wired & Wireless network yes – per the district's technology plan

Science Department Storage

Quantity: 2
Proposed SF: 150 to 200 SF Each

Space Design Concept

The storage should be designed to accommodate books, media storage, vented chemical storage cabinets and Science department specific equipment. Access to instructional space and the corridor is recommended.

Program Activities

Storage of educational materials.

Loose Furnishings

Carts with spill prevention lips

Lateral file cabinet

Fixed Equipment

| | |
|---------------------------|--|
| Shelves | yes – 12 inch deep, maximum 5 shelves high |
| Secure storage cabinet | yes |
| Chemical Storage Cabinets | yes - vented |

Finishes

| | |
|---------------------------------|--------------------------|
| Floor material: | VCT |
| Base material: | Rubber |
| Wall material: | Block / Sheetrock |
| Wall Finish: | Paint |
| Ceiling material: | Acoustical Tile |
| Ceiling height: | 8'-0" minimum |
| Hardware: | ADA compliant - Lockable |
| Lighting | Standard |
| Fire extinguisher & suppression | Per code |

Special Requirements

HVAC systems exhaust

Technology

| | |
|----------------------|---------------------------------------|
| Power outlet - walls | yes |
| Security | yes – per the districts security plan |
| Communications | yes – phone / intercom/PA system |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Science Department Prep Rooms

Quantity: 2

Proposed SF: 200 to 250 SF Each – High School

Space Design Concept

The prep room should be designed to accommodate all necessary casework for the preparation of science lab coursework related to the lecture and hands-on / experiment components of the curriculum. The prep rooms will be designed as a lab station to accommodate a fume hood and other equipment necessary for the preparation of the coursework. The work station will also be equipped with a computer, printer and other appropriate equipment. Storage cabinets and shelves will also be provided.

Program Activities

Science Lab preparatory area and office space.

Loose Furnishings

Carts with spill prevention lips

Desk and Chair

Lateral file cabinet

Fixed Equipment

Shelves yes – 12 inch deep, maximum 5 shelves high

Secure storage cabinet yes

Chemical Storage Cabinets yes - vented

Lab casework with resin tops.

Secure cabinets

Fume hood

Equipment specific to the science discipline.

Finishes

Floor material: Polished Concrete

Base material: Rubber

Wall material: Block / Sheetrock

Wall Finish: Paint

Ceiling material: Acoustical Tile

Ceiling height: 8'-0" minimum

Hardware: ADA compliant - Lockable

Lighting Standard

Fire extinguisher & suppression Per code

Special Requirements

HVAC systems and exhaust

Sink

All utilities (Air, Gas, Water, and Power)

Technology

Power outlet - walls yes

Security yes – per the districts security plan

Voice, video and data ports yes – phone / intercom/PA system and data

Computer, Printer, Monitor Etc. yes – per the districts technology plan

Educational Program Specifications – Mathematics

Program Objectives

Each student takes two years of Mathematics at Wheeler Middle School.

Each student who graduates from Wheeler High School needs to successfully earn 4.0 credits in Mathematics.

The 7-12 Math curriculum focuses on learning opportunities which enable students to think critically and problem-solve by analyzing data and applying math concepts to real-world situations. Students should become mathematical problem solvers, learn to communicate and reason mathematically, learn to value mathematics, and develop confidence in their ability to do mathematics. The high school mathematics program includes a range of offerings, including Algebra, Geometry, Algebra II, Statistics, Pre-Calculus, Discrete Math, and Calculus (both regular and Advanced Placement). Though there is a specific focus for each mathematics course, problems and explorations are introduced which cause students to revisit other strands of the mathematics curriculum, thereby highlighting the connections among different math topics and courses. Technology should be used extensively throughout the curriculum, enabling teachers to provide visual and physical components to illustrate abstract mathematical concepts, giving students opportunities to learn quickly and in depth. Under the new Common Core Curriculum, all courses should be application-driven, meaning that mathematical skills and concepts are taught as much as possible in the context of real-world situations. The language of mathematics provides a medium to translate the physical world into a system to facilitate recording, manipulation, and generalization.

Program Goals

Instruction in Mathematics involves the 21st Century Learning Expectations of writing effectively, reading effectively, speaking effectively, problem-solving effectively, and thinking critically. The goals of the mathematics program include the following:

- A. Developing the skill of perseverance in problem solving;
- B. Developing the skill to reason abstractly and quantitatively;
- C. Developing the skill to construct viable arguments and critique the reasoning of others;
- D. Developing the skill to model with mathematics;
- E. Developing the skill to use appropriate tools strategically;
- F. Developing the skill to attend to precision;
- G. Developing the skill to look for and make use of structure;
- H. Developing the skill to look for and express regularity in repeated reasoning.

Program Courses

- A. Grade 7 Math (at least one section of Pre-algebra)
- B. Grade 8 Math (at least one section of Algebra)
- C. Algebra I (General & Academic)
- D. Geometry (General, Academic & Honors)
- E. Algebra II (General, Academic & Honors)
- F. Pre-calculus (Honors & Academic)
- G. Statistics
- H. Discrete Math (ECE)
- I. Academic Calculus
- J. Advanced Placement/ECE Calculus

Program Activities to be Accommodated

Activities to be housed include large and small group instruction and class work. Students will discuss, read, write, word process, present, dramatize, and conduct research, applying skills and content learned through the utilization of material available in the classroom, as well as through the technological resources of voice, video, and print media. Each classroom must be large enough to accommodate students working in small and large groups. Space must allow for teacher supervision of small groups and acoustics must be appropriate to control the noise level. All

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

students are also required to meet individually with teachers in conference; therefore, appropriate quiet space should be provided. The Mathematics classroom should function as a general classroom with full audiovisual/technology capabilities supported with the necessary electrical and network infrastructure. Natural light, multi-level lighting, and individualized environmental control should be provided in each space.

Space Occupancy and Design Criteria

The Mathematics Department classrooms include the students and Mathematic Department teachers. Depending on the course, a special education teacher, paraprofessional, or a reading/writing resource teacher may share space for the instruction of small groups or individuals within the regular classroom. The following is a partial list of design elements that should be incorporated into all instructional spaces:

- The classroom configuration should maximize flexibility and interaction within and among the instructional areas for development of teaching teams and student learning.
- Each classroom should have the capability for a large number of computers.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas, which should be connected to an audio-visual system and a computer.
- Ceiling height and windows should maximize natural light and accommodate daylight.
- Sidelites must be provided adjacent to all classroom doors.
- Cabinets and casework appropriate to the instructional classroom function should be provided. General classrooms should be provided with a minimum of 12 linear feet of casework, while specialty spaces should be designed to accommodate the program requirements.
- Special consideration should be given for sound transmission to minimize sound infiltration into the adjacent space.
- Whiteboards and Bulletin Boards should be provided in each instructional space.

Current Space Limitations:

Lack of storage space in all mathematics classrooms and appropriate school-wide workroom.

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility or building new to meet the program objectives established for Wheeler High School/Middle School. The classroom should be designed to provide the department flexibility in the assignment of rooms based on enrollment in particular courses.

Design Concept:

Program Requirements

The Mathematics Department space requirements will include classrooms. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching styles and disciplines. All furniture will be evaluated for life expectancy and all furniture and/or equipment that do not meet the State DOE requirements for “renovate as new “will be replaced. The following pages identify specific requirements for each space.

Mathematics Classrooms

Quantity: 5 (2 Middle School – 3 High School)

Proposed SF: 1 spaces of 500 SF for 12 to 15 Students in New addition.
 1 spaces of 625 SF for 12 to 15 Students in New addition.
 2 spaces of 675 SF for 15 to 18 Students in New addition.
 2 spaces of 700 SF for 18 to 20 Students in New addition (Middle School)

Space Design Concept

The classroom should be designed for an integrated approach to technology accommodating multiple furniture arrangements and classroom configurations. A folding partition would be installed between the 500SF and 625SF rooms. The space should function as an office for the teacher and study hall for students.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction.

Loose Furnishings

Modular rectangular tables with chairs – 15 to 20 in each space depending on the size the space.
 Circular tables for small groups with chairs – Optional arrangement
 Mobile computer stations no – wireless computers throughout building
 Teacher Desk and Chair yes – 1 of each required
 Lateral/vertical file cabinet yes – 1 four drawer required in each classroom

Fixed Equipment

Acoustical treatment yes – Meet State acoustical requirements
 Marker/white board yes – 1 at 12 linear feet
 Tack board & display boards yes – 2 at 4 linear feet
 Projection screen/surfaces yes – white board will be utilized
 Flag Bracket & Flag yes – one in each room
 Display and book shelves yes – along one wall / 15 linear feet of shelf space
 Tall wardrobe and storage cabinet yes – along one wall 3 linear feet total
 Fixed cabinets and accessible work surfaces yes – along one wall 9 linear feet of upper and lower cabinets total

Finishes

Floor material: VCT
 Base material: Rubber / Vinyl
 Wall material: Block / Sheetrock finish: Paint
 Ceiling material: Acoustical Tile height: 8'-0" minimum
 Hardware: ADA compliant
 Lighting Multi-level energy efficient LED direct/indirect
 Windows Operable with blinds/shades - Maximize natural light
 Fire extinguisher & suppression per code

Special Requirements

Specialty lighting No
 HVAC systems including Air Conditioning Yes
 Natural and indirect/direct Lighting Yes Provide daylighting options in each space

Technology

Power outlet - floor and walls yes – as appropriate
 Media projection system yes – Utilize existing systems
 Interactive White Board Utilize existing systems
 Voice, video and data ports yes – phone / intercom and data
 Security yes
 Portable sound system yes
 Technology equipment yes – per the district's technology plan
 Wireless & Hard wired Network yes – per the district's technology plan
 Integrated public address & clock system yes

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – World Language

Program Objectives

Each student takes Spanish during 7th and 8th grade at Wheeler Middle School.

Each student who graduates from Wheeler High School needs to successfully earn 2.0 credits in World Language.

The Wheeler World Language Department recognizes the importance of language as a lifetime endeavor and provides students with communicative and cultural learning opportunities necessary for success in the ever-changing world. The department aims to engage students in use world languages in a purposeful way in order to become linguistically, culturally, ethnically, geographically, politically, and socially literate. It is understood by colleges that world languages are of great importance in today's world for self-development and career possibilities, as well as for communication with an understanding of cultures. The following is an outline of the World Language department's goals and objective for the students at Wheeler.

Program Goals

Instruction in World Language involves the 21st Century Learning Expectations of writing effectively, reading effectively, speaking effectively, problem-solving effectively, and thinking critically. The goals of the World Language program include the following:

- A. Development of skills which are basic to our highly verbal culture;
- B. Development of an understanding and appreciation about the broad cultural heritage cultures: religious, technological, political, sociological, and artistic;
- C. Development of the powers of comprehension and coherence and fluency in expression;
- D. Development of critical judgment techniques through awareness and practice of the way language shapes our world.

Program Courses

- A. Grade 7 Spanish
- B. Grade 8 Spanish
- C. French I
- D. French IA
- E. French IB
- F. French II
- G. French III
- H. French IV
- I. Spanish I
- J. Spanish IA
- K. Spanish IB
- L. Spanish II
- M. Spanish III
- N. Spanish IV/V (ECE)

Program Activities to be Accommodated

Activities to be housed include large and small group instruction and class work. Students will discuss, read, write, word process, present, dramatize, and conduct research, applying skills and content learned through materials available in the classroom, as well as through the technological resources of voice, video, and print media. Each classroom must be large enough to accommodate students working in small and large groups. Space must allow for teacher supervision of small groups and acoustics must be appropriate to control the noise level. All students are also required to meet individually with teachers in conference; therefore, appropriate quiet space should be provided. The World Language classroom should function as a general classroom with full audiovisual/technology capabilities supported with the necessary electrical and network infrastructure. Natural light, multi-level lighting, and individualized environmental control should be provided in each space. World Language students are assessed

throughout the year on their speaking and listening comprehension. A major component of assessments, including the mid-terms and final exams, consists of a listening and speaking portion. We are looking to offer AP courses in French and Spanish in the future.

Space Occupancy and Design Criteria

The World Language Department classrooms include the students and World Language Department teachers. Depending on the course, a special education teacher, paraprofessional, or a resource teacher may share space for the instruction of small groups or individuals within the regular classroom. The following is a partial list of design elements that should be incorporated into all instructional spaces:

- The classroom configuration should maximize flexibility and interaction within and among the instructional areas for development of teaching teams and student learning.
- Each classroom should have the capability for a large number of computers.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas, which should be connected to an audio-visual system and a computer.
- Ceiling height and windows should maximize natural light and accommodate daylight.
- Sidelites must be provided adjacent to all classroom doors.
- Cabinets and casework appropriate to the instructional classroom function should be provided. General classrooms should be provided with a minimum of 12 linear feet of casework, while specialty spaces should be designed to accommodate the program requirements.
- Special consideration should be given for sound transmission to minimize sound infiltration into the adjacent space.
- Whiteboards and Bulletin Board should be provided in each instructional space.

Current Space Limitations:

Lack of storage space in all World Language classrooms and appropriate school-wide workroom. The classrooms (which are shared by both Middle School and High School students) should be located in a more central location, easily accessible by students from both schools.

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility or building new to meet the program objectives established for Wheeler High School/Middle School. The classroom should be designed to provide the department flexibility in the assignment of rooms based on enrollment in particular courses. The classrooms should also be placed in a more central location easily accessible by students from both schools.

Design Concept:

Program Requirements

The World Language Department space requirements will include classrooms and language lab. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching styles and disciplines. All furniture will be evaluated for life expectancy and all furniture and/or equipment that do not meet the State DOE requirements for “renovate as new” will be replaced. The following pages identify specific requirements for each space.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

World Language Classrooms

Quantity: 5 (2 Middle School – 3 High School)

Proposed SF: 1 spaces of 500 SF for 12 to 15 Students in New addition.
1 spaces of 625 SF for 12 to 15 Students in New addition.
2 spaces of 675 SF for 15 to 18 Students in New addition.
2 spaces of 700 SF for 18 to 20 Students in New addition (Middle School)

Space Design Concept

The classroom should be designed for an integrated approach to technology accommodating multiple furniture arrangements and classroom configurations. A folding partition would be installed between the 500SF and 625SF rooms. The space should function as an office for the teacher and study hall for students.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction.

Loose Furnishings

Modular rectangular tables with chairs – 12 to 20 in each space depending on the size the space.
Circular tables for small groups with chairs – Optional arrangement
Mobile computer stations no – wireless computers throughout building
Teacher Desk and Chair yes – 1 of each required
Lateral/vertical file cabinet yes – 1 four drawer required in each classroom

Fixed Equipment

Acoustical treatment yes – Meet State acoustical requirements
Marker/white board yes – 1 at 12 linear feet
Tack board & display boards yes – 2 at 4 linear feet
Projection screen/surfaces yes – white board will be utilized
Flag Bracket & Flag yes – one in each room
Display and book shelves yes – along one wall / 15 linear feet of shelf space
Tall wardrobe and storage cabinet yes – along one wall 3 linear feet total
Fixed cabinets and accessible work surfaces yes – along one wall 9 linear feet of upper and lower cabinets total

Finishes

Floor material: VCT
Base material: Rubber / Vinyl
Wall material: Block / Sheetrock finish: Paint
Ceiling material: Acoustical Tile height: 8'-0" minimum
Hardware: ADA compliant
Lighting Multi-level energy efficient LED direct/indirect
Windows Operable with blinds/shades - Maximize natural light
Fire extinguisher & suppression per code

Special Requirements

Specialty lighting No
HVAC systems including Air Conditioning Yes
Natural and indirect/direct Lighting Yes Provide daylighting options in each space

Technology

Power outlet - floor and walls yes – as appropriate
Media projection system yes – Utilize existing systems
Interactive White Board Utilize existing systems
Voice, video and data ports yes – phone / intercom and data
Security yes
Portable sound system yes
Technology equipment yes – per the district's technology plan
Wireless & Hard wired Network yes – per the district's technology plan
Integrated public address & clock system yes

World Language Laboratory

Quantity: 1 Shared Space with Business computer lab

Proposed SF: 900 to 1,000 SF

Space Design Concept

The language lab should be designed for an integrated approach to technology. The furniture arrangements should accommodate a teacher workstation in the front of the room classroom configurations. This space should also function as a business computer lab.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction.

Loose Furnishings

| | |
|-------------------------------|------------------------------|
| Workstations with chairs | yes - 24 each |
| Teacher Desk and Chair | yes – 2 required |
| Lateral/vertical file cabinet | yes – 2 four drawer required |

Fixed Equipment

| | |
|---|--|
| Acoustical treatment | yes – Meet State acoustical requirements |
| Marker/white board | yes – 1 at 12 linear feet |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes – white board will be utilized |
| Flag Bracket & Flag | yes – one in each room |
| Display and book shelves | yes – along one wall / will be the department storage space |
| Tall wardrobe and storage cabinet | yes – along one wall 3 linear feet total |
| Fixed cabinets and accessible work surfaces | yes – along one wall 9 linear feet of upper and lower cabinets total |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | VTC | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi-level energy efficient LED direct/indirect | | |
| Windows | Operable with blinds/ shades - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

| | |
|---|---|
| Specialty lighting | No |
| HVAC systems including Air Conditioning | yes |
| Natural and indirect/direct Lighting | yes – provide daylighting options in each space |

Technology

| | |
|---|--|
| Power outlet - floor and walls | yes – as appropriate for room layout |
| Media projection system | yes – Utilize existing systems |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address & clock system | yes |
| 24 computers with DVD player (or equivalent technology) and 21" LCD monitors connected to network, printer and Internet | |
| DVD (or equivalent technology) connected to data projector | |
| Digital Sony Virtuoso Major Software | |
| 24 headphones | |
| Printer with scanner | |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Business

Program Objectives

The Business Education program is designed to develop a student's understanding of business, technology and economic concepts. It seeks to integrate academic concepts and technology application throughout the curriculum. It is tasked with providing students the ethical conduct and effective communication skills, which are needed to function as an effective employee and leader in the American free-market business system. Students acquire valuable business, life and personal skills necessary to function in today's dynamic and diverse world. The WHS Business curriculum focuses on developing the academic, thinking and interpersonal skills needed to become a productive worker, an economically successful entrepreneur and a keen consumer. In addition to the traditional business courses, all students graduating from Wheeler is required to earn a .5 credit in Personal Finance. The Business Department also manages the School Store, which is currently housed by the school cafeteria.

Program Goals

Instruction in Business Department involves the 21st Century Learning Expectations of writing effectively, reading effectively, speaking effectively, problem-solving effectively, and thinking critically. The goals of the Business program include the development of broad transferable skills which stress the understanding and demonstration of the following elements of the workplace:

- A. Planning, management, and financial skills;
- B. Technical and production skills;
- C. Labor, community, health, safety, and environmental issues;
- D. Marketing and presentation issues.

Program Courses

- A. "Invest in Yourself" – Personal Finance
- B. Accounting I & II
- C. Sports & Entertainment Management
- D. Business Law
- E. Career Exploration
- F. Introduction of Hospitality
- G. Entrepreneurship & Marketing

Program Activities to be Accommodated

Activities to be housed include large and small group instruction and class work. Students will discuss, read, write, word process, present, dramatize, and conduct research, applying skills and content learned through the utilization of material available in the classroom, as well as through the technological resources of voice, video, and print media. Each business classroom contains a computer lab and is designed large enough to accommodate students working in small and large groups. Space must allow for teacher supervision of small groups and acoustics must be appropriate to control the noise level. All students are also required to meet individually with teachers in conference; therefore, appropriate quiet space should be provided. The Business classroom should function as a general classroom with full audiovisual/technology capabilities supported with the necessary electrical and network infrastructure. Natural light, multi-level lighting, and individualized environmental control should be provided in each space. The School Store is managed by the Business Department.

Space Occupancy and Design Criteria

The Business Department classrooms include the students and Business department teachers. Depending on the course, a special education teacher, paraprofessional, or a reading/writing resource teacher may share space for the instruction of small groups or individuals within the regular classroom. The following is a partial list of design elements that should be incorporated into all instructional spaces:

- The classroom configuration should maximize flexibility and interaction within and among the instructional areas for development of teaching teams and student learning.
- Each classroom should have the capability for a large number of computers.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas, which should be connected to an audio-visual system and a computer.
- Ceiling height and windows should maximize natural light and accommodate daylight.
- Sidelites must be provided adjacent to all classroom doors.
- Cabinets and casework appropriate to the instructional classroom function should be provided. General classrooms should be provided with a minimum of 12 linear feet of casework, while specialty spaces should be designed to accommodate the program requirements.
- Special consideration should be given for sound transmission to minimize sound infiltration into the adjacent space.
- Whiteboards and Bulletin Boards should be provided in each instructional space.

Current Space Limitations:

Lack of storage space in all Business classrooms and appropriate school-wide workroom. The classrooms (which are shared by both Middle School and High School students) should be located in a more central location easily accessible by students from both schools. The school-store is in a retro-fitted space connected to the cafeteria far from the business department spaces.

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility or building new to meet the program objectives established for Wheeler High School/Middle School. The classroom should be designed to provide the department flexibility in the assignment of rooms based on enrollment in particular courses. The classrooms should also be placed in a more central location easily accessible by students from both schools. This will also provide better access to the school store which is connected to the cafeteria.

Design Concept:

Program Requirements

The Business Department space requirements will include classrooms/laboratories and school store. The classroom space should be designed as a flexible learning environment that is able to accommodate a number of teaching styles and disciplines. All furniture will be evaluated for life expectancy and all furniture and/or equipment that do not meet the State DOE requirements for “renovate as new” will be replaced. The following pages identify specific requirements for each space.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Business /Language Laboratory - Shared Space with Business computer lab

Business Classroom

Quantity: 1
Proposed SF: 500 SF

Space Design Concept

The Business classroom/laboratory should be designed for an integrated approach to technology. The furniture arrangements should accommodate a teacher workstation in the front of the room classroom configurations. A central table/student work area in the center of the room. The space will function as an office for the teacher.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction.

Loose Furnishings

Modular rectangular tables with chairs – 12 to 15 in each space depending on the size the space.
Circular tables for small groups with chairs – Optional arrangement
Mobile computer stations no – wireless computers throughout building
Teacher Desk and Chair yes – 1 of each required
Lateral/vertical file cabinet yes – 1 four drawer required in each classroom

Fixed Equipment

Acoustical treatment yes – Meet State acoustical requirements
Marker/white board yes – 1 at 12 linear feet
Tack board & display boards yes – 2 at 4 linear feet
Projection screen/surfaces yes – white board will be utilized
Flag Bracket & Flag yes – one in each room
Display and book shelves yes – along one wall / 15 linear feet of shelf space
Tall wardrobe and storage cabinet yes – along one wall 3 linear feet total
Fixed cabinets and accessible work surfaces yes – along one wall 9 linear feet of upper and lower cabinets total

Finishes

Floor material: VCT
Base material: Rubber / Vinyl
Wall material: Block / Sheetrock finish: Paint
Ceiling material: Acoustical Tile height: 8'-0" minimum
Hardware: ADA compliant
Lighting Multi-level energy efficient LED direct/indirect
Windows Operable with blinds/shades - Maximize natural light
Fire extinguisher & suppression per code

Special Requirements

Specialty lighting No
HVAC systems including Air Conditioning Yes
Natural and indirect/direct Lighting Yes Provide daylighting options in each space

Technology

Power outlet - floor and walls yes – as appropriate
Media projection system yes – Utilize existing systems
Interactive White Board Utilize existing systems
Voice, video and data ports yes – phone / intercom and data
Security yes
Portable sound system yes
Technology equipment yes – per the district's technology plan
Wireless & Hard wired Network yes – per the district's technology plan
Integrated public address & clock system yes

Educational Program Specifications – Music

Program Objectives

The purpose of the Music Education Program at Wheeler Middle & High School is to develop in students the sensitivities, feelings, understanding, cultural values, enjoyment, and skills necessary for them to have an aesthetic response to utilize and enjoy music as a part of everything they do throughout life. The Arts have been identified by the U.S. Congress, The Partnership for 21st Century Skills, the National Association of Secondary Principals, and the U.S. Department of Education as part of the core curriculum which all students should take as part of their high school program. It is understood that the development of creativity is greatly enhanced through music education and the Wheeler Music Department provides a varied, significant, and cumulative musical experience for every student.

All musical performing groups provide students with the opportunity for leadership roles and the involvement of students in the overall organizational planning. Those students who display exceptional musical talent can be recommended by their directors to compete with students from towns across the state for positions in the All State High School Festival.

Program Goals

Instruction in Music Education involves the 21st Century Learning Expectations of writing effectively, reading effectively, speaking effectively, problem-solving effectively, and thinking critically. The WHS Music program offers diverse learning and performing opportunities in vocal and instrumental music. The program provides opportunities for all students to:

- A. Development of skills which are basic to our highly verbal culture;
- B. Recognize the role and importance of music in their own lives and in their cultures;
- C. Perform music from a wide variety of cultural and aesthetic perspectives;
- D. Think critically and creatively;
- E. Work collaboratively;
- F. Develop self-discipline through practice and striving for excellence in their musical performances.

Program Courses

- A. Concert Band (7 – 12)
- B. Honors Concert Band
- C. Concert Choir (7 – 12)
- D. Honors Concert Choir
- E. General Music (7 & 8)
- F. Guitar Workshop
- G. Keyboard Workshop
- H. History of American Popular Music

Program Activities to be Accommodated

Students in grades 9-12 may elect a variety of classes in music. In each case classroom/music room space needs to be able to house instructional as well as practice spaces. Activities to be housed include large and small group instruction and class work. Students should be able to utilize materials in the classroom, as well as through the technological resources of voice, video, and print media. Each classroom must be large enough to accommodate students working in small and large groups. Space must allow for teacher supervision of small groups and acoustics must be appropriate to control the noise level. All students are also required to meet individually with teachers in conference; therefore, appropriate quiet space should be provided. The Music classrooms should function as a general classroom with full audiovisual/technology capabilities supported with the necessary electrical and network infrastructure. Natural light, multi-level lighting and individualized environmental control should be provided in each space.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Space Occupancy and Design Criteria

The individuals utilizing the space include students and Music department teachers. A special education paraprofessional or a teacher's aide may share space for the instruction of individuals with special needs. The following is a partial list of design elements that should be incorporated into the Music Department rehearsal room spaces:

- The rehearsal room configuration should maximize flexibility for small and large groups.
- Access to technology should be provided throughout the individual and group instructional spaces.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas.
- Ceiling height and windows should maximize natural light and accommodate daylighting.
- Side-lites must be provided adjacent to all classroom doors.
- Cabinets and casework appropriate to the instructional rehearsal spaces should be provided.
- Special consideration should be given for sound transmission to minimize sound infiltration into the adjacent space.
- Speaker systems should be incorporated into all instructional spaces.
- Whiteboards and Bulletin boards should be provided in each instructional space.
- Storage should be provided for student instruments.
- Sinks should be provided in a work room and at the instrument repair area.
- Music instrument equipment storage cabinets should be provided in the band rehearsal room.
- Computer workstations and data connections must be provided at each instructional space.
- Video recording equipment.
- Enhanced ventilation requirements.
- Ceiling heights appropriate to Band and Chorus rehearsal rooms should be provided.
- Student cubbies for student textbook storage near entrance doors of both the Choral and Band areas.
- Band Room
 - The Band Room will house the band and should have an acoustically appropriate space with high ceilings large enough to accommodate up to 100 students. A lockable cabinet or closet to house current percussion equipment, folio cabinets to hold folders for all ensembles, conductor's chair, and podium, and built-in and lockable stereo equipment and tuner are needed. A secure band storage facility adjacent to the band room will house all percussion, electronic equipment, and band music.
- Choral Room/Music Classroom
 - The Chorus/Music Room will house the choral classes and the other music courses (Guitar Workshop, Keyboard Workshop, and History of American Popular Music). The space should be an acoustically appropriate space with high ceilings large enough to accommodate up to 80 students. A lockable cabinet or closet to house current, folders for all ensembles, conductor's chair, and podium, and built-in and lockable stereo equipment and tuner are needed. A secure chorus storage facility adjacent to the rehearsal room will house a piano, guitars, keyboards, and music collection.

Current Space Limitations

The current music program is divided between two buildings. While the Instrumental Music program is in a space designed for them, the Choral Program is in a retrofitted classroom and using equipment (risers) which are not ADA compliant. Currently there is no space to provide electronic music and a recording studio. Appropriate storage cabinets are needed for instrument storage. There is a lack of appropriate choral classroom and practice room space and instrument/general storage space.

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility or building new to meet the program objectives established for Wheeler High School/Middle School. The classroom and program space should be designed to provide the department flexibility based on enrollment in particular courses. The music program will be supplemented with additional storage for instrument, risers and general storage and a Recording

Studio. The classrooms should also be placed in a central location easily accessible by students from both schools. In addition, the program should be near the concert space, without significant moving of instruments/risers required.

Design Concept:

Design concept for the music rooms is based on developing space that meet State and National Standard from based on data obtained from the following organizations:

- A. *The State of Connecticut* - Design Guidelines for Educational Facilities
- B. *Music Educators National Conference (MENC)* - Music Facilities: Building Equipment & Renovations by Harold P. Geerdes
- C. *Wenger Corporation* - Planning Guide for Secondary School Music Facilities standards for the design of music facilities.

Program Requirements

The space should be designed as a flexible learning environment that is able to accommodate the specific program requirements. The inclusion of technology and the ability to access technology is an imperative. All furniture and equipment will be evaluated for life expectancy and all furniture and/or equipment that do not meet the State DOE requirements for “renovate as new” will be replaced. The following pages identify specific requirements for each space.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Choral Rehearsal/General Music Classroom

Quantity: 1
Proposed SF: 750 to 800 SF

Space Design Concept

The Chorus Rehearsal/General Music Classroom will house the various vocal classes and vocal ensembles and an acoustically appropriate space with high ceilings large enough to accommodate 50 students. A lockable cabinet or closet to house current, folders for all ensembles, conductor's chair, and podium, and built-in and lockable stereo equipment and tuner are needed. A secure chorus storage facility adjacent to the rehearsal room will house a piano, risers and records. Access to the auditorium and stage is necessary for final rehearsals.

Program Activities

Support the instruction and practice of various levels of vocal programs

Program Adjacencies

Access to piano storage - separate
Access to practice rooms – adjacent to the band room

Loose Furnishings

| | |
|---------------------------|---|
| Music stands w/ carts | Reuse existing |
| Program equipment | Reuse existing |
| Risers | Reuse existing |
| Storage for music folders | Reuse existing |
| Chairs | Reuse existing |
| Mobile computer stations | No- Wireless capabilities by portable devices |
| Teacher Desk and Chair | yes – one of each required |
| Lateral file cabinet | yes – one four drawer required |

Fixed Equipment

| | |
|---|--|
| Acoustical treatment | yes – Meet State acoustical requirements |
| Marker/white board | yes – 1 at 12 linear feet with music staff |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes – white board will be utilized |
| Flag Bracket & Flag | yes – one in each room |
| Display and book shelves | yes – along one wall / 15 linear feet of shelf space |
| Tall wardrobe and storage cabinet | yes – along one wall 3 linear feet total |
| Fixed cabinets and accessible work surfaces | yes – along one wall 9 linear feet of upper and lower cabinets total |

Finishes

| | | | |
|---------------------------------|--|---------|----------------|
| floor material: | Tile | | |
| base material: | Rubber | | |
| wall material: | Block / Gyp | finish: | Paint |
| ceiling material: | Acoustical Tile | height: | 18'-0" minimum |
| hardware: | ADA compliant | | |
| lighting | multi-level energy efficient LED direct/indirect | | |
| fire extinguisher & suppression | per code | | |

Special Requirements

| | |
|--|--|
| HVAC systems including Air Conditioning | yes |
| Natural and indirect Lighting | yes – provide daylighting options |
| Operable partition | yes – opening to the cafeteria seating |
| Acoustical Controls & Sound Transmission | yes – sound separation with cafeteria |

Technology

| | |
|--|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes – Utilize existing systems |
| Interactive White Board | Utilize existing systems |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address & clock system | yes |

Choral/Band Practice Room – Share space with Band (existing)

Quantity: 2
Proposed SF: 50 to 75 SF Each

Space Design Concept

The practice room should be designed for an individual practice and instruction.

Program Activities

Choral music practice

Loose Furnishings

| | |
|-----------------------|----------------|
| Music stands w/ carts | Reuse existing |
| Chairs | Reuse existing |

Program Adjacencies

Access to rehearsal rooms

Loose Furnishings

| | |
|---------------------------|---|
| Music stands w/ carts | Reuse existing |
| Program equipment | Reuse existing |
| Risers | no |
| Storage for music folders | no |
| Chairs | Reuse existing |
| Mobile computer stations | no- Wireless capabilities by portable devices |
| Teacher Desk and Chair | no |
| Lateral file cabinet | no |

Fixed Equipment

| | |
|---|--|
| Acoustical treatment | yes – Meet State acoustical requirements |
| Marker/white board | no |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | | | |
|---------------------------------|--------------------------------------|---------|----------------|
| floor material: | Tile/Carpet | | |
| base material: | Rubber | | |
| wall material: | Block / Gyp | finish: | Paint |
| ceiling material: | Acoustical Tile | height: | 18'-0" minimum |
| hardware: | ADA compliant | | |
| lighting | energy efficient LED direct/indirect | | |
| fire extinguisher & suppression | per code | | |

Special Requirements

| | |
|--|------------------------|
| HVAC systems including Air Conditioning | yes |
| Natural and indirect Lighting | no |
| Operable partition | no |
| Acoustical Controls & Sound Transmission | yes – sound separation |

Technology

| | |
|--|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Interactive White Board | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address & clock system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Choral General Storage/Choral Library – Share space with Band (existing)

Quantity: 1
Proposed SF: 150 to 200 SF Each

Space Design Concept

The storage should be designed to accommodate supplies, media storage, student projects and music department specific equipment.

Program Activities

Storage of educational materials.
Storage of sheet music, CD's, MP3's & Books
Access to rehearsal room and office

Program Adjacencies

Access to music rehearsal rooms
Access to practice rooms

Loose Furnishings

| | |
|----------------------|----------------|
| Lateral file cabinet | Reuse existing |
| Shelving units | Reuse existing |

Fixed Equipment

| | |
|------------------------|----------------|
| Book shelves | Reuse existing |
| Secure storage cabinet | Reuse existing |

Finishes

| | | | |
|---------------------------------|--------------------------------------|---------|---------------|
| floor material: | Tile | | |
| base material: | Rubber | | |
| wall material: | Block / Gyp | finish: | Paint |
| ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| hardware: | ADA compliant | | |
| lighting | energy efficient LED direct/indirect | | |
| fire extinguisher & suppression | per code | | |

Special Requirements

| | |
|--|---|
| HVAC systems including Air Conditioning | yes |
| Natural and indirect Lighting | no |
| Operable partition | no |
| Acoustical Controls & Sound Transmission | yes – sound separation from rehearsal rooms |

Technology

| | |
|--|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Interactive White Board | no |
| Voice, video and data ports | no |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address & clock system | yes |

Band/Orchestra Rehearsal Room – (existing)

Quantity: 1
Existing SF: 2,250 SF

Space Design Concept

The Band Room will house the various levels of band and orchestra classes. An acoustically appropriate space with high ceilings large enough to accommodate 100 students. A lockable cabinet or closet to house current percussion equipment, folio cabinets to hold folders for all ensembles, conductor's chair, and podium, and built-in and lockable stereo equipment and tuner are needed. A secure band storage facility adjacent to the band room will house all marching percussion, electronic equipment for jazz, and band music. Access to the auditorium and stage is recommended.

Program Activities

Support the instruction and practice of various levels of band programs

Program Adjacencies

Access to instrument storage in room along walls
Access to seasonal instrument storage - separate
Access to practice rooms and office
Access to percussion storage

Loose Furnishings

| | |
|---------------------------|---|
| Music stands w/ carts | Reuse existing |
| Program equipment | Reuse existing |
| Storage for music folders | Reuse existing |
| Chairs | Reuse existing |
| Mobile computer stations | No- Wireless capabilities by portable devices |
| Teacher Desk and Chair | Reuse existing |
| Lateral file cabinet | Reuse existing |

Fixed Equipment

| | |
|---|--|
| Acoustical treatment | yes – Meet State acoustical requirements |
| Marker/white board | yes – 1 at 12 linear feet with music staff |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes – white board will be utilized |
| Flag Bracket & Flag | yes – one in each room |
| Display and book shelves | yes – existing |
| Tall wardrobe and storage cabinet | yes – existing |
| Fixed cabinets and accessible work surfaces | yes – existing |

Finishes

| | | | |
|---------------------------------|--|---------|----------------|
| floor material: | Tile | | |
| base material: | Rubber | | |
| wall material: | Block / Gyp | finish: | Paint |
| ceiling material: | Acoustical Tile | height: | 18'-0" minimum |
| hardware: | ADA compliant | | |
| lighting | multi-level energy efficient LED direct/indirect | | |
| fire extinguisher & suppression | per code | | |

Special Requirements

| | |
|--|---|
| HVAC systems including Air Conditioning | yes |
| Natural and indirect Lighting | yes – provide daylighting options |
| Operable partition | no |
| Acoustical Controls & Sound Transmission | yes – sound separation with adjacent spaces |

Technology

| | |
|--|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes – Utilize existing systems |
| Interactive White Board | yes - Utilize existing systems |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address & clock system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Band / Orchestra Practice Room

Quantity: 3

Proposed SF: 50 to 75 SF Each – 2 Individual Practice (existing)

Proposed SF: 200 to 250 SF Each – 1 Ensemble Practice (existing)

Space Design Concept

The practice room should be designed for an individual practice and instruction.

Program Activities

Instrumental music practice

Loose Furnishings

| | |
|---------------------------|---|
| Music stands w/ carts | Reuse existing |
| Program equipment | Reuse existing |
| Risers | no |
| Storage for music folders | no |
| Chairs | Reuse existing |
| Mobile computer stations | No- Wireless capabilities by portable devices |
| Teacher Desk and Chair | no |
| Lateral file cabinet | no |

Fixed Equipment

| | |
|---|--|
| Acoustical treatment | yes – Meet State acoustical requirements |
| Marker/white board | no |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | | | |
|---------------------------------|--------------------------------------|---------|---------------|
| floor material: | Tile/Carpet | | |
| base material: | Rubber | | |
| wall material: | Block / Gyp | finish: | Paint |
| ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| hardware: | ADA compliant | | |
| lighting | energy efficient LED direct/indirect | | |
| fire extinguisher & suppression | per code | | |

Special Requirements

| | |
|--|------------------------|
| HVAC systems including Air Conditioning | yes |
| Natural and indirect Lighting | no |
| Operable partition | no |
| Acoustical Controls & Sound Transmission | yes – sound separation |

Technology

| | |
|--|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Interactive White Board | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address & clock system | yes |

Band / Orchestra Storage/Library (Existing)

Quantity: 1
Proposed SF: 200 to 250 SF

Space Design Concept

The storage should be designed to accommodate music supplies, media storage, student projects, and music department specific equipment.

Program Activities

Storage of educational materials.
Storage of sheet music, CD's, MP3's & Books
Access to rehearsal room and office

Loose Furnishings

| | |
|---------------------------|---|
| Music stands w/ carts | no |
| Program equipment | no |
| Risers | no |
| Storage for music folders | no |
| Chairs | Reuse existing |
| Mobile computer stations | No- Wireless capabilities by portable devices |
| Teacher Desk and Chair | no |
| Lateral file cabinet | no |

Fixed Equipment

| | |
|---|---|
| Acoustical treatment | yes – Meet State acoustical requirements |
| Marker/white board | no |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes – appropriate for storage of sheet music etc. |

Finishes

| | | | |
|---------------------------------|--------------------------------------|---------|---------------|
| floor material: | Tile/Carpet | | |
| base material: | Rubber | | |
| wall material: | Block / Gyp | finish: | Paint |
| ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| hardware: | ADA compliant | | |
| lighting | energy efficient LED direct/indirect | | |
| fire extinguisher & suppression | per code | | |

Special Requirements

| | |
|--|------------------------|
| HVAC systems including Air Conditioning | yes |
| Natural and indirect Lighting | no |
| Operable partition | no |
| Acoustical Controls & Sound Transmission | yes – sound separation |

Technology

| | |
|--|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Interactive White Board | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address & clock system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Band / Orchestra Instrument Storage (Existing)

Quantity: 1
Proposed SF: 200 to 250 SF

Space Design Concept

The storage should be designed to accommodate students musical instruments, and music department specific equipment.

Program Activities

Storage of educational materials.

Storage of Instruments

Access to rehearsal room and office

Loose Furnishings

| | |
|---------------------------|----|
| Music stands w/ carts | no |
| Program equipment | no |
| Risers | no |
| Storage for music folders | no |
| Chairs | no |
| Mobile computer stations | no |
| Teacher Desk and Chair | no |
| Lateral file cabinet | no |

Fixed Equipment

| | |
|---|--|
| Acoustical treatment | yes – Meet State acoustical requirements |
| Marker/white board | no |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes – appropriate for storage of music instruments |

Finishes

| | | | |
|---------------------------------|--------------------------------------|---------|---------------|
| floor material: | Tile/Carpet | | |
| base material: | Rubber | | |
| wall material: | Block / Gyp | finish: | Paint |
| ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| hardware: | ADA compliant | | |
| lighting | energy efficient LED direct/indirect | | |
| fire extinguisher & suppression | per code | | |

Special Requirements

| | |
|--|-----|
| HVAC systems including Air Conditioning | yes |
| Natural and indirect Lighting | no |
| Operable partition | no |
| Acoustical Controls & Sound Transmission | no |

Technology

| | |
|--|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Interactive White Board | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address & clock system | yes |

Band Office (Existing)

Quantity: 1
Proposed SF: 150 to 200 SF

Space Design Concept

The office should be designed to accommodate the teacher and a small conference area. The space should be adjacent to the rehearsal room.

Program Activities

Teacher planning and preparation room.
Conference Space

Loose Furnishings

Lateral file cabinet
Conference Table and Chairs
Desks and chairs – 1
Shelving Units – 2 at 12 Linear feet each

Fixed Equipment

| | |
|---|---|
| Acoustical treatment | yes – Meet State acoustical requirements |
| Marker/white board | no |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | yes – along one wall / 5 linear feet of shelf space |
| Tall wardrobe and storage cabinet | yes – along one wall 3 linear feet total |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | |
|---------------------------------|-----------------------------|
| Floor material: | Carpet |
| Base material: | Rubber |
| Wall material: | Block / Sheetrock |
| Wall Finish: | Paint |
| Ceiling material: | Acoustical Tile |
| Ceiling height: | 8'-0" minimum |
| Hardware: | ADA compliant |
| Lighting | Multi level direct/indirect |
| Fire extinguisher & suppression | Per code |

Special Requirements

| | |
|--|-----|
| HVAC systems including Air Conditioning | yes |
| Natural and indirect Lighting | yes |
| Operable windows | yes |
| Acoustical Controls & Sound Transmission | yes |

Technology

| | |
|--|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Interactive White Board | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address & clock system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Art

Program Objectives

Wheeler Middle and High School is comprised of students with a wide range of abilities, interest, and social backgrounds. The Art courses offered at WHS provide many opportunities for students to develop their artistic talents. The Arts have been identified by the U.S. Congress, The Partnership for 21st Century Skills, the National Association of Secondary Principals, and the U.S. Department of Education as part of the core curriculum which all students should take as part of their high school program. The Art Department offers diverse learning opportunities including painting, drawing, sculpture, ceramics, crafts, printmaking, and technical design. Through the art program, students learn to appreciate the past and present artistic expressions of others and, in doing so, expand their own horizons and develop an awareness of the role of artists in society.

Opportunities exist for students to display their artwork within the school, district, and the greater community. Those students who display exceptional artistic talent can be recommended by their teachers to submit their work to the Connecticut Regional Scholastic Arts Awards Program, a juried student art show, featuring work created by students from across the state. Exhibition opportunities for all art students are also available in both juried and open shows at the regional, state and national levels.

The arts play a profound role in learning. Experiences in the arts are basic to learning. The arts curriculum offers one way to formulate questions, construct knowledge, express meaning, and solve problems. The arts enhance language facility and the development of expressive skills. Self-esteem, social awareness, critical thinking, sensitivity to others, sensitivity to one's environment, and problem solving are all enhanced with the dynamics of arts infused approach.

Program Goals

Instruction in Art involves the 21st Century Learning Expectations of writing effectively, reading effectively, speaking effectively, problem-solving effectively, and thinking critically. The goals of the art program include the following:

- A. Development of proficiency in the use of a variety of tools, materials, and techniques;
- B. Development of an understanding of the elements and principles of design;
- C. Development of a student's ability to intelligently judge art and show an appreciation of the visual arts;
- D. Development of visual perception and to challenge students to work toward excellence;
- E. Direction for students who are seeking art-related careers;
- F. Inspiration toward creativity so that students' lives may be enriched.

Program Courses

- A. Grade 7 Art
- B. Grade 8 Art
- C. Introduction to 2D Art
- D. Introduction to 3D Art
- E. 2D Art Studio
- F. 3D Art Studio
- G. Advanced Studio Art
- H. Portfolio Studio Art
- I. UConn Drawing/ECE
- J. Visual Art & Technology
- K. Advanced Visual Art & Technology

Program Activities to be Accommodated

Studios are needed to accommodate all art courses. One of the studios should contain a computer graphics lab which is needed for Visual Arts & Technology courses. A kiln room is needed for the clay component. A multipurpose lecture room is needed for slide and video presentations and lectures, as well as the collaborative classes. Display cases for student work should be created throughout the school as well as an art exhibition space at the main entrance of the school. Activities to be housed include large and small group instruction and class work. Students will discuss, read, write, word process, present, dramatize, and conduct research, applying skills and content learned by utilization material available in the classroom, as well as through the technological resources of voice, video, and print media. Each classroom must be large enough to accommodate students working in small and large groups. Space must allow for teacher supervision of small groups and acoustics must be appropriate to control the noise level. All students are also required to meet individually with teachers in conference therefore appropriate quiet space should be provided. Natural light, multi-level lighting and individualized environmental control should be provided in each space.

Space Occupancy and Design Criteria

The Art Department classrooms include the students and Art department teachers. Depending on the course, a special education teacher, and/or a paraprofessional may share space for the instruction of small groups or individuals within the regular art studio. The following is a partial list of design elements that should be incorporated into all instructional spaces:

- The studio configuration should maximize flexibility and provide lecture as well as studio space.
- Access to technology should be provided through the studio.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas.
- Ceiling height and windows should maximize natural light and accommodate daylight.
- Sidelites must be provided adjacent to all classroom doors.
- Cabinets and casework appropriate to the instructional studio function should be provided.
- Special consideration should be given for sound transmission at operable and standard walls to minimize sound infiltration into the adjacent space.
- Speaker systems should be incorporated into all instructional spaces.
- Whiteboards and Bulletin Boards should be provided in each instructional space.
- Storage should be provided for ongoing student projects within the studio and in storage rooms.
- Large deep sinks with clay-traps
- Adjustable multi directional lighting
- Art courtyard for student instruction and sculpture displays
- Student display gallery
- Computer graphic workstations within the studio and a graphics lab
- Dedicated Kiln Room
- Enhanced ventilation requirements
- Student display shelving in all studios
- Each studio space should be able to accommodate 20 students.

Current Space Limitations

Currently the two Art Studios/Rooms are not near each other or centrally located so they can be accessed equally by both the High School and Middle School students. This makes collaboration difficult. The current Middle School Art Studio/Room is a retrofitted classroom space, which does not meet the needs of the students and does not have the appropriate support space for a kiln room, storage, student display and gallery space. The Middle School space does not have appropriate windows or enough natural light. The High School Studio/Room does not have the appropriate support space for a graphics lab. Storage is a serious problem in both spaces.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility or building new to meet the program objectives established for Wheeler High School/Middle School. The studio and program space should be designed to provide the department flexibility based on enrollment and the needs of particular courses. The High School studio will have computer graphic workstations for small groups. The Art department workroom and office is located between the studios with access to each space. The studios should also be placed near each other and in a central location easily accessible by students from both schools. The Art department will share space with the Technology Education department. The gallery/display space will be used by both departments to showcase student work. The adjacency to the Technology Department will provide opportunities for students focusing on sculpture and industrial design.

Design Concept:

Program Requirements

The Art Department space requirements include two studios, storage rooms, kiln room, graphics lab and offices. The space should be designed as a flexible learning environment that is able to accommodate the specific program requirements. The inclusion of technology and computer graphics with a graphics lab and the ability to access technology within the studio is an imperative.

Art Studio – 3D

Quantity: 1

Proposed SF: 950 to 1,000 SF Each

Space Design Concept

The classroom should be designed for an integrated approach to technology and multiple furniture arrangements and classroom configurations. The space will function as an office for the teachers.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction. Display of student work and appropriate storage for on-going projects is required in each studio.

Loose Furnishings

| | |
|--|---|
| Modular rectangular art tables with chairs | reuse existing |
| Circular tables for small groups with chairs | reuse existing |
| Mobile computer stations | no - wireless computing throughout building |
| Teacher Desk and Chair | reuse existing |
| Lateral file cabinet | reuse existing |

Fixed Equipment

| | |
|---|--|
| Acoustical treatment | yes – Meet State acoustical requirements |
| Marker/white board | yes – 1 at 12 linear feet |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes – white board will be utilized |
| Flag Bracket & Flag | yes – one in each room |
| Display and book shelves | yes – along one wall / 15 linear feet of shelf space |
| Tall wardrobe and storage cabinet | yes – along one wall 3 linear feet total |
| Fixed cabinets and accessible work surfaces | yes – 20 linear feet of upper and lower cabinets total |

Finishes

| | | | |
|---------------------------------|--|---------|-------|
| Floor material: | Polished Concrete | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Open ceiling | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi-level energy efficient LED direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

| | |
|---|--|
| Specialty lighting | yes - track lighting in designated locations |
| Deep sinks with clay traps | yes - two with three faucets |
| HVAC systems including Air Conditioning | yes |
| Natural and indirect/direct Lighting | yes |
| Operable windows | yes |
| Power requirements for potters' wheel's | yes |
| Floor drains with clay traps and access panels. | yes |
| Adjacent Kiln Room with separate storage room. | |

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Interactive White Board | yes - Utilize existing systems |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Art Studio – 2D

Quantity: 1

Proposed SF: 500 to 650 SF Each

Space Design Concept

The classroom should be designed for an integrated approach to technology and multiple furniture arrangements and classroom configurations. The space will function as an office for the teachers.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction. Display of student work and appropriate storage for on-going projects is required in each studio.

Loose Furnishings

| | |
|--|---|
| Modular rectangular art tables with chairs | reuse existing |
| Circular tables for small groups with chairs | reuse existing |
| Mobile computer stations | no - wireless computing throughout building |
| Teacher Desk and Chair | reuse existing |
| Lateral file cabinet | reuse existing |

Fixed Equipment

| | |
|---|--|
| Acoustical treatment | yes – Meet State acoustical requirements |
| Marker/white board | yes – 1 at 12 linear feet |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes – white board will be utilized |
| Flag Bracket & Flag | yes – one in each room |
| Display and book shelves | yes – along one wall / 15 linear feet of shelf space |
| Tall wardrobe and storage cabinet | yes – along one wall 3 linear feet total |
| Fixed cabinets and accessible work surfaces | yes – 15 linear feet of upper and lower cabinets total |

Finishes

| | | | |
|---------------------------------|--|---------|-------|
| Floor material: | Polished Concrete | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Open ceiling | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi-level energy efficient LED direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

| | |
|---|--|
| Specialty lighting | yes - track lighting in designated locations |
| Deep sinks with clay traps | yes - one with three faucets |
| HVAC systems including Air Conditioning | yes |
| Natural and indirect/direct Lighting | yes |
| Operable windows | yes |
| Power requirements for potters' wheel's | no |
| Floor drains with clay traps and access panels. | yes |
| Adjacent Kiln Room with separate storage room. | |

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Interactive White Board | yes - Utilize existing systems |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Art Department Storage

Quantity: 1 (shared by both Art Rooms)
Proposed SF: 150 to 200 SF

Space Design Concept

The storage should be designed to accommodate art supplies, media storage, student projects, drying racks and art department specific equipment.

Program Activities

Storage of educational materials.

Fixed Equipment

| | |
|---|---|
| Display and shelve | yes – 10 linear feet 12-inch-deep, maximum 5 shelves high |
| Secure storage cabinet | yes – Flammable storage |
| Acoustical treatment | yes – Meet State acoustical requirements |
| Marker/white board | no |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | |
|---------------------------------|--------------------------|
| Floor material: | Polished Concrete |
| Base material: | Rubber |
| Wall material: | Block / Sheetrock |
| Wall Finish: | Paint |
| Ceiling material: | Acoustical Tile |
| Ceiling height: | 8'-0" minimum |
| Hardware: | ADA compliant - Lockable |
| Lighting | Standard |
| Fire extinguisher & suppression | Per code |

Special Requirements

| | |
|--|-----|
| HVAC systems including Air Conditioning | yes |
| Natural and indirect Lighting | no |
| Operable partition | no |
| Acoustical Controls & Sound Transmission | yes |

Technology

| | |
|--|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Interactive White Board | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address & clock system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Art Department Kiln Room

Quantity: 1 (Shared by both Art Rooms)

Proposed SF: 100 to 150 SF

Space Design Concept

The workroom should be designed to accommodate an office with work/planning area.

Program Activities

Kiln and ceramic storage

Fixed Equipment

| | |
|---|--|
| Display and shelf | yes – 5 linear feet 12-inch-deep, maximum 5 shelves high |
| Secure storage cabinet | yes – Flammable storage |
| Acoustical treatment | yes – Meet State acoustical requirements |
| Marker/white board | no |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | |
|---------------------------------|--------------------------|
| Floor material: | Polished Concrete |
| Base material: | Rubber |
| Wall material: | Block / Sheetrock |
| Wall Finish: | Paint |
| Ceiling material: | Acoustical Tile |
| Ceiling height: | 8'-0" minimum |
| Hardware: | ADA compliant - Lockable |
| Lighting | Standard |
| Fire extinguisher & suppression | Per code |

Special Requirements

| | |
|--|-----------------------------------|
| HVAC systems including Air Conditioning | yes – direct exhaust for the kiln |
| Natural and indirect Lighting | no |
| Operable partition | no |
| Acoustical Controls & Sound Transmission | yes |

Technology

| | |
|--|--|
| Power outlet - floor and walls | yes – as appropriate Power for one Kiln |
| Media projection system | no |
| Interactive White Board | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address & clock system | yes |

Educational Program Specifications – Technology Education

Program Objectives

The Technology Education Department provides a link from the traditional areas of study to the technologies of the future. Technology Education is based on experiential learning models and career exploration that is available to all students. The curriculum allows students to shape and change the physical world to meet needs, by manipulating materials, tools, and techniques. The department strives to expose students to a wide array of technological experiences and gain applied experiences in the traditional study areas. The Technology Lab allows students to use CAD and other graphics related technology. The program also includes Video Production, yet the program is housed in another part of the building which limits its cohesiveness.

All programs are designed to contain points of integration for self-reflection, evaluation, writing, reasoning, and analysis using mathematical models with a strong connection to the sciences.

Program Goals

Instruction in Technology Education involves the 21st Century Learning Expectations writing effectively, reading effectively, speaking effectively, problem-solving effectively, and thinking critically. The goals of the technical education program include the following:

- A. Development of problem-solving strategies and work habits which will result in almost any career and/or occupation;
- B. Development of a greater appreciation for the work of craft workers and the skills required of that work;
- C. Exploration of a variety of activities related to many areas where science, technology, engineering, and math intersect in society;
- D. Development of students to see how “systems” work together and a chance to put much of the academic class instruction to work in an applied way.

Program Courses

- A. Materials Processing II
- B. Technical Drafting/CAD
- C. Innovation and Invention
- D. Architectural Drafting and Design
- E. Graphic Design
- F. Video Production

Program Activities to be Accommodated

The Technology Education Coursework focuses on the development and application of technology and the effect that technology has on people, society, and the environment. The video production program, which is currently housed in the Media Center, provides students with hands-on experiences in the field of communication and provides them with an authentic experience working in the video field. Experience will be gained in writing scripts, idea development, interviewing skills, and on-camera presentation. The video production program is one of technology education's clearest integration points, as it offers students the opportunities to implement their academic experiences with a hands-on, minds-on, authentic learning experience.

The Technology Lab should contain up to 20 computer stations which are needed for a variety of technology courses. The Tech Lab must also have a multipurpose lecture room for slide and video presentations and lectures, as well as the collaborative classes. Display cases for student work should be created throughout the school as well as an art exhibition space at the main entrance of the school. Activities to be housed include large and small group instruction and class work. Students will discuss, read, write, word process, present, dramatize, and conduct research, applying skills and content learned through the utilization of material available in the classroom, as well as through the technological resources of voice, video, and print media. Each classroom must be large enough to

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

accommodate students working in small and large groups. Space must allow for teacher supervision of small groups and acoustics must be appropriate to control the noise level. All students are also required to meet individually with teachers in conference; therefore, appropriate quiet space should be provided. Natural light, multi-level lighting, and individualized environmental control should be provided in each space.

Space Occupancy and Design Criteria

The Technology Department classrooms/labs include the students and Technology department teachers. Depending on the course, a special education teacher, and/or a paraprofessional may share space for the instruction of small groups or individuals within the labs. The following is a partial list of design elements that should be incorporated into all instructional spaces:

- The Lab configuration should maximize flexibility and provide lecture as well as practical application lab space.
- Access to technology should be provided through the Labs.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas.
- Ceiling height and windows should maximize natural light and accommodate daylight.
- Sidelites must be provided adjacent to all classroom doors.
- Cabinets and casework appropriate to the instructional studio function should be provided.
- Special consideration should be given for sound transmission at operable and standard walls to minimize sound infiltration into the adjacent space.
- Speaker systems should be incorporated into all instructional spaces.
- Whiteboards and Bulletin Boards should be provided in each instructional space.
- Storage should be provided for ongoing student projects within the lab and in storage rooms.
- Large deep sinks, eyewash, body showers, and other safety equipment (as needed)
- Adjustable multi-directional lighting.
- Student display gallery.
- Computer graphic workstations within the technology lab.
- Video recording equipment and broadcast facilities (removed from the Media Center)
- Enhanced ventilation requirements including dust collection if required.
- Student display shelving in all Labs.
- Appropriate work station for each lab based on the program requirements.
- Each Technology Department work space should accommodate up to 20 students.

Existing Conditions

The Technology Education spaces, although adequate in size, lack the appropriate support space and equipment, storage, student display and gallery space and appropriate requirement for environmental comfort. Currently the two Tech and Art Studios/Rooms are not near each other or centrally located so they can be accessed equally by both the High School and Middle School students. The space, as currently designed, is having an impact on the instructional programs which can be offered; with more and more emphasis being placed on technology in the construction process, the current configuration, limits our program.

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility or building new to meet the program objectives established for Wheeler High School/Middle School. The studio and program space should be designed to provide the department flexibility based on enrollment and the needs of particular courses. The Technology spaces should also be placed near each other and in a central location easily accessible by students from both schools. The Art department will share space with the Technology Education department. The gallery/display space will be used by both departments to showcase student work. The adjacency to the Technology Department will provide opportunities for students focusing on sculpture and industrial design. The

new/redesigned labs have been supplemented with additional storage and appropriately accommodate the display, storage and work areas with the labs. A gallery space has been developed outside the art studios to display student work and also function as an informal meeting area. Each lab will have several computer graphic workstations for small groups and have access to the graphics and CADD labs. The Tech Ed department workroom and office is located between the studios with access to each space.

Design Concept:

Program Requirements

The Tech Ed Department space requirements include space for the current program and expansion of the program in the future. It also includes storage rooms and offices. The space should be designed as a flexible learning environment that is able to accommodate the specific program requirements. The inclusion of technology and the ability to access technology within the studio is an imperative.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

CADD/ Graphics Lab (Shared space)

Quantity: 1 (shared with Technology Department)
Proposed SF: 900 to 1,000 SF Each

Space Design Concept

The classroom should be designed for an integrated approach to technology and multiple furniture arrangements and classroom configurations. The computers should be along the wall with a center table used for lecture/cooperative style instruction.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction.

Loose Furnishings

| | |
|--|--------------------------|
| Computer Workstations with chairs | 20 Stations Use existing |
| Rectangle table for small groups with chairs | Reuse existing |
| Work Tables | Reuse existing |
| Teacher Desk and Chair | Reuse existing |
| Lateral file cabinet | Reuse existing |

Fixed Equipment

| | |
|---|--|
| Acoustical treatment | yes – Meet State acoustical requirements |
| Marker/white board | yes – 1 at 12 linear feet with music staff |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes – white board will be utilized |
| Flag Bracket & Flag | yes – one in each room |
| Display and book shelves | yes – along one wall / 15 linear feet of shelf space |
| Tall wardrobe and storage cabinet | yes – along one wall 3 linear feet total |
| Fixed cabinets and accessible work surfaces | yes – along one wall 9 linear feet of upper and lower cabinets total |

Finishes

| | | | |
|---------------------------------|--|---------|---------------|
| floor material: | Tile | | |
| base material: | Rubber | | |
| wall material: | Block / Gyp | finish: | Paint |
| ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| hardware: | ADA compliant | | |
| lighting | multi-level energy efficient LED direct/indirect | | |
| fire extinguisher & suppression | per code | | |

Special Requirements

| | |
|--|-----------------------------------|
| HVAC systems including Air Conditioning | yes |
| Natural and indirect Lighting | yes – provide daylighting options |
| Operable partition | no |
| Acoustical Controls & Sound Transmission | yes |

Technology

| | |
|---|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes – utilize existing systems |
| Interactive White Board | yes - utilize existing systems |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address & clock system | yes |
| Dedicated electrical circuits with a UPS back up system | |

Video Production Studio

Quantity: 1
Proposed SF: 800 to 1,000 SF

Space Design Concept

The students should be able to demonstrate the fundamental knowledge and application of the elements of audio-video production and execution. Technical knowledge will be realized through workshop experiences, which combine theory and hands-on practice. The studio may be shared with the local community access television group. The lab should be designed for an integrated approach to technology. This space should be adjacent to the video production lab.

Program Activities

Students will produce live television cable casts. Students will also participate in other production and post-production editing.

Loose Furnishings

Circular tables for small groups with chairs
Mobile computer stations
Teacher Desk and Chair
Lateral file cabinets

Fixed Furnishings

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 2 at 12 linear feet |
| Tack board & display boards | yes – minimum 20 linear feet |
| Projection screen/surfaces | yes |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |
| Green screen background | yes |

Finishes

| | | | |
|---------------------------------|---|---------|-------|
| Floor material: | VCT /VET and Area Rug | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Open ceiling with pipe grid | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi-level direct/indirect studio lighting | | |
| Windows | No | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting (assorted systems, roughly 6-7 units for a small space)
Dedicated electrical circuits with a UPS back up system
HVAC systems including Air Conditioning
1 video switcher
2 Canon, XL-2 (with chargers and cases)
2 Bogen-Manfrotta tripods,
2 tripod carriages
2 teleprompters
2 way wireless intercom system with multiple headsets (preferable 4 terminals)
6 Microphones (2 stick, 4 lavalier)
2, 22 inch monitors (preferably flat screen)
Curtains for backdrops

Technology

| | |
|----------------------------------|---|
| Power outlet - floor and walls | yes – as appropriate to provide multiple workstation configurations |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Video Production Lab - Control Room & Video Editing

Quantity: 1
Proposed SF: 150 to 250 SF

Space Design Concept

The students should be able to demonstrate the fundamental knowledge and application of the elements of audio-video production and execution. Technical knowledge will be realized through workshop experiences, which combine theory and hands-on practice. The studio may be shared with the local community access television group. The lab should be designed for an integrated approach to technology. This space should be adjacent to the video production studio.

Program Activities

Students will also participate in production and post-production editing.

Loose Furnishings

Workstations with editing equipment
Circular tables for small groups with chairs
Mobile computer stations
Teacher Desk and Chair
Lateral file cabinets

Fixed Furnishings

| | |
|---|---|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 1 at 8 linear feet |
| Tack board & display boards | yes – minimum 10 linear feet |
| Projection screen/surfaces | yes |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes – designed to accommodate the editing and production console. |
| Blue screen background | yes |
| Lighting pipe grid | |

Finishes

| | | | |
|---------------------------------|---|---------|-------|
| Floor material: | VCT /VET and Area Rug | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Open ceiling with pipe grid | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect studio lighting | | |
| Windows | No | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
Dedicated electrical circuits with a UPS back up system
HVAC systems including Air Conditioning

Technology

| | |
|----------------------------------|---|
| Power outlet - floor and walls | yes – as appropriate to provide multiple workstation configurations |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Educational Program Specifications – Computers/Prototypical Resource Lab

Program Objectives

Wheeler Middle and High School provides a comprehensive computer program which mirrors the current technological trends which provides our students with the proper skills so they can be technologically literate and be an active and productive member of society. The Computer Department is housed within the Computer Resource Lab which allows courses ranging from website design to using computer technology in the creation of graphic designs and advertisement.

Program Goals

Instruction in the Computer Department involves the 21st Century Learning Expectations of writing effectively, reading effectively, speaking effectively, problem-solving effectively, and thinking critically. The goals of the Computer program include the following:

- A. Encourage creativity in producing various outputs of design.
- B. Development of an understanding of design.
- C. Development of Computer skills to challenge the student to produce excellent work.

Program Courses

- A. Creative Designs using Computer Technology
- B. Advanced Creative Designs using Computer Technology
- C. Web Design
- D. Video Production I/II

Program Activities to be Accommodated

The lab space needs to be both instructional and administratively flexible. These labs shall be identical and shall be designed to provide support to classes when the curriculum requires this type of setting. They should be designed so that activities which include large and small group instruction can occur in the space. Students will discuss, read, write, word process, present, dramatize, and conduct research, applying skills and content learned through materials available in the classroom, as well as through the technological resources of voice, video, and print media. The lab must be large enough to accommodate 25 students and allow space for teacher supervision of small groups, and acoustics must be appropriate to control the noise level. All students are also required to meet individually with teachers in conference; therefore, appropriate quiet space should be provided. The lab should function as a general classroom with full audiovisual/technology capabilities supported with the necessary electrical and network infrastructure. Natural light, multi-level lighting, and individualized environmental control should be provided in each space.

Space Occupancy and Design Criteria

The Computer Department classrooms/Resource Lab includes the students and the department teachers. Depending on the course, a special education teacher and/or paraprofessional may share space for the instruction of small groups or individuals within the regular classroom. The following is a partial list of design elements that should be incorporated into all instructional spaces:

- The classroom configuration should maximize flexibility and interaction within and among the instructional areas for development of teaching teams and student learning.
- 25 Computer work stations for students.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas, which should be connected to an audio-visual system and a computer.
- Ceiling height and windows should maximize natural light and accommodate daylight.
- Side-lites must be provided adjacent to all classroom doors.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

- Cabinets and casework appropriate to the instructional classroom function should be provided. General classrooms should be provided with a minimum of 12 linear feet of casework, while specialty spaces should be designed to accommodate the program requirements.
- Special consideration should be given for sound transmission to minimize sound infiltration into the adjacent space.
- Whiteboards and Bulletin Boards should be provided in each instructional space.

Existing Conditions

The Computer Department spaces, although adequate in size, lack the appropriate storage, student display and gallery space and appropriate requirement for environmental comfort. Currently the two lab spaces are not near each other or centrally located so they can be accessed equally by both the High School and Middle School students. With more and more emphasis being placed on technology, the current configuration, limits what we can offer as a part of our program.

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility or building new to meet the program objectives established for Wheeler High School/Middle School. The studio and program space should be designed to provide the department flexibility based on enrollment and the needs of particular courses. The lab spaces should also be placed near each other and in a central location easily accessible by students from both schools. The new/redesigned labs have been supplemented with additional storage and appropriately accommodate the display, storage and work areas with the labs.

Design Concept:

Program Requirements

The Computer Department space requirements include space for the current program and expansion of the program in the future. The space should be designed as a flexible learning environment that is able to accommodate the specific program requirements. The inclusion of technology and the ability to access technology within the studio is an imperative.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Student Support Services

Program Objectives

Wheeler High School has a comprehensive Student Support Structure. This program includes the special education teachers, self-contained staff, paraprofessionals, the district-wide social worker, the school psychologist, the school counselors, the school nurse, the speech and language pathologist, and the occupational and physical therapist. In addition, the Reading teachers and the Student Study Center all provide support to our students. These professionals provide a continuum of services in self-contained and mainstream settings. With several new intervention initiatives, such as SRBI and PBIS, the number of students requiring services has been increasing over the past several years. All students who attend Wheeler, no matter their educational abilities, are entitled to receive appropriate educational services in the least restrictive environment that will enable them to full equality of access. The diversity of educational and behavioral student support needs necessitates a variety of spaces to accommodate instructional activities.

Program Goals

Instruction and support involves the 21st Century Learning Expectations of writing effectively, reading effectively, speaking effectively, problem-solving effectively, and thinking critically. In addition to the educational programs designed specifically to meet the individualized needs of the students, Individualized Education Plans (IEP) are implemented in inclusive settings with appropriate support staff. Other support staff provides individualized student support based upon academic needs defined by assessment data, behavioral data, social-emotional concerns, and state requirements, such as the Student Success Plan and assisting in the college planning process.

Program Activities to be Accommodated

Student Support Services consists of Resource Rooms, Student Study Center, Self-contained setting, Speech and Language Services, Psychological Services, Social Work Services, the school nurse, and School Counseling Services. Other appropriate services as determined by the students' Individual Education Plans (IEP) are also included. As all of the above are fairly specialized, so are their respective activities. Activities range from regular classroom instruction to testing, learning fundamental living skills in a residential-like environment, traditional counseling services, specialized physical education, and other specialized activities aimed at the individual.

Space Occupancy and Design Criteria

The space design criterion includes the student's special education teacher, professionals, and aides. The following is a partial list of design elements that should be incorporated into the all spaces to accommodate students with special needs:

- A. Sensory-friendly lighting and acoustics would be beneficial for students with autism, hearing difficulties, and attention deficits.
- B. Self-contained programs should be placed with ready access to the mainstream classrooms.
- C. Special education classrooms must provide efficient emergency egress.
- D. Self-contained settings should be close to exits to allow for easy access to transportation.
- E. All classrooms should have ample locked storage space for materials and records.
- F. Self-contained, flexible work stations should support both individual and small group instruction.
- G. Classroom technology in special education settings should be equal to that offered in mainstream settings.
- H. All classrooms should be equipped with a telephone line, clock, multiple outlets, whiteboards, bulletin boards, and wiring for computer network capability and internet access.
- I. Each classroom should have audiovisual capability and the flexibility to accommodate large and small group activities and individual instruction.
- J. General education classrooms will require commensurate standards for the inclusion of special education students.
- K. Access to technology should be provided in all spaces.

- L. Digital projection systems should be utilized for visual display.
- M. Interactive whiteboards should be installed in all instructional areas.
- N. Ceiling height and windows should maximize natural light and accommodate daylight.
- O. Sidelites must be provided adjacent to all classroom doors.
- P. Cabinets and casework appropriate to the instructional studio function should be provided.
- Q. Speaker systems should be incorporated into all instructional spaces.
- R. Whiteboards and Bulletin Boards should be provided in each instructional space.
- S. ***Student Support Services Conference/Testing Space.***
 - This conference room will be the main venue for PPT's, Annual, and Triennial Reviews. (Right now these meetings are housed in the School Counseling Suite, which causes scheduling issues with the counseling and special education department). This space can be used as the Speech/Supplemental Instruction/Testing Space.
 - Whiteboard and Tack Boards
 - Should be able to fit up to 15 people.
 - Sound field enhancement
 - Privacy considerations
 - Built-Ins
 - Technology capability for up to 4 computers.
- T. ***Student Study Center***
 - Space for academic interventions within the high school setting
 - Whiteboard and Tack Board
 - Build-Ins
 - Technology capability for up to 8 computers
 - Privacy considerations
- U. ***Reading Room***
 - Traditional classroom setting for up to 10 students and a teacher and paraprofessional

School Counseling Department (Suite)

The School Counseling department is a service to students, teachers, parents, the community, and the professional staff of Wheeler High School. In general the counseling department, both on an individual and group basis, assists each student with his/her emotional and physical needs. Counselors with specialized professional training provide the following services:

- A. Individual and group counseling
- B. College preparation and application processes
- C. Developmental guidance
- D. New student orientation
- E. Teacher and parent consultation
- F. Transition planning
- G. Consulting
- H. Career Awareness
- I. Referral
- J. Screening
- K. Testing and test preparation
- L. Monitoring placed students
- M. Enrollment and transfer paperwork
- N. Scheduling
- O. Student Intervention Team Management
- P. Development and management of Student Success Plans

Space Occupancy and Design Criteria

Occupancy:

- A. School Counselor

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

- a. One grades 7 – 9
- b. One grades 10 – 12
- B. District Social Worker
- C. School Psychologist
- D. Guidance Secretary

Design Criteria:

- A. Conference Room
 - a. Fit up to 15 people
 - b. Built-Ins
 - c. Privacy Considerations
- B. Five (5) Offices
- C. Office/Reception Area
- D. Private waiting area
- E. Student Records Vault
 - a. This currently does not exist. File cabinets are stored in many different spaces throughout the school, in and out of the counseling suite area.
- F. Supply Closet
- G. Resource Center (Career, college and Student Success Plan)

School Health Clinic (Suite)

The Wheeler High School Health Clinic is needed to help students achieve and maintain high standards of health and recognize the relationship of health with educational programs. The school nurse also acts as a resource person for health education programs, families, students and provides support to school personnel. The nurse should be involved in the coordination with special education students.

The program encompasses many activities, including routine and special physical examinations, screening tests, vision and height/weight assessments, hearing assessments, scoliosis exam, and follow-up immunization against communicable disease. The school nurse also manages all athletic and yearly health paperwork, a requirement to attend school or participate in athletics. Unlike now, the health clinic should have adequate private space for health examinations, conferences with students/parents, rest, and isolation. A exterior window is required.

Space Occupancy and Design Criteria

Occupancy:

- A. School Nurse
- B. Nurse's Aid (part-time)

Design Criteria:

- A. Student Records Vault
 - a. This currently does not exist. File cabinets are stored in many different spaces throughout the office, which takes up a lot of space.
- B. Waiting area for up to 5 students (the current one only houses one comfortably)
 - a. Examination Area/Room (with dressing room, Sink & storage)
- C. Nurse's Office Space
- D. Isolation Space (currently houses two students and acts as nurse storage)
- E. Handicap Bathroom and sink (the nurse's office currently uses the Main Office bathroom)

Adaptive Living Skills - ALS

Quantity: - 1
Proposed SF: 700 to 950 SF

Space Design Concept

The classroom should be designed for an integrated approach to technology and multiple furniture arrangements and classroom configurations. The space adjacencies include a) An accessible bathroom, b) a secondary classroom which includes space for therapy, functional skills, assistive technology work and instruction; c) A fully equipped OT/PT therapy room. The classroom should accommodate 12 – 15 students and be located in close proximity to the main office.

Program Activities

Instructional space for students with disabilities to learn life skills. The space will provide a private, safe, secure area for de-escalation and counseling services and a storage room within the classroom for equipment such as wheel chairs, walkers, therapy equipment etc.

Loose Furnishings

Modular rectangular art tables with chairs
Circular tables for small groups with chairs
Mobile computer stations
Teacher Desk and Chair
Lateral file cabinet
Student and Staff Lockers

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 2 at 12 linear feet |
| Tack board & display boards | yes – minimum 20 linear feet |
| Projection screen/surfaces | yes |
| Display and book shelves | yes – 8 linear feet |
| Tall wardrobe and storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|-------|
| Floor material: | VCT / VET | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Open ceiling | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
HVAC systems including Air Conditioning
Natural and indirect/direct Lighting

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Resource Room

Quantity: 2 (1 Middle School and 1 High School)
Proposed SF: 350 to 450 SF Each

Space Design Concept

The small group classroom should be designed for an integrated approach to technology and multiple furniture arrangements and classroom configurations. The space will function as an instructional classroom for eight to ten students, and will be dispersed among the general classrooms. This space is where special education teachers and para-professionals work out of.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction.

Loose Furnishings

Computer Workstations with chairs (8 Each)
Mobile computer stations (2 Each) in addition to wireless capabilities
Work Tables
Teacher Desk and Chair - 2
Lateral file cabinet

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 2 at 12 linear feet |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes |
| Flag Bracket & Flag | yes |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Smart boards | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Special Education Department Storage

Quantity: 1
Proposed SF: 200 to 250 SF Each

Space Design Concept

The storage should be designed to accommodate art supplies, media storage, student records, and department specific equipment.

Program Activities

Storage of educational materials.

Fixed Equipment

Shelves yes – 12 inch deep, maximum 5 shelves high
Secure storage cabinet yes

Finishes

Floor material: VCT
Base material: Rubber
Wall material: Block / Sheetrock
Wall Finish: Paint
Ceiling material: Acoustical Tile
Ceiling height: 8'-0" minimum
Hardware: ADA compliant - Lockable
Lighting: Standard
Fire extinguisher & suppression: Per code

Special Requirements

HVAC systems exhaust

Technology

Power outlet - walls yes
Security yes – per the districts security plan

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

OT / PT

Quantity: 2 (1 Middle School and 1 High School)
Proposed SF: 350 to 450 SF Each

Space Design Concept

The small group classroom should be designed for an integrated approach to technology and multiple furniture arrangements and classroom configurations. The space will function as an instructional classroom for eight to ten students, and will be dispersed among the general classrooms. This space is where special education teachers and para-professionals work out of.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction.

Loose Furnishings

Computer Workstations with chairs (8 Each)
Mobile computer stations (2 Each) in addition to wireless capabilities
Work Tables
Teacher Desk and Chair - 2
Lateral file cabinet

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 2 at 12 linear feet |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes |
| Flag Bracket & Flag | yes |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Smart boards | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Secretary / Reception

Quantity: 1 (To be located in the School Counseling Suite)
Proposed SF: 150 to 200 SF

Space Design Concept

The secretarial work area will accommodate work space for one secretaries and include casework that will be lockable. A fixed secure closet for confidential materials and supplies with shelves and coat hooks.

Program Activities

Provide administrative support to the guidance department.

Loose Furnishings

Reception Desk with chair
Computer Workstation with chair.
Work Tables
File cabinets 2 Minimum

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | yes |
| Display and book shelves | yes |
| Upper storage cabinet | yes – minimum 15 linear feet |
| Fixed cabinets and accessible work surfaces | yes – minimum 15 feet. |
| Designated area for Printer | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | VCT | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Fax Machine
HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Phone with all-call capabilities

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data (2 each) |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Waiting Area

Quantity: 1 (To be located in the School Counseling Suite)
Proposed SF: 100 to 150 SF

Space Design Concept

The waiting area will accommodate seating for 5 to 10 individuals with a combination of individual seating and tables and chair settings. The waiting area will be part of the common space which will include areas for free standing bookcases, file cabinets and a student form cabinet. This space should be shared with the waiting area for the nurses clinic.

Program Activities

Waiting area and document dissemination.

Loose Furnishings

Tables with chairs, rectangular and round.
Individual chairs
Lockable file cabinets – 4 drawers (4 units)
Work Tables

Fixed Equipment

| | |
|---|--|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – Several with a minimum of 30 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | yes |
| Display and book shelves | yes – 50 linear feet of shelving |
| Forms storage cabinet with cubbies | yes – lockable with 36 cubbies |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting Multi-Level
HVAC systems including Air Conditioning
Multiple outlets

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Counseling/Social Worker/Psychologist Office

Quantity: 4 (To be located in the School Counseling Suite)
Proposed SF: 150 to 175 SF

Space Design Concept

The space should be designed to accommodate typical private office equipment and a small conference table for up to four individuals. All office should have exterior windows.

Program Activities

Individual counseling

Loose Furnishing

| | |
|-----------------------------|------------------|
| Shelves | yes |
| Secure storage cabinet | yes – 2 required |
| Comfortable student seating | yes |

Fixed Equipment

| | |
|---|----------------|
| Acoustical treatment | yes |
| Marker/white board | yes |
| Tack board & display boards | yes |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinet | yes – lockable |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Counseling Storage/Document storage

Quantity: 1
Proposed SF: 200 to 250 SF

Space Design Concept

There is currently limited storage for the counseling department; items such as supplies and required records are stored throughout the current space with little organization. Storage area must accommodate paper supplies, instructional supplies, testing materials (PSAT, SAT, ACT, Developmental Guidance materials etc.), SIT files, 504 files, withdrawn student files, etc.

Program Activities

Secure, fireproof area for records storage

Loose Furnishings

Work Table
Lateral and vertical file cabinets
Storage shelving

Fixed Equipment

| | |
|---|---------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Book shelves | yes |
| Storage cabinet | yes – Fireproof |
| Fixed cabinets and accessible work surfaces | yes – 5 Linear feet |

Finishes

| | | | |
|---------------------------------|-------------------|---------|---------------|
| Floor material: | VCT | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Standard | | |
| Windows | no | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Student Support Services Conference/Testing Room

Quantity: 1 (To be located in the School Counseling Suite)
Proposed SF: 150 to 200 SF

Space Design Concept

The space should be designed to accommodate a conference table for up to twelve individuals.

Program Activities

Small group instruction and meetings

Fixed Equipment

| | |
|------------------------|-----|
| Shelves | yes |
| Secure storage cabinet | yes |

Fixed Equipment

| | |
|---|--------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 1 at 8 linear feet |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | yes |
| Display and book shelves | yes |
| Lower storage cabinet | yes – lockable |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Interactive | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Nurse / Health Clinic

Quantity: 1
Proposed SF: 500 to 700 SF Each

Space Design Concept

The Clinic should be located close to the main office and counseling suite so it is easily accessible to all students. The clinic will include a waiting area, semi-private cubicles with a cot for students, a handicapped accessible toilet, storage and an exam room.

Program Activities

Treatment of sick students.

Loose Furnishings

Computer Workstation with chair
Chairs for patients
Cots
Work Tables
Nurse's Desk and Chair
Lateral file cabinet

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board | no |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Book shelves | yes |
| Tall wardrobe and storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |
| Sink in the main clinic space | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | VCT | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Operable windows

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Nurse / Exam Room

Quantity: 1
Proposed SF: 100 to 150 SF

Space Design Concept

The exam room will be accessed from the clinic and will serve as a private exam room for students/patients.

Program Activities

Treatment of sick students

Loose Furnishings

Computer Workstation with chair
Exam Table
Lateral file cabinet

Fixed Equipment

| | |
|---|---|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Book shelves | yes |
| Secure storage cabinet | yes – lockable for storage of medicinal drugs |
| Fixed cabinets and accessible work surfaces | yes |
| Fixed cabinets with sink | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | VCT | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Operable windows
Handicap bathroom
Sink

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes – |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Waiting Area

Quantity: 1 (To be located in the Nurses Suite)
Proposed SF: 100 to 150 SF

Space Design Concept

The waiting area will accommodate seating for 5 to 10 individuals with a combination of individual seating and tables and chair settings. The waiting area will be part of the common space which will include areas for free standing bookcases, file cabinets and a student form cabinet. This space should be shared with the waiting area for the Counseling Suite.

Program Activities

Waiting area and document dissemination.

Loose Furnishings

Tables with chairs, rectangular and round.
Individual chairs
Lockable file cabinets – 4 drawers (4 units)
Work Tables

Fixed Equipment

| | |
|---|--|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – Several with a minimum of 30 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | yes |
| Display and book shelves | yes – 50 linear feet of shelving |
| Forms storage cabinet with cubbies | yes – lockable with 36 cubbies |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting Multi-Level
HVAC systems including Air Conditioning
Multiple outlets

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Nurse Storage/Document storage

Quantity: 1
Proposed SF: 100 to 150 SF

Space Design Concept

There is currently no storage for the nurses; items such as supplies and required records are stored throughout the current small nurses area. Storage area must accommodate nursing supplies, testing equipment, and required records as prescribed state law.

Program Activities

Secure, fireproof area for records storage

Loose Furnishings

Work Table
Lateral and vertical file cabinets
Storage shelving

Fixed Equipment

| | |
|---|---------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Book shelves | yes |
| Storage cabinet | yes – Fireproof |
| Fixed cabinets and accessible work surfaces | yes – 5 Linear feet |

Finishes

| | | | |
|---------------------------------|-------------------|---------|---------------|
| Floor material: | VCT | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Standard | | |
| Windows | no | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Secure / Lockable storage cabinets for medicine

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Health Education

Program Objectives

The Health Program at Wheeler High School is designed to support and guide students' personal and academic achievement through the development of skills needed to live a healthy and balanced lifestyle. The curriculum, which is provided to students in grades 9 & 11, helps students to make plans and take actions that lead to a healthy and balanced life for themselves and the world around them.

Program Goals

Instruction in Health involves the 21st Century Learning Expectations of writing effectively, reading effectively, speaking effectively, problem-solving effectively, and thinking critically. The goals of the Health program include the following:

- A. Demonstrate the ability to practice health-enhancing behaviors that will contribute to the establishment of a healthy lifestyle;
- B. Development of strategies to avoid risk-taking behavior that may lead to their premature death or disability;
- C. Demonstrate an understanding of the relationship between health and the ability to live, learn, play, and work together;
- D. Demonstrate the behaviors that will enable students to become productive citizens who value and respect themselves, others, and the environment.

Program Courses

Health education is for students in grades 7 - 9 & 11. Students need to earn 1.0 credit in Health in order to graduate.

Program Activities to be Accommodated

Activities to be housed include large and small group instruction and class work. Students will discuss, read, write, word process, present, dramatize, and conduct research, applying skills and content learned through the utilization of material available in the classroom, as well as through the technological resources of voice, video, and print media. The Health classroom must be large enough to accommodate students working in small and large groups. Space must allow for teacher supervision of small groups and acoustics must be appropriate to control the noise level. All students are also required to meet individually with teachers in conference; therefore, appropriate quiet space should be provided. The Health classroom should function as a general classroom with full audiovisual/technology capabilities supported with the necessary electrical and network infrastructure. Natural light, multi-level lighting, and individualized environmental control should be provided in each space.

Space Occupancy and Design Criteria

The Health classroom includes the students and Health teachers. Depending on the course, a special education teacher and/or paraprofessional may share space for the instruction of small groups or individuals within the regular classroom. The following is a partial list of design elements that should be incorporated into all instructional spaces:

- The classroom configuration should maximize flexibility and interaction within and among the instructional areas for development of teaching teams and student learning.
- Each classroom should have the capability for a large number of computers.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas, which should be connected to an audio-visual system and a computer.
- Ceiling height and windows should maximize natural light and accommodate daylight.

-
- Sidelites must be provided adjacent to all classroom doors.
 - Cabinets and casework appropriate to the instructional classroom function should be provided. General classrooms should be provided with a minimum of 12 linear feet of casework, while specialty spaces should be designed to accommodate the program requirements.
 - Special consideration should be given for sound transmission to minimize sound infiltration into the adjacent space.
 - Whiteboards and Bulletin Boards should be provided in each instructional space.

Current Space Limitations:

Lack of storage space and appropriate workroom. There is only one Health Classroom for High School students, there is no designated health space for Middle School students. The space is separated from the Physical Education areas and should be close in proximity.

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility or building new to meet the program objectives established for Wheeler High School/Middle School. The classroom should be designed to provide the department flexibility in the assignment of rooms.

Design Concept:

Program Requirements

The Health Department space requirements will include classrooms. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching styles and disciplines. All furniture will be evaluated for life expectancy and all furniture and/or equipment that do not meet the State DOE requirements for “renovate as new” will be replaced. The following pages identify specific requirements for each space.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Health Classrooms

Quantity: 1 (Shared Middle School & High School)
Proposed SF: 500 to 700 SF

Space Design Concept

The classroom should be designed for an integrated approach to technology and multiple furniture arrangements and classroom configurations. The space should function as an office for the teacher and study hall for students.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction.

Loose Furnishings

Modular rectangular tables with chairs – 20 each
Circular tables for small groups with chairs
Mobile computer stations no – wireless computing throughout building
Teacher Desk and Chair
Lateral/vertical file cabinet yes – 2 required

Fixed Equipment

Acoustical treatment yes
Marker/white board (Multiple) yes – 2 at 12 linear feet
Tack board & display boards yes – 2 at 4 linear feet
Projection screen/surfaces yes
Flag Bracket & Flag yes
Display and book shelves yes – along one wall / will be the department storage space
Tall wardrobe and storage cabinet yes – along one wall / will be the department storage space
Fixed cabinets and accessible work surfaces yes

Finishes

Floor material: Tile
Base material: Rubber / Vinyl
Wall material: Block / Sheetrock finish: Paint
Ceiling material: Acoustical Tile height: 8'-0" minimum
Hardware: ADA compliant
Lighting Multi level direct/indirect
Windows Operable with blinds - Maximize natural light
Fire extinguisher & suppression per code

Special Requirements

Specialty lighting
HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Operable windows

Technology

Power outlet - floor and walls yes – as appropriate
Media projection system yes
Interactive White Board yes
Voice, video and data ports yes – phone / intercom and data
Security yes
Portable sound system yes
Technology equipment yes – per the district's technology plan
Wireless & Hard wired Network yes – per the district's technology plan
Integrated public address system yes

Educational Program Specifications – Physical Education

Program Objectives

The Physical Education program is an integral part of the total educational structure of the North Stonington Public Schools. Taken in conjunction with the Health program, it provides the most significant contributions toward the total well-being of each child. The overall goal of the program is to offer progressive, sequential instruction which provides each student with sufficient physical activity to maintain an optimal level of fitness and develop acceptable social, emotional, and physical traits. The Physical Education department is currently separated from the Health department based upon layout and is in a separate building.

Program Goals

Instruction in the Physical Education Department involves the 21st Century Learning Expectations of writing effectively, reading effectively, speaking effectively, problem-solving effectively, and thinking critically. The goals of the Physical Education program include the following:

- A. Development of a student's positive attitude toward his/her personal involvement in physical activities;
- B. Development of an understanding of and appreciation for the nature of rules, skills, and strategies as they relate to physical education activities at the appropriate grade levels;
- C. Provide opportunities for students to develop a wholesome self-concept and an acceptable perception of others;
- D. Development of an interest and a desire to participate in life-long recreational sports;
- E. Development of healthy attitudes concerning winning, losing, and fair play;
- F. Development of the ability to identify options available in making personal decisions.

Program Courses

Physical Education is required for all students each year from grades 6 - 12. Students need to earn 2.0 credits in Physical Education in order to graduate.

Program Activities to be Accommodated

The facilities will accommodate physical education and athletic activities for the entire student population. The facilities required to achieve the department's goal for physical education/health and athletics are identified below.

- A. Main gymnasium with seating for 500 (2 Teaching Stations)
- B. Second Gymnasium (2 Teaching Stations)
- C. Fitness center
- D. Storage for all equipment (currently there is a lack of storage and showers are being used for storage)
- E. Separate boys' and girls' locker rooms with toilet and shower facilities
- F. Team locker areas for sport teams and visiting team use (Middle – High School)
- G. Athletic Director's Office
- H. Office, lockers, toilet, and shower facilities for the PE Staff
- I. Coaches' Offices
- J. Outdoor Equipment Storage
- K. Concession with Storage
- L. Ticket Booth

Space Occupancy and Design Criteria

The individuals using the space include the students, teachers, volunteers, and the community. The following is a partial list of design elements that should be incorporated into the design of the PE spaces:

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

- A. The Gymnasiums should maximize flexibility and provide adequate seating for state-wide competitions. At a minimum, there should be enough seating in the gym for all students who attend Wheeler High School/Middle School.
- B. Access to technology should be provided through the instructional and office areas.
- C. Digital projection systems should be utilized for visual display, including scoreboards.
- D. Interactive whiteboards should be installed in all instructional areas.
- E. Ceiling height and windows should maximize natural light and accommodate daylight.
- F. Sidelites must be provided adjacent to all instructional classroom doors.
- G. Cabinets and casework must be provided in all instructional classrooms.
- H. Speaker systems should be incorporated into all instructional spaces.
- I. Whiteboards and Bulletin Boards should be provided in each instructional space.
- J. Adjustable multi-directional lighting.
- K. Video recording infrastructure must be installed in the gymnasiums for the live recording of events.
- L. Enhanced ventilation requirements
- M. Masonry, ceramic tile and similar finish products should be used in all locker and team facilities.
- N. Natural light should be provided in the gymnasiums.
- O. Provisions for the storage of equipment for all sports activities.
- P. All facilities should meet Title IX requirements.
- Q. The Athletic Training Room should include: sink, ice machine, white board, whirlpools, and storage lockers.
- R. Mechanically-operated curtain
- S. The weight room should consist of: cardiovascular and weight equipment to accommodate 20 students.
- T. The count of all existing athletic fields and courts should be maintained with the addition of a new practice field.

Special Considerations

The gymnasium should have a generator which would allow the building to be used as an emergency shelter. Therefore, the facility should be designed with the emergency shelter in mind.

Existing Conditions

The most significant program deficiency in the Physical Education Department is the lack of gym and locker-room space. There is no distinguishing the Middle School from High School Spaces. With one locker room designated for both boys and girls, the students from grade 6 – 12 are all in the same space at the same time. This is even exasperated after school when the spaces are inundated with students changing for athletics or when we have home basketball games. We could have up to four different teams and three sets of referees accessing the spaces.

With only two teaching stations in the gym, the hallway has to be utilized certain periods when it rains. The hallway currently contains the climbing wall.

Other program shortfalls are the size of fitness center and the lack of storage for athletic and physical education equipment. The main gymnasium is not large enough to have bleacher seating for all students' grades 6 – 12 which limits the possibility of hosting tournament contests. With the bleachers extended there is a safety concern for the athletes as there is inadequate space around the court. This condition also impact accessibility for spectators during sports events. The bleachers are not ADA compliant.

Current Space Limitations:

Lack of instructional space for health near the gym, equipment storage space, inadequate office and conference rooms.

Proposed Program and Concept Plan

The program developed for the Physical Education program is based on meeting the curriculum need of Wheeler High School/Middle School. Right sizing the program areas, addressing ADA/OCR and Title IX; and resolving the natural light environmental issues have been the programming priorities. In developing the plan a key component was the introduction of a new gymnasium space that addressed all the safety concerns identified under the existing conditions, by increasing the width and providing appropriate egress options in the event of an emergency. Also, the addition of additional locker room space.

Design Concept:

The design approach reorganizes the existing program to meet the following priorities:

1. Equality in the size of the facilities and amenities available to both the boys and the girls.
2. Introduction of natural light and HVAC systems that meet or exceed ASHRAE standards and provide a healthy environment for the competitive sprite.
3. A facility that is welcoming and enhances student performance allowing them to excel by developing a healthy body and mind.
4. A facility that serves the students and the community at large.

Program Requirements

The key spaces requirements of the Physical Education Department, and the community at large, is to include two gymnasiums, a larger fitness center, health classrooms, storage rooms, utility room, locker rooms and offices for the athletic director and teachers. The inclusion of technology is an imperative.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Gymnasium (Existing)

Quantity: 2

Proposed SF: 7,500 to 10,000 SF

Space Design Concept

The Main Gymnasium should be designed to accommodate a full size courts for basketball and volleyball; and seating for 500 Spectators. The second gym should be smaller and accommodate less spectators. Both Gyms will be designed with an integrated approach to technology. Each space will function as a physical education instructional area for 2 classes.

Program Activities

Primarily PE activities and should support a number of teaching styles, including lectures, small group and individual instruction. Appropriate storage for equipment for each gym.

Loose Furnishings

Physical Ed Equipment

Fixed Equipment

| | |
|---|----------------------------------|
| Acoustical treatment | yes – Acoustical Deck and panels |
| Marker/white board (Multiple) | no |
| Tack board & display boards | no |
| Projection screen/surfaces | yes – Retractable |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | | | |
|---------------------------------|--|---------|-------|
| Floor material: | Wood resilient sports flooring | | |
| Base material: | Wood | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Wall material: | Wall padding | | |
| Ceiling material: | Open ceiling painted with acoustical deck | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Maximize natural light – Avoid potential for glare | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
Retractable Clear Glass basketball backboards
HVAC systems including Air Conditioning
Mechanically operated divider curtains or rigid folding partitions
Accommodation for baseball cages
Protection for all equipment
Sloped roof deck at 1/2" per foot minimum
Provision for floor scansion for volleyball and other sports.
Access to power and data in the floor
Electronic scoreboards
Display of banners
Retractable bleachers to sit 500 people in larger gym

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Locker Rooms

Quantity: 3 (divided equally between the High School and Middle School – One locker room designated for officials/staff)
Proposed SF: 800 to 1,200 SF Each

Space Design Concept

The locker rooms should be designed with an integrated approach to technology. The space will function as a changing area for students, include toilets and shower facilities and be adjacent to the team rooms. The PE teacher offices will open on the locker rooms. Each locker-room should contain restroom facilities as prescribed by code.

Program Activities

Student changing and preparatory area for PE activities
Team athletics

Loose Furnishings

Shower curtains

Fixed Equipment

| | |
|---|--|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 1 at 8 linear feet in team rooms |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Large Lockers | yes – 250 lockable (each locker room) |
| Fixed counters and accessible work surfaces | yes |
| Mirrors | yes |

Finishes

| | | | |
|---------------------------------|---|---------|------------|
| Floor material: | Polished Concrete | | |
| Base material: | Ceramic Tile | | |
| Wall material: | Block / Tile | finish: | Paint/Tile |
| Ceiling material: | Open ceiling | | |
| Hardware: | ADA compliant | | |
| Lighting | Standard | | |
| Windows | Clearstory Semitransparent - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Interior windows for teacher office sightlines
Vandal proof furnishings
Restrooms

Technology

| | |
|----------------------------------|--|
| Power outlet - walls | yes – as appropriate |
| Media projection system | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Fitness Center

Quantity: 1
Proposed SF: 400 to 700 SF

Space Design Concept

The fitness room should be designed for an integrated approach to technology and flexibility

Program Activities

Primary use will be cardiovascular activities and will also support a number of teaching styles, including lectures and dance.

Loose Furnishings

Aerobic activities equipment

Fixed Equipment

| | |
|---|---------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 1 at 12 linear feet |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes |
| Flag Bracket & Flag | yes |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | no |
| Mirrors on all walls | |

Finishes

| | | | |
|---------------------------------|-----------------------------|---------|---------------|
| Floor material: | Rubber | | |
| Base material: | Wood | | |
| Wall material: | Block / Sheetrock | finish: | Paint/Mirrors |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Water fountain

Technology

| | |
|----------------------------------|---|
| Power outlet - floor and walls | yes – as appropriate based on equipment location design |
| Media projection system | yes |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Athletic Directors Office

Quantity: 1
Proposed SF: 100 to 150 SF

Space Design Concept

The space should be designed to accommodate an office for the Athletic Director(s) with work/planning area, conference area.

Program Activities

Planning and preparation office.

Loose Furnishings

Desks and Chair
Computer station
Work table and Chair
Lateral/vertical file cabinet

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 1 at 8 linear feet |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | yes |
| Display and book shelves | yes – 8 linear feet |
| Tall wardrobe and storage cabinet | yes – lockable 6 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Standard | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Operable windows

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

PE/Athletic Storage

Quantity: 1
Proposed SF: 200 to 500 SF

Space Design Concept

The storage should be designed to accommodate department, athletic and community specific equipment.

Program Activities

Storage of PE, athletic ad community equipment

Fixed Equipment

Shelves yes – 12 inch deep

Finishes

| | |
|---------------------------------|--------------------------|
| Floor material: | Concrete |
| Base material: | Rubber |
| Wall material: | Block / Sheetrock |
| Wall Finish: | Paint |
| Ceiling material: | Acoustical Tile |
| Ceiling height: | 8'-0" minimum |
| Hardware: | ADA compliant - Lockable |
| Lighting | Standard |
| Fire extinguisher & suppression | Per code |

Special Requirements

HVAC systems exhaust

Technology

| | |
|----------------------|---------------------------------------|
| Power outlet - walls | yes |
| Security | yes – per the districts security plan |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Trainer/Utility Room

Quantity: 1
Proposed SF: 50 to 100 SF

Space Design Concept

The space should be designed to accommodate laundry equipment and Ice Machine.

Program Activities

Laundry for uniforms
Ice Machine

Loose Equipment

Washer & Dryer
Ice Machine

Fixed Equipment

Shelves yes – 12 inch deep

Finishes

| | |
|---------------------------------|--------------------------|
| Floor material: | VCT |
| Base material: | Rubber |
| Wall material: | Block / Sheetrock |
| Wall Finish: | Paint |
| Ceiling material: | Acoustical Tile |
| Ceiling height: | 8'-0" minimum |
| Hardware: | ADA compliant - Lockable |
| Lighting | Standard |
| Fire extinguisher & suppression | Per code |

Special Requirements

HVAC systems exhaust

Technology

| | |
|----------------------|---------------------------------------|
| Power outlet - walls | yes |
| Security | yes – per the districts security plan |

Educational Program Specifications – Cafeteria

Program Objectives

The food service program is a vital part of today's educational service and is an integral part of the overall educational plan for a school facility program. Nutrition requirements based on a healthy diet, sufficient time for serving, and eating arrangements must be given a high priority as they contribute to the health and welfare of all students and staff. The Cafeteria should be designed as a comfortable and multifunctional space as it typically serves as a banquet facility, school dance venue, meeting room, and home to other after school and community activities. The dining area should accommodate a minimum of 140 students at a time and provide designated areas for senior seating, vending machines, small gathering areas, and temporary/portable food stations for snacks, salad etc. Additionally, the space should provide the opportunity for presentations such as lecture, music, and dances. The cafeteria should also function as an area where student work and achievements are displayed.

The kitchen/food preparation area that will accommodate hot and cold meal serving lines is imperative. A self-service line and a snack line with a steam table should be provided. A separate washing/disposal area for elimination of waste and cleaning utensils should be maintained. This area should be readily accessible to the serving area for quick redistribution of utensils. There should be an access area for quick and convenient disposal of solid waste products and paper trash without distraction to diners or school traffic.

Program Activities to be Accommodated

- Food service and seating for up to 102 students, approximately 33% of the school's population at one time with multiple furniture arrangements
- Kitchen area large enough to service the needs associated with the preparation of the food
- Facilities for dishwashing, garbage disposal area, freezers, coolers, food services staff office, and planning areas
- Toilets, lockers, and other support spaces associated with the kitchen

Space Occupancy and Design Criteria

The space includes the students, teachers, administrative and food service staff. The following is a partial list of design elements that should be incorporated into the studio spaces:

- A. The Cafeteria configuration should maximize flexibility and provide for activities such as lectures, school dances, social events, and art displays.
- B. Digital projection systems should be utilized for visual display in designated areas.
- C. Community access after school hours should be provided.
- D. Ceiling height and windows should maximize natural light and accommodate daylight.
- E. Windows in the corridors should be provided and appropriately sized corridors should be provided to the area in and out of the cafeteria.
- F. Booth, high-top, and other seating arrangements should be planned for maximum flexibility.
- G. Special consideration should be given for sound transmission and acoustics.
- H. Speaker systems should be incorporated into all cafeteria seating areas.
- I. Storage should be provided for the tables and chairs.
- J. Adjustable multi-directional lighting
- K. A courtyard for exterior dining should be provided.
- L. Student display cases for two- and three-dimensional art work should be provided.
- M. Enhanced ventilation requirements

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Existing Conditions

The existing cafeteria lacks appropriate acoustics and the ability to effectively function as a multi-use space. It also has a maximum capacity of approximately 150 students which requires 4 separate lunch waves. Communications, data and video technology is limited.

Current Space Limitations:

Lack of seating for one lunch wave for each school and storage space

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility to meet the program objectives established for Wheeler High School/Middle School. The cafeteria seating space needs to be expanded. Additionally, technology will be introduced throughout the space and areas with multi-use capabilities in mind.

Design Concept:

Program Requirements

The Cafeteria space requirements include the seating area to incorporate 240 students at one time, storage rooms, and kitchen/support spaces.

Cafeteria

Quantity: 1

Proposed SF: 2,500 to 3,000 SF (enough for a minimum of 102 students at one time)

Space Design Concept

A multi-functional space that is used to serve students lunch and provides options for large and small assemblies

Program Activities

Student dining area and assemblies

Loose Furnishings

Tables with attached seating

Vending machines

Fixed Equipment

| | |
|-------------------------------|----------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes |
| Projection screen/surfaces | yes - overhead |
| Display and book shelves | no |

Finishes

| | | | |
|---------------------------------|---|---------|-------|
| Floor material: | VCT / VET | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical and Open ceiling | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
 Drinking Fountains
 HVAC systems including Air Conditioning
 Natural and indirect/direct Lighting
 Power requirements for portable hot and cold food serving units

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Warming Kitchen / Servery

Quantity: 1

Proposed SF: 500 to 700 SF

Space Design Concept

An efficient commercial kitchen with appropriate support spaces

Program Activities

Preparation and serving meals, primarily lunch.

Loose Furnishings

Food preparation and serving utensils equipment

Tables

Portable carts

Portable serving stations

Portable hot and cold food storage units

Acoustical treatment

Washable Acoustical Tile

Marker/white board (Multiple)

no

Tack board & display boards

yes

Projection screen/surfaces

no

Display and book shelves

no

Finishes

Floor material:

Quarry Tile

Base material:

Tile

Wall material:

Block / Sheetrock

finish:

Paint

Ceiling material:

Acoustical and Open ceiling

Hardware:

ADA compliant

Lighting

Multi level direct/indirect

Windows

Operable with blinds - Maximize natural light

Fire extinguisher & suppression

per code

Special Requirements

Specialty lighting

Drinking Fountains

Hand Sinks

Food preparation equipment

HVAC systems including Air Conditioning

Natural and indirect/direct Lighting

Power requirements for portable hot and cold food serving units

Technology

Power outlet - walls

yes – as appropriate

Media projection system

no

Voice, video and data ports

yes – phone / intercom and data

Security

yes

Portable sound system

yes

Technology equipment

yes – per the district's technology plan

Wireless & Hard wired Network

yes – per the district's technology plan

Integrated public address system

yes

Kitchen Storage

Quantity: 2 - Depending on the specific use.
Proposed SF: 150 to 200 SF

Space Design Concept

The storage should be designed to accommodate supplies, food prep and service related products.

Program Activities

Storage of food service related materials. Includes Freezer, Cooler, Dry Storage and General Storage

Fixed Equipment

| | |
|------------------------|--|
| Shelves | yes – 12 inch deep, maximum 5 shelves high |
| Secure storage cabinet | yes |

Finishes

| | |
|---------------------------------|--------------------------|
| Floor material: | VCT |
| Base material: | Rubber |
| Wall material: | Block / Sheetrock |
| Wall Finish: | Paint |
| Ceiling material: | Acoustical Tile |
| Ceiling height: | 8'-0" minimum |
| Hardware: | ADA compliant - Lockable |
| Lighting | Standard |
| Fire extinguisher & suppression | Per code |

Special Requirements

HVAC systems exhaust

Technology

| | |
|----------------------|---------------------------------------|
| Power outlet - walls | yes |
| Security | yes – per the districts security plan |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Media Center

Program Objectives

The mission of the library is to ensure that students develop both an enjoyment of reading and the information gathering skills that enable them to be independent, effective, responsible, critical, and creative users of ideas and information. The Shaw Media Center is the school's center for information and inquiry for students and staff. The center provides the services, instruction, materials, equipment, and personnel to assist the faculty in developing an appropriate and effective educational program. Media Centers of today are designed to be flexible and have electronic adaptability; ready for technologies as traditional methods are changing almost daily in the area of instruction.

The media center also coordinates the use and maintenance of instructional equipment. The library will consist of student seating areas with tables and study carrels, technology areas for student access to computers and AV equipment, classroom areas for instruction, shelving and storage for materials, a circulation area, small group meeting area, production room, library staff offices and workroom, storage room for equipment, and a professional library area for teachers.

The district media workroom will consist of a staff and student production area, office/work room for the media director, quiet work/meeting room, secured storage areas, and areas for copying and laminating.

Program Activities to be Accommodated

The library will house individual and class research using/viewing print, audio-visual, non-print, and computer resources; student instruction and activities in classroom areas; student pleasure reading; circulation of materials; student copying and compilation of research; library staff acquisition and processing of materials; storage of materials and equipment; and professional reading and research for teachers.

The Media Center currently has a computer lab and a computer room integrated into its operation. This lab is used for direct instruction by the Library Media Specialist, the Video Production class, and the other classes who sign up for its use. The Media Center environment currently provides wireless access to the Internet, utilized by district equipment and by approved staff and student devices.

Space Occupancy and Design Criteria

The library will have seating for up to 50 students including space for a minimum of 6 computers in the computer room, office/work space for the library media specialists, copy machine, video production studio (unless moved – see below), secured storage, and the high school faculty room.

The following is a partial list of design elements that should be incorporated into the studio spaces:

- A. The Media Center configuration should maximize flexibility and provide lecture as well as general seating and computer workstation space.
- B. Access to technology should be provided through the Media Center.
- C. Digital projection systems should be utilized for visual display.
- D. Interactive whiteboards should be installed in designated areas.
- E. Ceiling height and windows should maximize natural light and accommodate daylight.
- F. Sidelites must be provided adjacent to all doors.
- G. Cabinets and casework appropriate to the media center functions should be provided.
- H. Special consideration should be given for sound transmission.
- I. Speaker systems should be incorporated into designated instructional areas.
- J. Whiteboards, Bulletin Boards, and projection screens will be provided at each designated instructional areas.
- K. Dedicated storage should be provided.

- L. Adjustable multi-directional lighting
- M. A reading courtyard for students
- N. Student project display area
- O. The library workroom should be located near the circulation desk and should have a sink. Maximum sight lines and visibility throughout the library space for supervision are needed. The classrooms and small group spaces should be visible for supervision.
- P. Move the Video Production/Broadcast studio to the technology area of the school and create a quiet/work area with windows

Existing Conditions

The size of the existing Media Center meets the needs of our educational program, but the way in which the space is used could be redesigned to meet the needs of our school.

Current Space Limitations:

Quiet work/meeting spaces

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility to meet the program objectives established for Wheeler High School. The new Media Center has been supplemented with additional storage and will be redesigned to address the issues of security. The plan proposes a reading garden/courtyard adjacent to the media center.

Design Concept:

Program Requirements

Student seating areas with tables and study carrels, technology areas for student access to computers and AV equipment, classroom areas for instruction, shelving and storage for materials, a circulation area, small group meeting area, production room, library staff offices and workroom, storage room for equipment, and a professional library area for teachers.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Media Center

Quantity: 1

Proposed SF: 2,000 to 2,500 SF

Space Design Concept

The space should be designed for an integrated approach to technology and multiple furniture arrangements and classroom configurations.

Program Activities

The library will have seating for up to 50 students, including space for a minimum of 25 computers, a small group meeting area, comfortable seating for students, offices for the library media specialists; library assistants; and professional library to seat a minimum of 12 at tables.

Loose Furnishings

Tables with chairs
Circular tables for small groups with chairs
Mobile computer stations
Comfortable seating for students
Shelving

| | |
|-------------------------------|-----|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes |
| Tack board & display boards | yes |
| Projection screen/surfaces | yes |
| Display and book shelves | yes |

Finishes

| | | | |
|---------------------------------|---|---------|-------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Open ceiling | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Operable windows

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Teacher Work Room

Quantity: 1
Proposed SF: 200 to 250 SF

Space Design Concept

The workroom should be designed to accommodate the work/planning area, copier, limited equipment and secure media storage.

Program Activities

Teacher planning and preparation area.

Loose Furnishings

| | |
|-------------------------------|----------------------------|
| Desks and Chair | yes – rooms for 5 teachers |
| Computer stations | yes – 5 |
| Work table and Chair | yes – room for 5 teachers |
| Lateral/vertical file cabinet | no |

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 1 at 8 linear feet |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | yes |
| Display and book shelves | yes – 8 linear feet |
| Tall wardrobe and storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Operable windows
Copier and various printers

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Media Center Office/Work Area

Quantity: 1
Proposed SF: 150 to 200 SF

Space Design Concept

The office to accommodate the media specialist with conference space.

Program Activities

Planning and preparation room

Loose Furnishings

Desks and Chair
Computer station
Work table and Chair
Lateral/vertical file cabinet yes – 4 required

Fixed Equipment

Acoustical treatment yes
Marker/white board (Multiple) yes – 1 at 8 linear feet
Tack board & display boards yes – 1 at 4 linear feet
Projection screen/surfaces yes
Display and book shelves yes – 8 linear feet
Tall wardrobe and storage cabinet yes – lockable 8 linear feet
Fixed cabinets and accessible work surfaces yes

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Operable windows

Technology

Power outlet - floor and walls yes – as appropriate
Media projection system yes
Voice, video and data ports yes – phone / intercom and data
Security yes
Portable sound system yes
Technology equipment yes – per the district's technology plan
Wireless & Hard wired Network yes – per the district's technology plan
Integrated public address system yes

Media Center Storage

Quantity: 1
Proposed SF: 200 to 250 SF Each

Space Design Concept

The storage should be designed to accommodate supplies, media storage and department specific equipment.

Program Activities

Storage of educational materials

Fixed Equipment

Shelves yes – 12 inch deep, maximum 5 shelves high
Secure storage cabinet yes

Finishes

Floor material: VCT
Base material: Rubber
Wall material: Block / Sheetrock
Wall Finish: Paint
Ceiling material: Acoustical Tile
Ceiling height: 8'-0" minimum
Hardware: ADA compliant - Lockable
Lighting: Standard
Fire extinguisher & suppression: Per code

Special Requirements

HVAC systems exhaust

Technology

Power outlet - walls yes
Security yes – per the districts security plan

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Media Center Conference/Classroom

Quantity: 1
Proposed SF: 450 to 500 SF

Space Design Concept

The space should be designed to accommodate a small conference table for up to twelve individuals.

Program Activities

Small group instruction and meetings

Fixed Equipment

Shelves yes
Secure storage cabinet yes

Fixed Equipment

Acoustical treatment yes
Marker/white board (Multiple) yes – 1 at 8 linear feet
Tack board & display boards yes – 2 at 4 linear feet
Projection screen/surfaces yes
Flag Bracket & Flag yes
Display and book shelves yes
Lower storage cabinet yes – lockable 8 linear feet
Fixed cabinets and accessible work surfaces yes

Finishes

Floor material: Carpet
Base material: Rubber / Vinyl
Wall material: Block / Sheetrock finish: Paint
Ceiling material: Acoustical Tile height: 8'-0" minimum
Hardware: ADA compliant
Lighting: Multi level direct/indirect
Windows: Operable with blinds - Maximize natural light
Fire extinguisher & suppression per code

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting

Technology

Power outlet - floor and walls yes – as appropriate
Media projection system yes
Smart boards yes
Voice, video and data ports yes – phone / intercom and data
Security yes
Portable sound system yes
Technology equipment yes – per the district's technology plan
Wireless & Hard wired Network yes – per the district's technology plan
Integrated public address system yes

Educational Program Specifications – Administration

Program Objectives

The administrative offices will be designed to provide support the efficient operation of the administrative and secretarial staff. The office suite should be able to house the school principal, associate principal, special services director and two support/secretarial staff. The school nurse/clinic and the counseling suite will be located adjacent to the office space. The administrative offices should be located at the main school entrance and provide control for all visitors and students entering and leaving he school.

Program Activities to be Accommodated

The administrative facilities will accommodate offices, and other administrative support spaces including the following:

- Offices
- Conference Room
- Work Room
- Teachers' lounge
- General & student record storage
- Secretarial stations
- Waiting Area
- Storage Space
- Handicapped Accessible Toilet

Space Occupancy and Design Criteria

The individual's utilization the space include the administrators, students and teacher, volunteers and the community. The following is a partial list of design elements that should be incorporated into the design of the spaces:

- The main office should control all access from the main entrance to the school.
- Access to technology should be provided through the conference and office areas.
- Digital projection systems should be utilized for visual display in the main conference room.
- Interactive whiteboards should be installed in the main conference room.
- Ceiling height and windows should maximize natural light and accommodate day-lighting.
- Sidelites must be provided adjacent to all doors.
- Cabinets and casework must be provided in all offices and at the secretarial workstations.
- All spaces will be fully accessible.
- Waiting areas should be provided.
- Individualized temperature control for all spaces.
- Communication and video security control to all spaces and egress points.

Existing Conditions:

The size of the space is adequate, but the current configuration does not meet the needs of the school. Not having a direct entrance into the Main Office from the outside does pose a security risk. A separate entrance into the Main Office for visitors is required. The Nurse's Suite is connected to the Main Office and uses the same entrance without a dedicated waiting area, it causes privacy and health concerns. There is one bathroom shared by the Nurses Suite and the Main Office which poses privacy concerns.

Current Space Limitations:

Lack of storage space, visitor management and distinguished spaces for the Nurse Suite

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Proposed Program and Concept Plan

The program developed for the administrative offices focus on reusing the existing space and meeting program deficiencies by addressing space layout and secure casework for storage. Natural light and environmental issues will be priorities.

The administrative offices are located at the entrance to the school and provide an excellent point of control.

Design Concept:

Program Requirements

Separate entrance for visitors and more privacy between the Nurses Suite and the Main Office.

Principal's Office

Quantity: 1
Proposed SF: 150 to 200 SF

Space Design Concept

The office should be designed for easy access and include adequate space for a small conference/meeting area. A coat and storage closet should be provided within the space.

Program Activities

Administrative office and small meeting groups

Loose Furnishings

| | |
|-----------------------------|----------------------------|
| Conference table and chairs | |
| Computer station | No – Wireless capabilities |
| Desk and Chair | |
| Lateral file cabinet | |
| Book Shelves | |

Fixed Equipment

| | |
|---|--------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 1 at 6 linear feet |
| Tack board & display boards | yes – 6 linear feet |
| Projection screen/surfaces | no |
| Display and book shelves | no – Loose Furnishing |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|-------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Operable windows

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Associate Principals Office

Quantity: 1
Proposed SF: 125 to 150 SF

Space Design Concept

The office should be designed to include adequate space for a small conference/meeting area. A coat and storage closet should be provided within the space.

Program Activities

Administrative office and small meeting groups

Loose Furnishings

Conference table and chairs
Computer stations no - wireless
Desk and Chair
Lateral file cabinet
Book Shelves

Fixed Equipment

Acoustical treatment yes
Marker/white board (Multiple) yes – 1 at 6 linear feet
Tack board & display boards yes – 6 linear feet
Projection screen/surfaces no
Display and book shelves no – Loose Furnishing
Tall wardrobe and storage cabinet no
Fixed cabinets and accessible work surfaces yes

Finishes

Floor material: Carpet
Base material: Rubber / Vinyl
Wall material: Block / Sheetrock finish: Paint
Ceiling material: Acoustical
Hardware: ADA compliant
Lighting: Multi level direct/indirect
Windows: Operable with blinds - Maximize natural light
Fire extinguisher & suppression per code

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Operable windows

Technology

Power outlet - floor and walls yes – as appropriate
Media projection system no
Voice, video and data ports yes – phone / intercom and data
Security yes
Portable sound system no
Technology equipment yes – per the district's technology plan
Wireless & Hard wired Network yes – per the district's technology plan
Integrated public address system yes

Special Services Office

Quantity: 1
Proposed SF: 150 to 175 SF

Space Design Concept

The office should be designed to include adequate space for a small conference/meeting area. A coat and storage closet should be provided within the space

Program Activities

Administrative office and small meeting groups

Loose Furnishings

| | |
|-----------------------------|---------------|
| Conference table and chairs | |
| Computer station | no - wireless |
| Desk and Chair | |
| Lateral file cabinet | |
| Book Shelves | |

Fixed Equipment

| | |
|---|--------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 1 at 6 linear feet |
| Tack board & display boards | yes – 6 linear feet |
| Projection screen/surfaces | no |
| Display and book shelves | no – Loose Furnishing |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|-------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Operable windows

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

In School Suspension

Quantity: 1
Proposed SF: 150 to 200 SF

Space Design Concept

The In-School Suspension space should be designed to accommodate 5 to 6 students, in a small classroom environment with minimal privileges individual work area and a work/planning area.

Program Activities

Small group instruction

Loose Furnishings

Desks and Chair
Computer stations
Teachers Desk and Chair
Lateral/vertical file cabinet no

Fixed Equipment

Acoustical treatment yes
Marker/white board (Multiple) yes – 1 at 8 linear feet
Tack board & display boards yes – 1 at 4 linear feet
Projection screen/surfaces no
Display and book shelves no
Tall wardrobe and storage cabinet no
Fixed cabinets and accessible work surfaces yes

Finishes

Floor material: VCT / VET
Base material: Rubber / Vinyl
Wall material: Block / Sheetrock finish: Paint
Ceiling material: Acoustical Tile height: 8'-0" minimum
Hardware: ADA compliant
Lighting: Multi level direct/indirect
Windows yes
Fire extinguisher & suppression per code

Special Requirements

HVAC systems including Air Conditioning

Technology

Power outlet - floor and walls yes – as appropriate
Media projection system no
Voice, video and data ports yes – phone / intercom and data
Security yes
Portable sound system no
Technology equipment yes – per the district's technology plan
Wireless & Hard wired Network yes – per the district's technology plan
Integrated public address system yes

Main Office/Principals' Conference Room

Quantity: 1
Proposed SF: 200 to 250 SF

Space Design Concept

The conference rooms should seat 10 to 16 individuals in a comfortable setting. The large conference room should include voice, video, and data and digital projection.

Program Activities

Meeting space and small group presentation

Loose Furnishings

Conference table for small groups with chairs 12 to 15 in the large conference room.

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board | yes – 1 at 8 linear feet |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes |
| Flag Bracket & Flag | yes |
| Display and book shelves | yes |
| Storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting Multi-Level
HVAC systems including Air Conditioning

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Interactive Whiteboard | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Main Office Waiting Area

Quantity: 1

Proposed SF: 100 to 200 SF Each

Space Design Concept

There will be one designated waiting area for the Main Office. It will be located adjacent to the reception/secretarial area with seating for 6 to 8. There will be a much smaller waiting area inside the Main Office Suite that is isolated and private. This should accommodate up to 4 people.

Program Activities

Waiting area for students and visitors

Loose Furnishings

Comfortable seating

Small tables

Fixed Equipment

| | |
|---|--------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | | | |
|---------------------------------|------------------------|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Standard | | |
| Windows | Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning

Display stand for school related information.

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – data ports |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Secretarial Area

Quantity: 1

Proposed SF: 200 to 400 SF (Adequate space for two secretaries)

Space Design Concept

The secretarial stations will be designed to facilitate efficient operations and planning functions of the school. The space should be open and inviting to all visitors, yet also provide privacy of records. Secure casework must be provided for storage of records and supplies. There should be a counter the designate the waiting area from the secretarial area.

Program Activities

Support administrative staff and school operations.

Loose Furnishings

Computer Workstations with chair
Work Tables
Desk and Chair
Lateral file cabinet
Visitor Chair

Fixed Equipment

| | |
|---|--------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes - lockable |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Tile | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting Task lighting
HVAC systems including Air Conditioning
Natural Lighting
Operable windows

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Main Office General Storage

Quantity: 1
Proposed SF: 100 to 150 SF Each

Space Design Concept

Storage of main office supplies in a secure fire rated room

Program Activities

Student record storage

Loose Furnishings

Work Table
File cabinets

Fixed Equipment

| | |
|---|-----|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|-------------------|---------|---------------|
| Floor material: | VCT | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Standard | | |
| Windows | No | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Sink and counter space

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Main Office Records Storage

Quantity: 1
Proposed SF: 200 to 300 SF Each

Space Design Concept

Storage of records and in a secure fire rated room

Program Activities

Student record storage

Loose Furnishings

Work Table
File cabinets

Fixed Equipment

| | |
|---|-----|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|-------------------|---------|---------------|
| Floor material: | VCT | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Standard | | |
| Windows | No | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Sink and counter space

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Teachers' Lounge

Quantity: 1 (If it is centrally located we would only need one space)
Proposed SF: 300 to 400 SF

Space Design Concept

A space with comfortable seating that teachers can use in their free or lunch time for informal discussions with co-workers. The space can be adjacent to the work room and have faculty toilets nearby. There are currently two lounges, if the space is centrally located only one would be required.

Program Activities

Teachers' Lounge.

Loose Furnishings

Computer Workstation with chair
Circular table for small groups with chairs
Comfortable Chairs

Fixed Equipment

| | |
|---|--------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Educational Program Specifications – Facilities Management

Program Objectives

The physical plant and building systems infrastructure at Wheeler must meet the latest building, Fire and Life Safety codes adopted by the State of Connecticut. In addition the renovated WHS facility must meet and/or exceed the High Performance building standards adopted by the State, and achieve a LEED Silver or equivalent certification. Alternative energy systems should be introduced, as part of the program started by the town for energy efficiency and sustainable solutions, with the goal of making Wheeler High School an example of environmental stewardship.

Program Activities to be Accommodated

The facilities management department will be responsible for the maintenance of Wheeler High School/Middle School and will address the building systems and spaces identified below:

- Boiler Room (currently 3)
- Emergency Generator (currently none)
- Electrical Service and distribution
- Power Backup Systems
- Domestic Hot and Cold Water Systems
- Heating, Ventilation and Air Conditioning
- Fire Alarm Systems
- Sprinkler Systems
- Waste Water Systems
- Storm Drainage Systems
- Alternative Energy Systems
 - Co-Generation
 - Solar/ Photo-Voltaic
 - Geothermal
- Plant Maintenance / Custodial
- Building Receiving and Storage
- Equipment Storage
- Toilet Facilities
- Janitors Closets
- Maintenance Shop
- Custodial Lounge and Work room
- Custodial Locker Rooms
- Building and Grounds Office and Records Storage

Space Occupancy and Design Criteria

The individuals utilizing the facilities management and maintenance spaces include custodians and building engineers and contract staff, and school administration. The following is a partial list of design elements that will be incorporated into the design of the Building Systems:

- **Fire Protection Systems**
 - The existing service entrances are recommended to be retained and reconfigured for final special layout.
 - The system distribution is recommended to be reconfigured based on final special layout.
 - All sprinkler heads are recommended to be replaced.
 - Complete system is recommended to be recertified at project completion.
 - Stage protection to be modified to current requirements.

- **Plumbing Systems**

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

- Replace all existing domestic cold water mains and modify service entrance for new special layout.

- **Natural Gas**
 - Combine natural gas services of multiple boiler rooms for centralized network.

- **Sanitary Service**
 - Completely camera survey exiting sanitary network in conjunction with complete cleaning of all pipes.
 - Reconfigure pipes to accommodate new special layouts.

- **Storm System**
 - Completely camera survey existing storm network in conjunction with complete cleaning of all pipes to accommodate adding and connecting new risers.
 - All drains shall be replaced.

- **Domestic Hot Water**
 - Provide centralized domestic hot water production for facility.
 - Maintain pool area as separate high efficiency plant.
 - Replace all existing domestic hot water mains.

- **Heating**
 - Update heating system throughout

- **Ventilation**
 - Provide air conditioning in all spaces. New roof mounted units serving classrooms (1 per 8 classrooms).
 - All major spaces to receive new roof mounted air handling units with hot water coils.
 - Each individual space to be provided with variable air volume air conditioning. The building to be provided with high efficiency centralized airconditioning network. Central chiller preferred. Alternates systems to be evaluated.
 - Replace all exhaust fans.
 - Replace all existing exhaust ductwork.
 - Remove all unit ventilators in school.
 - Replace temperature control system throughout with electric/electronic.

- **Electrical Systems**
 - Provide new emergency generator for school (two).
 - Allow for replacing of all corridor lighting in and high school.
 - Update (increase) electrical service entrance at high school
 - Replace all existing electrical panels prior >91.
 - Allow for replacing of all lighting in school with energy efficiency lighting.
 - Modify existing telephone system for new layouts.
 - Update clocks to a central system.
 - Provide new fire alarm throughout facilities (expand existing network).

- **Security System**
 - Update a new security system based on video surveillance and a proximity card access and monitoring system

- **Technology Infrastructure**
 - Install an updated wired and wireless infrastructure throughout the facility

- Ceiling height and windows should maximize natural light and accommodate day-lighting.

Existing Conditions: The existing space for maintenance, toilets and circulation are adequate with a few modifications in the area of storage and work space.

Current Space Limitations:

Lack of dispersed storage space throughout entire building

Proposed Program and Concept Plan

The program developed for the Building maintenance and support facilities is based on meeting the latest codes and the space requirements of the energy's systems that will be designed for Wheeler High School/Middle School. Addressing ADA/OCR and Title IX; and resolving the natural light environmental issues will be programming priorities. The proposed plan will effectively deal with the storage issues we are currently facing.

Design Concept:

The design approach reorganizes the existing program to meet the following priorities:

- Provide dispersed space for general storage, janitor's closet and mechanical equipment.
- All toilet facilities will be fully renovated and made accessible throughout the facility.

Program Requirements

The key spaces requirements of the Facilities Management office includes, space for the building MEP & FP Systems, Storage, Maintenance department space, building circulation and toilets.

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Maintenance/Custodial Locker Rooms

Quantity: 1
Proposed SF: 200 to 300 SF

Space Design Concept

The maintenance locker room will function as a changing area for custodial/maintenance staff and include toilets and shower facilities.

Program Activities

Changing space for the custodians. This space should be connected to the office/workroom space

Loose Furnishings

Lockers

| | |
|---|-----|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | | | |
|---------------------------------|-------------------------|---------|-------------|
| Floor material: | Polished Concrete | | |
| Base material: | Tile | | |
| Wall material: | Block / Sheetrock | finish: | Epoxy Paint |
| Ceiling material: | Water resistant ceiling | | |
| Hardware: | ADA compliant | | |
| Lighting | Standard | | |
| Windows | no | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning

Technology

| | |
|----------------------------------|--|
| Power outlet - walls | yes – as appropriate |
| Media projection system | no |
| Voice, video and data ports | no |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Storage

Quantity: 3
Proposed SF: 150 to 500 SF Each

Space Design Concept

Storage rooms shall be provided throughout the school. The larger storage areas should be located near the custodial work room and the boiler room(s). Chemical and combustible material storage should be in appropriately rated and vented rooms and cabinets. Equipment that uses gasoline should be stored in rooms with direct access to the exterior and in fire rated rooms.

Program Activities

Storage of maintenance related supplies and equipment.

Loose Furnishings

Industrial Shelves
Chemical Storage Cabinets

Fixed Equipment

| | |
|---|-------------------------------|
| Acoustical treatment | yes – Provide sound isolation |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|-------------------|---------|----------------|
| Floor material: | Concrete | | |
| Base material: | N/A | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Sheetrock | height: | 10'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Standard | | |
| Windows | no | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Explosion proof fixtures
HVAC systems including Air Conditioning

Technology

| | |
|----------------------------------|---------------------------------|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | no |
| Wireless & Hard wired Network | no |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Electrical Rooms

Quantity: 2 (one in each building)
Proposed SF: 250 to 450 SF

Space Design Concept

The Electrical room will house the electrical switch gear, distribution panels and other designated equipment for the operation of the school.

Program Activities

Electrical room for boiler plant operation.

Loose Furnishings

Safety equipment
First Aid Kit

Fixed Equipment

| | |
|---|---|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet (post notices) |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes -Limited |

Finishes

| | | | |
|---------------------------------|-------------------|---------|-------|
| Floor material: | Concrete | | |
| Base material: | None | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | None | | |
| Hardware: | ADA compliant | | |
| Lighting | Utility Standard | | |
| Windows | No | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Ventilation of equipment per code

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Voice and data ports | yes – phone / intercom and data |
| Security | yes |
| Technology equipment | yes – related to the equipment in the room |
| Wireless & Hard wired Network | yes – Access should be available |
| Integrated public address system | yes |

Mechanical Room Existing Space

Quantity: 1 (one in each building)
Proposed SF: 1250 to 1450 SF

Space Design Concept

The Electrical room will house the electrical switch gear, distribution panels and other designated equipment for the operation of the school.

Program Activities

Electrical room for boiler plant operation.

Loose Furnishings

Safety equipment
First Aid Kit

Fixed Equipment

| | |
|---|---|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet (post notices) |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes -Limited |

Finishes

| | | | |
|---------------------------------|-------------------|---------|-------|
| Floor material: | Concrete | | |
| Base material: | None | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | None | | |
| Hardware: | ADA compliant | | |
| Lighting | Utility Standard | | |
| Windows | No | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Ventilation of equipment per code

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Voice and data ports | yes – phone / intercom and data |
| Security | yes |
| Technology equipment | yes – related to the equipment in the room |
| Wireless & Hard wired Network | yes – Access should be available |
| Integrated public address system | yes |

Wheeler Middle & High School Facilities Study & Educational Specifications

June 1, 2016

Sprinkler Room

Quantity: 1 (entire facility should be sprinkled)
Proposed SF: 250 to 300 SF

Space Design Concept

Sprinkler room for the fire suppression system

Program Activities

Mechanical equipment space

Loose Furnishings

none

Fixed Equipment

| | |
|---|---|
| Acoustical treatment | no |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet (post notices) |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | | | |
|---------------------------------|-------------------|---------|-------|
| Floor material: | Concrete | | |
| Base material: | None | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | None | | |
| Hardware: | ADA compliant | | |
| Lighting | Utility Standard | | |
| Windows | No | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Ventilation of equipment per code
Area drain in dock recess area

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Voice and data ports | yes – phone / intercom and data |
| Security | yes |
| Technology equipment | yes – related to the equipment in the room |
| Wireless & Hard wired Network | yes – Access should be available |
| Integrated public address system | yes |

Toilets and Janitors Closets

Quantity: 3 Pairs
Proposed SF: 100 to 150 SF – 1 Pairs
Proposed SF: 400 to 650 SF – 2 Pairs

Space Design Concept

The toilets should be located in pairs with a men’s and women’s (boys and girls) toilet on each area of the school. Additional toilets will be located in proximity to the assembly spaces such as the auditorium and gymnasiums etc. All Toilets will be accessible with a HC stall. Faculty bathrooms should be located near the faculty work rooms, lounge(s) and throughout appropriate areas of the building.

Program Activities

Rest room for all occupants

Loose Furnishings

Toilet accessories such as soap, toilet paper etc.

Fixed Equipment

| | |
|-----------------------------|----------------|
| Acoustical treatment | yes |
| Toilet accessories | yes |
| Toilet Partitions | yes – lockable |
| Accessible counter surfaces | yes |

Finishes

| | | |
|---------------------------------|--------------------------------------|-----------------------|
| Floor material: | Ceramic Tile | |
| Base material: | Ceramic Tile 6 feet high minimum | |
| Wall material: | Block / Tile | finish: Ceramic Tile |
| Ceiling material: | Moisture resistant Acoustical Tile | height: 8'-0" minimum |
| Hardware: | ADA compliant | |
| Lighting | Multi-level direct | |
| Windows | Translucent - Maximize natural light | |
| Fire extinguisher & suppression | per code | |

Special Requirements

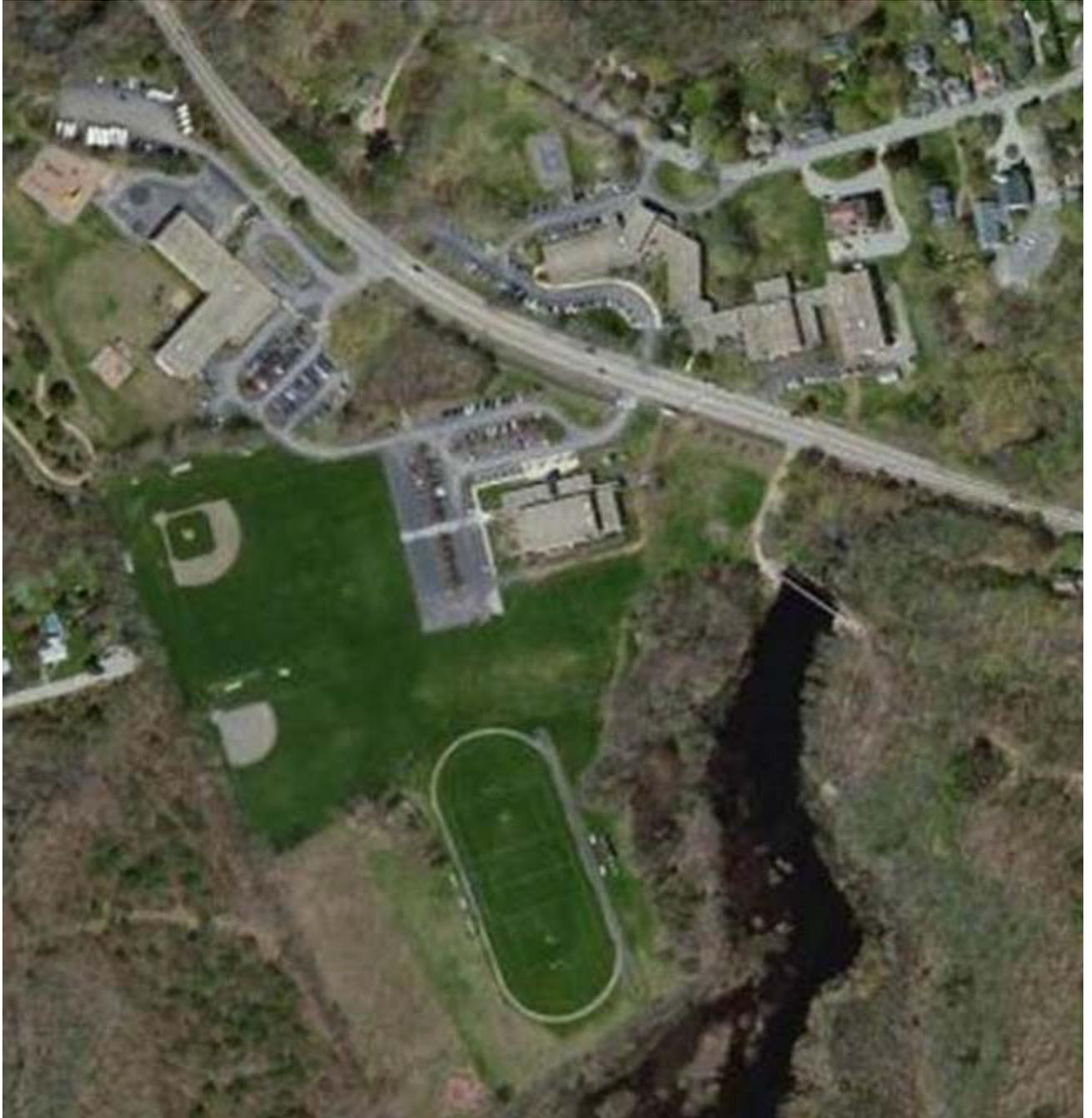
HVAC systems including Air Conditioning
Sensor activated
Floor drains
Changing tables in specific toilets

Technology

| | |
|----------------------------------|--|
| Power outlet - walls | yes – as appropriate |
| Voice and data ports | yes – phone / intercom and data |
| Security | yes |
| Technology equipment | no |
| Wireless & Hard wired Network | yes – per the district’s technology plan |
| Integrated public address system | yes |

North Stonington Public Schools

Facilities Study & Educational Specifications



North Stonington Elementary School

June 1, 2016

Quisenberry Arcari Architects, L.L.C.
318 Main Street Farmington, CT. 06032

Table of Contents

Acknowledgements

Project Overview.....Tab - 1

Executive Summary

Project Goals

Project Priority Consideration & Process

District's Mission & Vision Statement

Elementary School - Long Range Plan

Regional Information and Climate Data

Existing ConditionsTab - 2

Architecture and Interiors

Building Systems and Infrastructure

Site and Site Utilities

Enrollment Projections.....Tab - 3

Enrollment Summary

Educational Program Specifications.....Tab - 4

Educational Program Specifications

1. ACADEMIC

- Pre-Kindergarten
- Kindergarten
- Grade 1
- Grade 2
- Grade 3
- Grade 4
- Grade 5
- Special Education

2. TECHNOLOGY EDUCATION, PERFORMING & VISUAL ARTS

- Music
- Art
- Technology Education / Computer Lab

3. ASSEMBLY & COMMUNITY USE

- Media Center
- Multi-Purpose / Cafeteria and Kitchen
- Multi-Purpose / Auditorium / Assembly
- Gymnasium / Physical Education

4. ADMINISTRATION & STUDENT SERVICES

- Administrative Offices
- Health/Nurse

5. FACILITY MANAGEMENT & SUPPORT

- Boiler Plant / Mechanical / Electrical Infrastructure
- Facilities Offices & Building Storage

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Planning Concepts.....Tab - 5

Energy Conservation and Sustainable Design
Codes – Building, Fire/Life Safety, ADA
Technology - North Stonington Public Schools Technology Plan
Security & Safety
Furniture Furnishing and Equipment
Community Use
Flexibility & Agility
Student Display
Site Analysis/Evaluation

- Land Use Requirements
- Site Selection
- Site Circulation

Concept designs
Construction Phasing
Project and Construction Schedule

Financial Data.....Tab - 6

Project Budget Estimates
State Reimbursement Estimates

Appendix.....Tab - 7

A - NESDEC – Enrollment Projections 2011 – Projected to 2020
Glossary
Project Team

Acknowledgements

Board of Selectmen

Mr. Shawn P. Murphy– First Selectman
Mr. Nicholas H. Mullane, II
Mr. Mark Donahue

Board of Education

Mr. Robert Carlson – Chairperson
Mr. David McCord – Vice-Chairperson
Mr. Walt Mathwich – Secretary
Dr. Darren Robert
Ms. Christine Wagner
Mr. Alex Karpinski
Mr. Phil Mendolia
Ms. Julia Buzzee

Administrative Team

Mr. Peter Nero - Superintendent of Schools
Ms. Kimberly Allen – Business Manager
Mrs. Kristen St. Germain– Principal
Mr. Ryan Chaney – Associate Principal
Ms. Veronica o. Wilkison – Principal
Ms. Kelly Gonzalez – Secretary
Mrs. Sue Costa – Special Education
Mr. Greg Pont – Director of Technology
Mr. Guy Boucher - Director of Maintenance & Operations

Educational Specifications Committee

Mr. Peter Nero - Superintendent of Schools
Ms. Kimberly Allen – Business Manager
Mrs. Kristen St. Germain – Principal
Mr. Ryan Chaney – Associate Principal
Mrs. Sue Costa – Special Education
Ms. Veronica o. Wilkison – Principal
Mr. Christopher – Principal
Mrs. Sue Costa – Special Education
Mr. Greg Pont – Director of Technology
Mr. Guy Boucher - Director of Maintenance & Operations
Ms. Veronica o. W - Principal
Ms. Roberta McCarthy – Administrative Assistant

North Stonington School Modernization Project Committee

Mr. Michael Urgo - Chairperson
Mr. Michael Anderson
Mr. Walter Mathwich
Mr. Michael Osborn
Mr. Mark Perkins, Jr
Mr. Jay Peterson
Ms. Pamela Potemri
Mr. David Sellins
Mr. Daniel Spring

Existing Conditions Summary

North Stonington Public Schools selected Quisenberry Arcari Architects in October of 2011 to conduct a facilities study and complete an evaluation of their school facilities. The purpose of the evaluation is to provide a basis for developing a master plan for Elementary, Middle and High School. The Design Team has reviewed the Wheeler High School Middle School, the Board of Education and combination Gymnasium/Auditorium facility, and the North Stonington Elementary School, as well as the athletic fields, roads and walkways. The site visits to evaluate the existing conditions took place during October thru December, 2011 timeframe. The Wheeler Middle School-High School and Elementary School buildings were originally built more than 35 years ago and have experienced additions, renovations, and isolated upgrades in the ensuing years. The most recent substantive project, undertaken in 1995, included reroofing, code upgrades, interior upgrades to corridors, computer spaces, special needs space, library, kitchen and toilet facilities; new classrooms, administrative and guidance space to connected the two schools; as well as new gymnasium, performance and music facilities on the southwest side of Route 2 with a new tunnel for safe access across the State highway. Exterior walls and many classrooms remained untouched in this renovation and the electrical and heating systems were upgraded only on an as needed basis. Over the past three additional improvements have been made to the boiler plants at each school and the chimneys have been replaced at the Central Office and Elementary School Facilities.

Some of the Key facility and program related concerns at the North Stonington Elementary School include:

- Non-addressable fire alarm systems
- Inadequate ventilation
- Inability to properly monitor the entry to the Elementary School from the Administration Offices
- A single multipurpose room is inadequate to serve all assembly functions of physical education, the cafeteria and main assembly space.
- Insufficient space to house preschool and full day kindergarten programs
- Inadequate space for music
- Insufficient support space for mandated special education programs
- Appropriate program adjacencies.
- Code violations

The design team recommends a comprehensive plan to address all educational, maintenance, and regulatory issues to meet the Town's needs through the middle of the 21st Century. The design team will recommend options including cost effective approach to upgrades. The facilities study would include renovation, additions, or replacement of existing facilities and will require additional planning activities by the School Committee and Town. The facilities plan may be undertaken in a phased or comprehensive way. Probable project costs can only be generated through a District-defined proposed scope of work

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Existing Conditions North Stonington Elementary School

Site

- Provide signage for handicapped accessible parking
- Provide screening at dumpsters
- Provide one additional Handicapped accessible parking space
- Site Lighting provide additional lighting. Light level readings can be completed to determine adequacy.
- Provide HC accessibility to quarter mile track and playgrounds.
- Replace bituminous concrete at Elementary School basketball court.

Exterior Building Envelope

- The existing sealant should be removed and replaced with new or a program of replacement as required.
- Re-pointing of the masonry veneer is recommended.
- Repair the spalled brick veneer masonry under the window sills.
- The damaged concrete elements should be repaired, restored and/or replaced.
- Re-paint all exposed steel structure, lintels, and railings
- All original exterior hollow metal doors should be replaced. • All original exterior louvers should be replaced.
- When doing future re-roofing work provide tapered insulation under the roof membrane to direct
- water to drains.
- Repair, replace and make water tight masonry at the chimney.
- Remove damaged roof hood and provide 20 oz. zinc coated copper cap on existing roof curb.

Interiors Spaces

- Re-paint all walls as required.
- Replace all carpet floors.
- Verify that the corridor doors and frames are 45 minute rated and bear the proper U.L. and/or Wernock-Hersey labels.
- Verify that the magnetic hold open devices are tied-into the fire alarm system.
- Verify that the corridor walls are one-hour rated and have all penetrations properly sealed with U.L. tested assemblies. Refer to the code evaluation plan in the Appendix.
- Replace all water coolers in corridors

Main Entrance Lobby

- Replace all interior signage and provide clear directional signage.

Main Administration Office

- Replace reception desk casework.
- Provide additional storage
- Relocate and expand to meet program needs

School Nurse

- Expand in a future renovation project
- Provide a HC Accessible Toilet

Library

- Replace the main circulation desk to be handicapped accessible.
- Relocate and expand to meet program needs
- Integrate Technology & Computers

Multi-Purpose Cafeteria / Auditorium/Gymnasium

- Replace surface mounted tighten fixtures -
- Replace all VCT floors.
- Replace the exterior window treatments.
- Remove stairs in handicapped lift and remove all improper storage.
- Provide acoustic treatments for this space.
- Provide new rigging and stage curtains.
- Provide additional storage. And/ or protection for tables stored within the space Kitchen/Servery
- A selective renovation of this area is recommended. Additional space will be needed to accommodate program space for physical education and code requirements.

Typical Classroom

- 1995 classrooms without ceilings should have ceilings installed for acoustical purposes
- A general refurbishment of the 1964 classrooms is recommended
- Re-paint all ceilings and walls.
- Replace all carpet flooring
- Replace surface mounted light fixtures.
- Replace ' wood and plastic' laminate casework.
- Replace chalk boards with marker boards for improved air quality.
- Provide handicapped accessible sinks and bubblers.
- Replace the original exterior window treatments.
- Provide adequate ventilation.
- Provide additional storage.
- Provide additional exterior windows.
- A general refurbishment of the: following 1964 classrooms per above is recommended in addition to the comments below

Fifth Grade (Science) Classroom

- Replace all casework.
- Clean out the storage/preparation room.

Art Classroom

- Provide a two-hour room around the kiln area with a new exhaust system.
- Provide additional storage and display opportunities

Computer Lab

- Install acoustic ceiling grid/tiles to improve acoustic properties.
- Location is inappropriate for Kindergarten and 1st Grade students – Code Violation

Special Education Classrooms

- Provide appropriate space based on program requirements

Teacher's Lounge Mechanical Rooms

- Refer to the MEP portion of the report for additional information.
- Door hardware to room should have knurled surfaces on all lever handles.

Typical Student Toilets

- Replace fixtures, accessories and revise layouts in 1964 toilet rooms to meet full ADA compliance.
- Toilets in the Pre-Kindergarten and Kindergarten classrooms do not meet code

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Typical Staff Toilets

- Provide additional toilet rooms to staff.
- Replace fixtures, accessories and revise layouts as required to meet full ADA compliance.

Typical Stairs

- Verify that the stair enclosure walls are two-hour rated and have all penetrations properly sealed with UL tested assemblies. The two-hour rating is only required if sprinkling of the building is not anticipated in the short term. If the building were to be fully sprinklered, then the rating would drop to one-hour. Refer to the code evaluation plan in the Appendix.
- Remove and replace the handrails and guardrails to meet the current codes.
- Revise the stair nosing coverings to comply with current code requirements. • Remove all improper stored materials from the stair enclosure.

Elevator

- Verify fire rating of shaft walls.
- Install signage compliant with handicapped accessibility codes.

Structural Recommendations 1964 Building

We would recommend that 4 monitors be installed to record any possible movement in the cracks over a 6 month period of time. In addition, a portion of the spalled concrete should be removed in 4 to 6 locations and the concrete cleaned -Of loose debris. The exposed sections of the structural girders and columns must be evaluated for further damage. These exposed conditions should be viewed by a representative of a concrete restoration firm such as "Sika". They will assist in indicating the proper repair products to correct the condition to prohibit additional destruction from the freeze-thaw cycles.

Mechanical and Electrical Recommendations

HVAC and Plumbing

- Replace the entire building mechanical systems including hot water boilers
- hot water heating pumps baseboard heat air-handling/rooftop equipment exhaust fans
- most of the existing ductwork
- hot water supply and return piping systems and controls insulation
- plumbing fixtures not replaced during the 1996 renovation sump pumps
- provide new automatic temperature control systems (remove existing pneumatic controls)
- Provide a new sprinkler system

Electrical

- To meet requirements for the next 20 years, replace the following systems
- Power distribution if significant changes to loads occur due to renovations or expansion.
- Lighting system .
- Fire alarm system
- Modify or replace the following systems as required by occupant/renovation needs PA/Clock
- Telephone
- Data

Utilities

Replace pole mounted transformer with pad mounted transformer if new service is brought in for expansion.

Enrollment Projections

Each year the administration updates student enrollment projections for the North Stonington Public Schools by grade, and by grade combinations from Kindergarten through Grade 12. These enrollment projections are used during the budget development process to anticipate future staffing needs as well as materials, equipment, and/or furniture needs associated with increases or decreases in projected enrollments.

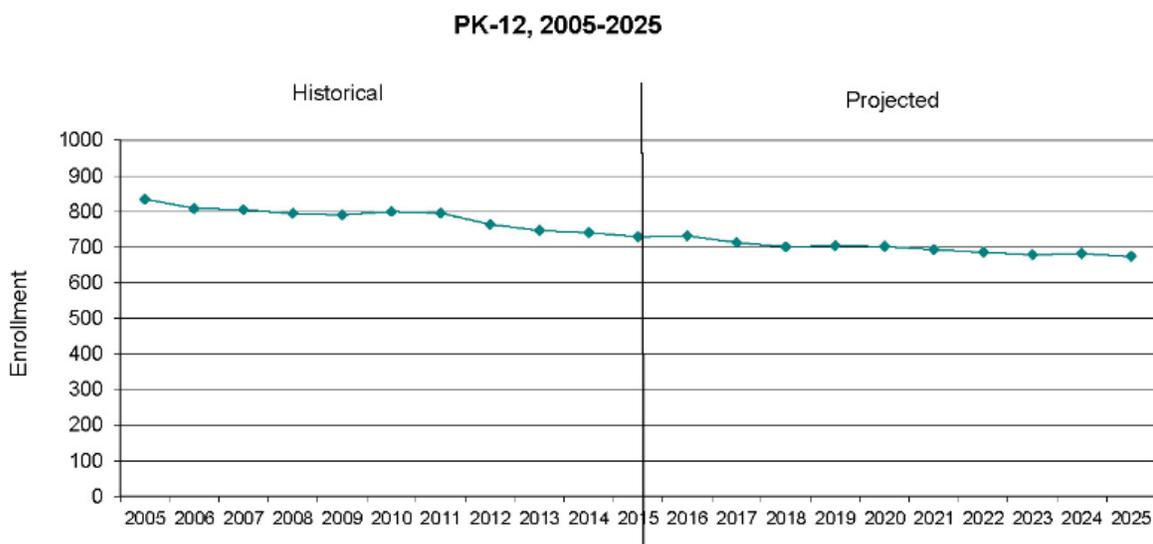
The enrollment in the North Stonington Public Schools peaked in 2001 at 883 and declined to 729 students in 2015 which includes the pre-kindergarten program that was introduced in 2006. Projections during the next eight-year period 2016-2023, the North Stonington Public Schools experienced a decrease in enrollment, to 682 in 2023-24, a decrease of 47 students or 9.3 percent. During this period there will be some fluctuation in the enrollment with a maximum projected enrollment of 732 in 2016. However, the elementary school enrollment will be directly impacted with the increase of students in the pre-kindergarten and kindergarten programs.

The State Department of Education requires enrollment projections indicating the highest 8 year projected enrollment starting in October of the year the project application is submitted. Based on a potential additions and alterations project for North Stonington Elementary School, enrollment projections would be required for October 2016 thru October 2023

The following information was obtained from the report titled “2016 – 2017 Enrollment Projections” by Donald G. Kennedy, Ed.D, a demographic specialist with NESDEC dated March 29th, 2016. The full report is included in Appendix A of the educational specifications.

Based on the enrollment projections provided by Donald G. Kennedy, Ed.D., the enrollment at North Stonington Public Schools is projected to be 803 students in the year 2016-17 which is the highest projection over the 8 year projection period required by the State Department of Education. The breakdown of the enrollment for 2016 -2017 is:

2016-2017: PK = 37 K-5 = 335 6-8 = 176 9-12 = 189 Total = 737



An overview of the enrollment projections from the NESDEC enrollment projection for North Stonington Elementary School is provided in the follows tables:

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

School District: North Stonington, CT

3/29/2016

| Historical Enrollment By Grade | | | | | | | | | | | | | | | | | | | |
|--------------------------------|--------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------|------|-------|
| Birth Year | Births | School Year | PK | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | UNGR | K-12 | PK-12 |
| 2000 | 60 | 2005-06 | 0 | 62 | 71 | 60 | 60 | 64 | 60 | 71 | 64 | 60 | 65 | 64 | 67 | 67 | 0 | 835 | 835 |
| 2001 | 50 | 2006-07 | 18 | 48 | 62 | 78 | 56 | 63 | 61 | 58 | 69 | 65 | 55 | 53 | 67 | 56 | 0 | 791 | 809 |
| 2002 | 49 | 2007-08 | 18 | 53 | 51 | 63 | 70 | 56 | 62 | 63 | 57 | 67 | 70 | 57 | 52 | 66 | 0 | 787 | 805 |
| 2003 | 55 | 2008-09 | 18 | 63 | 51 | 53 | 63 | 75 | 58 | 65 | 66 | 55 | 61 | 60 | 54 | 53 | 0 | 777 | 795 |
| 2004 | 52 | 2009-10 | 20 | 66 | 59 | 52 | 53 | 59 | 74 | 57 | 62 | 63 | 57 | 54 | 60 | 55 | 0 | 771 | 791 |
| 2005 | 55 | 2010-11 | 24 | 59 | 63 | 61 | 50 | 57 | 57 | 81 | 59 | 63 | 56 | 53 | 57 | 60 | 0 | 776 | 800 |
| 2006 | 47 | 2011-12 | 21 | 60 | 64 | 62 | 50 | 57 | 57 | 79 | 59 | 63 | 56 | 53 | 55 | 60 | 0 | 775 | 796 |
| 2007 | 59 | 2012-13 | 39 | 65 | 49 | 60 | 64 | 62 | 46 | 52 | 51 | 73 | 51 | 50 | 50 | 52 | 0 | 725 | 764 |
| 2008 | 47 | 2013-14 | 36 | 55 | 59 | 47 | 60 | 60 | 61 | 51 | 52 | 51 | 63 | 48 | 48 | 56 | 0 | 711 | 747 |
| 2009 | 46 | 2014-15 | 37 | 56 | 54 | 63 | 50 | 61 | 60 | 66 | 51 | 47 | 47 | 57 | 43 | 49 | 0 | 704 | 741 |
| 2010 | 41 | 2015-16 | 31 | 62 | 56 | 54 | 62 | 46 | 56 | 61 | 60 | 52 | 40 | 47 | 58 | 44 | 0 | 698 | 729 |

The enrollment at the elementary school peaked at 386(PK-5) in 2006-2007 and has been declining with a low of 367(PK-5) students in 2015-2016. However, with the addition of the 6th grade to the school, the enrollment over the next eight years is expected to increase to 399(PK-6) students in 2023-2024 and remain relatively flat with 402 students in the year 2025-2026. Based on this projection the student enrollment of 426 will be utilized for the State Board of Education Grant application and the space standards calculations for North Stonington Elementary School. Increase in the Pre-Kindergarten and Kindergarten programs will further impact this projected enrollment count and should be resolved prior to the submission of the grant application for any project at this facility.

This projected student enrollment growth has implications at all three levels, elementary, middle school, and high school, in light of the current operating capacity of each school facility as outlined in the New England School Development Council's report entitled Long Range School Facilities Master Plan, dated November 2010.

Enrollment projections have been provided by the New England School Development Council (NESDEC), located in Marlborough, Massachusetts. NESDEC is able to project enrollments for up to a ten-year period of time. It cautions however, that the degree of confidence in its projections diminishes the further out one looks. NESDEC relies on historical data from the previous five-year period to make its projections.'

| Historical Enrollment in Grade Combinations | | | | | | | | | |
|---|------|-----|-----|-----|-----|-----|-----|------|------|
| Year | PK-5 | K-5 | K-6 | K-8 | 5-8 | 6-8 | 7-8 | 7-12 | 9-12 |
| 2005-06 | 377 | 377 | 448 | 572 | 255 | 195 | 124 | 387 | 263 |
| 2006-07 | 386 | 368 | 426 | 560 | 253 | 192 | 134 | 365 | 231 |
| 2007-08 | 373 | 355 | 418 | 542 | 249 | 187 | 124 | 369 | 245 |
| 2008-09 | 381 | 363 | 428 | 549 | 244 | 186 | 121 | 349 | 228 |
| 2009-10 | 383 | 363 | 420 | 545 | 256 | 182 | 125 | 351 | 226 |
| 2010-11 | 371 | 347 | 428 | 550 | 260 | 203 | 122 | 348 | 226 |
| 2011-12 | 371 | 350 | 429 | 551 | 258 | 201 | 122 | 346 | 224 |
| 2012-13 | 385 | 346 | 398 | 522 | 222 | 176 | 124 | 327 | 203 |
| 2013-14 | 378 | 342 | 393 | 496 | 215 | 154 | 103 | 318 | 215 |
| 2014-15 | 381 | 344 | 410 | 508 | 224 | 164 | 98 | 294 | 196 |
| 2015-16 | 367 | 336 | 397 | 509 | 229 | 173 | 112 | 301 | 189 |

The methodology used by NESDEC is known as the cohort survival method. This method looks at past enrollment patterns and projects future enrollment on the basis of past history. Factors such as the balance between in-migration and out-migration of students, changes in housing patterns, and other demographic information may

require periodic modifications to the cohort survival formulas. These modifications are generally done by experienced demographers as in the case of the State Department of Education and NESDEC.

Projecting Enrollment: The Methodology

Although there are various methods of predicting the future number of students in any school district, the *Cohort Survival Method* is probably the single most utilized method today. This method, in its generic form, works as follows:

1. A demographer calculates the actual number of students in each grade for a period of five or ten year;

2. Next, the demographer takes the percentage difference between one year's data compared to the next year's actual enrollment in the subsequent grade level (students in first grade in year one are compared to students in second grade in year two);
3. Then the demographer computes the mean average percentage of "student survival" or "change coefficient" of the five or ten actual data-based years for each grade level:
4. Finally, the demographer uses this mean percentage average and applies it as a constant projection into, usually, five future years by initially applying that mean percentage for each grade level on the final year of *actual data*, and then carrying these projections forward for another five years. This method, by itself, is a sufficient methodology to use if a school district is very stable, and if it is undergoing a small and predicted growth or decline pattern. The projections become less accurate as the number of future projection years' increase. Therefore, modifications of this method of predicting future student enrollments have to be used in conjunction with the standard *Cohort Survival Method*. Specifically, as in the case of the North Stonington Public Schools, if there has been rapid enrollment growth or decline in the past three to five years, which would be masked by the use of the mean percent of survival figure used as the multiplier to project the student population into future years, the demographer must modify the standard percent of survival figures obtained from the *Cohort Survival Method* by using common sense, pragmatic modifications.

For example, an analysis of the town's population density allows the demographer to avoid wanting students in areas unsuitable for housing, thus providing a more accurate determination of projected growth and decline trends in specific areas of the school district. Additionally, while short-term (one-year) projections are accomplished with a high degree of confidence, five-year projections can be more uncertain. Factors contributing to the uncertainty include in/out migration, public/private school enrollments and transfers, births and birthrates. It is generally recognized by demographers that *Component Cohort Survival Methodology* including the analysis of these additional variables is most adequate in reducing the relative error in projections.

Enrollment projections, using the modified cohort survival method, will continue to be updated each school year.

Enrollment Projections and Space Standards

The State of Connecticut Department of Education provides grants for school construction projects to all public school systems. The eligibility of a school project for State funding is governed by the Connecticut General Statutes (CGS) and the grant application is administered by the State Department of Education Grants Division. Each municipality must apply for the grant by June 30th of each year and the funding is approved the following year. The Town of North Stonington has applied for and received several school construction grants over the years and specifically was funded for the last construction project that included renovations and code updates.

In considering the renovations and additions project at North Stonington Elementary School for state reimbursement several regulations must be evaluated. These include laws that will determine the project eligibility, priority and estimated percentage of the project cost that is for the state grant. Additionally, the Town of North Stonington must meet the requirement of the Office of School Construction Grants/Department of Construction Services and ultimately an audit of the project. Regulation of the State Board of Education Concerning School Construction Grants can be reviewed in the Connecticut General Statutes Section 10-287 c-J to 10-287 c-2J.

The first step in this process will be a meeting with representatives from the State Department of Education to review a waiver request for a partial or complete waiver of the space standards.

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

SPACE STANDARDS WORKSHEET

This worksheet should be completed and submitted with the application for any N (new), E (extension), A (alteration), or RENO (renovation) project, or combination of such types of project.

State Standard Space Specifications Grades

| Projected Enrollment | Pre-K and K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------------------------------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Allowable Square Footage per Pupil | | | | | | | | | | | | | |
| 0 - 350 | 124 | 124 | 124 | 124 | 124 | 156 | 156 | 180 | 180 | 180 | 194 | 194 | 194 |
| 351 - 750 | 120 | 120 | 120 | 120 | 120 | 152 | 152 | 176 | 176 | 176 | 190 | 190 | 190 |
| 751 - 1500 | 116 | 116 | 116 | 116 | 116 | 148 | 148 | 170 | 170 | 170 | 184 | 184 | 184 |
| Over 1500 | 112 | 112 | 112 | 112 | 112 | 142 | 142 | 164 | 164 | 164 | 178 | 178 | 178 |

- Under the column headed "Projected Enrollment", find the range within which your school's highest projected 8 year enrollment falls.
- Using the figures on that line, complete the grid below for only those grades housed within the school.

| | | | |
|---|-----|----|--------|
| Pre-K | 120 | 6 | 156 |
| K | 120 | 7 | |
| 1 | 120 | 8 | |
| 2 | 120 | 9 | |
| 3 | 120 | 10 | |
| 4 | 120 | 11 | |
| 5 | 152 | 12 | |
| (a) Total (grades Pre-K through 12) | | | 1,032 |
| (b) Number of grades housed | | | 8 |
| (c) Average [(a)/(b)] | | | 128 |
| (d) Highest Projected 8-year Enrollment | | | 426 |
| (e) Maximum Square Footage [(c) x(d)] | | | 54,954 |

- Total square footage at completion of project:
 - Existing area constructed pre-1950. 0
 - Multiply "a." by 80% 0
 - Area (at completion of project) constructed 1950 or later. 57,831
 - Square footage for space standards computation (b+c). 57,831

If line 2(e) is greater than line 3(d) there is no grant reduction.

If line 3(d) is greater than line 2(e), divide line 2(e) by line 3(d). 0.9503 *

* This factor will be used to reduce total eligible costs because of space in excess of the maximum eligible for reimbursement.

If a project exceeds the standards solely as the result of extraordinary programmatic requirements, the superintendent may submit a request to the Commissioner for a waiver. A detailed list of space allocations for all extraordinary programs with explanations must be included with the request.

Educational Program Specifications - Overview

Overview of Program Format

The educational programming section for the North Stonington Elementary School study is organized into six sections. Each section identifies program and support spaces that are programmatically related. All spaces within the facility are identified in one of the following sections:

1. Academic Classroom & Support Spaces
2. Technology Education, Performing & Visual Arts
3. Assembly and Community Use
4. Administration and Student Services
5. Facilities Management and Support

A space utilization program is provided in the beginning of each section indicating the name of each space, the number of the spaces required and the size of the space. Following the space program are diagrams that show the relationship and adjacencies of the proposed program spaces. Informational data sheets are provided for each space. The information on these pages is provided as a starting point for the architectural design team. Further review with the school for final room layout, furnishings and fixtures will be required prior to the development of the final design.

1. **ACADEMIC**
 - Pre-Kindergarten
 - Kindergarten
 - Grade 1
 - Grade 2
 - Grade 3
 - Grade 4
 - Grade 5
 - Grade 6
 - Special Education
2. **TECHNOLOGY EDUCATION, PERFORMING & VISUAL ARTS**
 - Music
 - Art
 - Technology Education
3. **ASSEMBLY & COMMUNITY USE**
 - Media Center
 - Cafeteria and Kitchen
 - Assembly / Gymnasium
4. **ADMINISTRATION & STUDENT SERVICES**
 - Administrative Offices
 - Health/Nurse
5. **FACILITY MANAGEMENT & SUPPORT**
 - Boiler Plant / Mechanical / Electrical Infrastructure
 - Facilities Offices & Building Storage

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Pre Kindergarten

Program Objectives/Goals - The North Stonington Integrated Preschool’s mission is to provide a safe, nurturing learning community where all children are appropriately educated in their development of language, social emotional, cognitive and motor skills. The Pre-school environment promotes the child’s development through a multi-sensory approach to learning. Due to the fact that the young children enter the pre-school program at different rates of development, the program must be differentiated to ensure every child is successful. This integrated environment is closely aligned with the special education, speech and language and the occupational therapy programs in its design to encourage exploration and independence in all aspects of a child’s development through child-initiated and teacher initiative activities.

Program Requirements and Activities: - Currently North Stonington Elementary School has four half day programs for 3 and 4 year old placed in two classrooms. The goal will be to provide a universal pre-school for all 3 and 4 year old children of North Stonington.

- Each classroom needs space for whole group, center-based and independent activities which include multi-sensory approach to learning
- Environment must provide daily opportunities for exploration of materials, engage in concrete activities, interact with peers and adults to develop language and an understanding of the world.
- Set-up for at least 2 -3 computers in each classroom.
- A lavatory is needed in each classroom due to the possible need to toilet train students.
- Separate Pre-school entrance and exit to include families into the daily school routine and allow for communication.

Space Occupancy: Each classroom typically houses a class of 10 – 12 students with a highly qualified pre-school teacher and two Para-professionals. Throughout the school day the speech-language pathologist and the occupational therapist will be involved in the children’s instruction. The space requirements will include a classroom, multiple small group instruction space, stimulus shelter, storage rooms and serves as an office for the teacher. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching models and age appropriate activities.

Existing Conditions:

Current Space Limitations: Lack of small of multiple small group instructional areas; children’s storage space; resource storage space; pre-school designated entrance/exit as well to play area; physical access between classrooms and to program storage (e.g. adaptive/gross motor equipment; ADA compliant rest room and outdoor age appropriate play area. –



CONCEPT DESIGN - The pre-kindergarten classrooms are located on the north wing of the building with direct access to the exit and an enclosed playground. The program will house one full day and one half day (two Sessions) classrooms.



Educational Program Specifications – Pre Kindergarten

Program Requirements

The Pre-school program requirements will include classrooms, storage areas, and classroom office space. The space requirements will include a classroom, storage area and a space that serves as an office for the teacher. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching models and age appropriate activities.

Pre-school Classrooms

Quantity: 2

Proposed SF: 780 to 850

Space Design Concept:

A physical space with tables, cubbies for student belongings, whole group activities and play areas including:

- Designated play areas
- water table
- art center
- kitchen
- independent reading

Rest area for full day program students

ADA compliant rest room

Separate pre-school entrance and exit

Close location to playground

Fenced in play yard

Joint access to each classroom to share facilities as well as access to motor room

Program Activities

Support activities in a flexible learning environment that accommodates a number of teaching models and cognitive, social and motor activities.

Loose Furnishings:

Rectangular tables with chairs for small group activities

Circular tables for snack and art activities

Mobile computer stations

Teacher Desk and Chair

Fixed Equipment

| | |
|---|-----|
| Marker/white board | yes |
| Tack board & display boards | yes |
| Projection screen/surfaces | yes |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinets | yes |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---------------|----------------|-----------------------------|
| floor material: | TBD | base material: | TBD |
| wall material: | TBD | finish: | TBD |
| ceiling material: | TBD | height: | 8'-0" minimum |
| hardware: | ada compliant | lighting | multi level direct/indirect |
| fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting

HVAC systems including Air Conditioning

Natural and indirect Lighting

Operable windows

Technology

| | |
|--------------------------------|---------------------------------------|
| Power outlet - floor and walls | yes |
| Media projection system | yes |
| Smart-boards | yes |
| Voice, video and data ports | yes |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the schools technology plan |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Pre Kindergarten Storage

Quantity: 2
Proposed SF: 60

Program Storage Needs:

Storage space for special needs equipment and instructional materials because classroom set-up is continually changing based on needs and program.
Storage for large motor skill development such as tricycles.
Lavatory storage for student training and extra clothing.
Designated classroom areas such as the building area, water table, art center, and kitchen
A large physical space with areas for instruction, play, reading, storage and student work
Close exit to playground
Fenced in play yard
Joint access to each classroom to share facilities as well as access to motor room

Program Activities

Storage of educational materials.

Loose Furnishings

Lateral and vertical file cabinets

Fixed Equipment

| | |
|---|-----|
| Storage space for special needs equipment | yes |
| Display and curriculum material shelves | yes |
| Secure storage cabinet | yes |

Educational Program Specifications – Kindergarten

Program Objectives/Goals - The North Stonington Elementary School kindergarten’s mission is to provide a safe, nurturing learning community where all children receive age appropriate instruction for their development of language, social emotional, cognitive and motor skills. This integrated environment is designed to encourage exploration and independence in all aspects of a child’s development. Through instruction appropriate for each child, the students will attain skills leading to the development of literacy and numeracy skills. Daily opportunities will be provided for the students to achieve their personal best, become responsible and respectful, and embrace lifelong learning in a positive, effective learning environment. This integrated environment is closely aligned with the special education, speech and language and the occupational therapy programs in its design to encourage exploration and independence in all aspects of a child’s development through child-initiated and teacher initiative activities.

Program Requirements and Activities- Currently North Stonington Elementary School has three full day programs for 4 and 5 year old placed in three classrooms.

Each classroom needs space for center-based and whole group activities which include multi-sensory approach to learning
Technology – document camera, interactive white board with projector, television hook-up, etc.
SRBI– small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place
Differentiated Instruction – small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place
State and Federal mandates (Special Education, Curricular, Data Driven instruction, Standards, etc.)
All classrooms have exit to outside.
A lavatory is needed in each classroom with storage.
Location near sensory/ motor room.

Space Occupancy: Each of the three classrooms typically houses a class of 17 to 22 students with a highly qualified kindergarten teacher and a half-time Para-professional. Throughout the school day the speech-language pathologist, reading teacher, special education teacher and the occupational therapist will be involved in the children’s instruction. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching models and age appropriate activities. There is a need for one door for entrance and exit; windows that open upward – 1 of which is deemed an emergency exit.

Existing Conditions- Current space and storage limitations; extremely limited electric outlets, limited ‘drop’ for technology – these drops dictate room arrangement; cold water only in utility sink. Lack of small of multiple small group instructional areas; children’s storage space; resource storage space; ADA compliant rest room in one classroom and outdoor age appropriate play area.

CONCEPT DESIGN - The kindergarten classrooms are located on the first floor north wing of the building with direct access to the exit and an enclosed playground. Each of the classrooms have an accessible toilet.



North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Kindergarten Classroom

Quantity: 3
Proposed SF: 880 to 900

Space Design Concept: Each kindergarten classroom must support a number of teaching styles, including whole group, small group and individual instruction.

Pod of 3 classrooms with storage area located in the middle and classrooms connected on the outside.

Designated building area, water table, art center,

A large physical space with areas for instruction, play, reading, storage and student work

Close exit to playground

Fenced in play yard

Joint access to each classroom to share facilities as well as access to motor room

Toilets within Classroom

Blinds on windows and doors for security

Program Activities

Support activities in a flexible learning environment that accommodates a multitude of teaching models and cognitive, social and motor activities.

Loose Furnishings:

Rectangular tables with chairs for small group activities

Circular tables for snack and art activities

Mobile computer stations

Teacher Desk and Chair

Fixed Equipment

| | |
|---|-----|
| Magnetic white board | yes |
| Tack board & display boards | yes |
| Projection screen/surfaces | yes |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinets | yes |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---------------|----------------|-----------------------------|
| floor material: | TBD | base material: | TBD |
| wall material: | TBD | finish: | TBD |
| ceiling material: | TBD | height: | 8'-0" minimum |
| hardware: | ada compliant | lighting | multi level direct/indirect |
| fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
HVAC systems including Air Conditioning
Natural and indirect Lighting
Operable windows

Technology

| | |
|--------------------------------|---------------------------------------|
| Power outlet - floor and walls | yes |
| Media projection system | yes |
| Smart board technology | yes |
| Voice, video and data ports | yes |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the schools technology plan |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Grade 1

Program Objectives/Goals: To provide opportunities for first grade students to achieve their personal best, become responsible and productive six and seven year olds, and embrace lifelong learning in a safe, positive, effective learning environment. This effective learning environment is foundational in its design addressing the following core domains: physical environment, psychological, pedagogical, technological, cultural and pragmatic.

Program Requirements and Activities:

Each classroom needs space for center-based and whole group activities which include multi-sensory approach to learning Technology – document camera, interactive white board with projector, etc.

SRBI– small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place
Differentiated Instruction – small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place

State and Federal mandates (Special Education, Curricular, Data Driven instruction, Standards, etc.)

Space Occupancy:

Each of the three classrooms typically houses a class of 17 to 22 students with a highly qualified grade one teacher and a part-time Para-professional. Throughout a typical week the speech-language pathologist, reading teacher, special education teacher and the occupational therapist will be involved in the children’s instruction. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching models and age appropriate activities. There is a need for one door for entrance and exit; 2 windows – 1 of which is deemed an emergency exit.

Existing Conditions:

Current space and storage limitations; extremely limited electric outlets, limited ‘drop’ for technology – these drops dictate room arrangement; cold water only in utility sink. Lack of small of multiple small group instructional areas; children’s storage space; resource storage space;

SIGNIFICANT air quality concerns since a new bathroom has been installed in a Pre-K classroom next to a first grade classroom (specifically Room 102)

CONCEPT DESIGN - The first grade classrooms are located on the first floor north wing of the building with direct access to the exit and an enclosed playground.



Educational Program Specifications - Grade 1 Classrooms

Quantity: 3
Proposed SF: 775 to 825

Space Design Concept: The classroom should be designed for an integrated approach to instruction, multiple furniture arrangements and classroom configurations. The space will function as an office for the teacher.

A physical organization of space that facilitates rather than hinders pedagogy . . . organized to promote the various ways children acquire knowledge: visually, auditorally, kinesthetically, independently; cooperatively – thus creating multiple learning scenarios within one space

A physical space should large enough for various learning tasks and other gatherings such as meeting,

- Whole group and small group instruction
- An area for library, technology, math, and science/social studies.
- Wall space low enough for student access and visibility from both the floor and the table area.
- A large enough floor space for whole group instruction and gatherings on the floor and without sacrificing comfortable space for tables that seat 4- 6 students.

Color, lighting, furniture that helps to help delineate different learning zones – quiet vs. active; independent vs. small group; working with a variety of technology

Infrastructure that supports and enhances current and future technology (including multiple outlets on walls)

Furniture and equipment specifically designed for 6-7 year olds

Utility sink in classroom with hot and cold water and a water fountain

Bathroom in primary classrooms

Close proximity to other early primary classrooms and close proximity to bathrooms (if bathrooms are not in classroom)

Program Activities

Support activities in a flexible learning environment that accommodates a multitude of teaching models and cognitive, social and motor activities.

Loose Furnishings:

Rectangular tables with chairs for small group activities
Circular tables for snack and art activities
Mobile computer stations
Teacher Desk and Chair

Fixed Equipment

| | |
|---|-----|
| Magnetic white board | yes |
| Tack board & display boards | yes |
| Projection screen/surfaces | yes |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinets | yes |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---------------|----------------|-----------------------------|
| floor material: | TBD | base material: | TBD |
| wall material: | TBD | finish: | TBD |
| ceiling material: | TBD | height: | 8'-0" minimum |
| hardware: | ada compliant | lighting | multi level direct/indirect |
| fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
HVAC systems including Air Conditioning
Natural and indirect Lighting
Operable windows

Technology

| | |
|--------------------------------|---------------------------------------|
| Power outlet - floor and walls | yes |
| Media projection system | yes |
| Smart board technology | yes |
| Voice, video and data ports | yes |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the schools technology plan |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Grade 1 Storage

Quantity: 3
Proposed SF: 60

Program Storage Needs:

Adequate storage – bookcases, cubbies, drawer units all designed for easy access for 6 and 7 year olds
Coat area for adults
Countertop work space for teacher work space.
Overhead wall cabinets with doors
Storage areas with built in shelving for teacher supplies.
Countertop work space for teacher work space.
Built-in closet for teachers.

Space Design Concept

The storage should be designed to accommodate books, storage grade level specific materials and equipment.

Program Activities

Storage of educational materials.

Loose Furnishings

Lateral file cabinet

Fixed Equipment

| | |
|--------------------------|-----|
| Display and book shelves | yes |
| Secure storage cabinet | yes |

Educational Program Specifications – Grade 2

Program Objectives/Goals: The goals of the North Stonington Elementary School’s second grade experience is to provide opportunities for the students to achieve their personal best by becoming confident readers and mathematicians, responsible and respectful young students, and lifelong learners in a positive and safe learning environment. This effective learning environment is foundational in its design addressing the following core domains: physical environment, psychological, pedagogical, technological, cultural and pragmatic.

Program Requirements and Activities:

Each classroom needs space for center-based and whole group activities which include multi-sensory approach to learning Technology – document camera, interactive white board with projector, etc.
 SRBI– small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place
 Differentiated Instruction – small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place
 State and Federal mandates (Special Education, Curricular, Data Driven instruction, Standards, etc.)

Space Occupancy:

Each of the three classrooms typically houses a class of 17 to 22 students with a highly qualified grade two teacher and a part-time Para-professional. Throughout a typical week the speech-language pathologist, reading teacher, special education teacher and the occupational therapist will be involved in the children’s instruction. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching models and age appropriate activities. There is a need for one door for entrance and exit; 2 windows – 1 of which is deemed an emergency exit.

Existing Conditions:

- Current space and storage limitations
- Extremely limited electric outlets, limited ‘drop’ for technology – these drops dictate room arrangement
- Cold water only in utility sink
- Lack of small multiple group instructional areas
- Great distance from boys and girls restrooms
- Limited children’s storage space and resource storage space;

CONCEPT DESIGN - The second grade classrooms are located on the second floor north wing of the building and are adjacent to the third and fourth grade classrooms that are housed in this wing of the building.



North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Grade 2 Classrooms

Quantity: 3
Proposed SF: 775 to 825

Space Design Concept: The classroom should be designed for an integrated approach to instruction, multiple furniture arrangements and classroom configurations. The space will function as an office for the teacher.

A physical organization of space organized to promote the various ways children acquire knowledge: visually, auditorally, kinesthetically, independently; cooperatively – thus creating multiple learning scenarios within one space

A physical space should be large enough for various learning tasks and other gatherings such as class:

- Whole group and small group instruction
- An area for library, technology, math, and science/social studies.
- Wall space low enough for student access and visibility from both the floor and the table area.
- A large enough floor space for whole group instruction and gatherings on the floor and without sacrificing comfortable space for tables that seat 4- 6 students.

Color, lighting, furniture that helps to help delineate different learning zones – quiet vs. active; independent vs. small group; working with a variety of technology

Infrastructure that supports and enhances current and future technology (including multiple outlets on walls)

Furniture and equipment specifically designed for 7-8 year olds

Utility sink in classroom with hot and cold water

Close proximity to other second grade classrooms

Close proximity to bathrooms

Program Activities

Support activities in a flexible learning environment that accommodates a multitude of teaching models and instructional strategies.

Loose Furnishings

Student desks and chairs

Rectangular tables with chairs for small group activities

Computer stations

Teacher Desk and Chair

Fixed Equipment

| | |
|---|-----|
| Magnetic white board | yes |
| Tack board & display boards | yes |
| Projection screen/surfaces | yes |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinets | yes |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---------------|----------------|-----------------------------|
| floor material: | TBD | base material: | TBD |
| wall material: | TBD | finish: | TBD |
| ceiling material: | TBD | height: | 8'-0" minimum |
| hardware: | ADA compliant | lighting | multi-level direct/indirect |
| fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting

HVAC systems including Air Conditioning

Natural and indirect Lighting

Operable windows

Technology

| | |
|--------------------------------|---------------------------------------|
| Power outlet - floor and walls | yes |
| Media projection system | yes |
| Smart-board technology | yes |
| Voice, video and data ports | yes |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the schools technology plan |

Educational Program Specifications – Grade 2 Storage

Quantity: 3
Proposed SF: 60

Program Storage Needs:

Adequate storage – bookcases, cubbies, drawer units all designed for easy access for students
Built in closet for teachers.
Countertop work space for teacher work space.
Overhead wall cabinets with doors

Space Design Concept

The storage should be designed to accommodate books, storage grade level specific materials and equipment.

Program Activities

Storage of educational materials.

Loose Furnishings

Lateral file cabinet

Fixed Equipment

| | |
|--------------------------|-----|
| Display and book shelves | yes |
| Secure storage cabinet | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Grade Three

Program Objectives/Goals - The goals of the North Stonington Elementary School’s third grade experience is provide opportunities for the students to achieve their personal best by becoming confident readers and mathematicians, responsible and respectful young students, and lifelong learners in a positive and safe environment. The daily instruction guides the students to transition from becoming students who are learning to read to independent learners who learn from reading.

Program Requirements and Activities:

Each classroom needs space for center-based and whole group activities which include multi-sensory approach to learning Technology – document camera, interactive white board with projector, etc.

SRBI– small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place
Differentiated Instruction – small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place

State and Federal mandates (Special Education, Curricular, Data Driven instruction, Standards, etc.)

Space Occupancy: Each of the three classrooms typically houses a class of 17 to 22 students with a highly qualified grade three teacher. Throughout a typical week the speech-language pathologist, reading teacher, special education teacher and the occupational therapist will be involved in the children’s instruction. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching models and age appropriate activities. There is a need for one door for entrance and exit; 2 windows – 1 of which is deemed an emergency exit.

Existing Conditions:

Current space and storage limitations

Extremely limited electric outlets, limited ‘drop’ for technology – these drops dictate room arrangement

Cold water only in utility sink

Lack of small multiple group instructional areas

Great distance from boys and girl’s restrooms

Limited children’s storage space and resource storage space;

CONCEPT DESIGN - The third grade classrooms are adjacent to each other and are located on the second floor north wing of the building and are adjacent to the second and fourth grade classrooms that are housed in this wing of the building.



Educational Program Specifications – Grade Three Classrooms

Quantity: 3
Proposed SF: 775 to 825

Space Design Concept: The classroom should be designed for an integrated approach to instruction, multiple furniture arrangements and classroom configurations. The space will function as an office for the teacher.

A physical space should be large enough for various learning tasks for differentiated instruction and SRBI:

- Whole group and small group instruction
- An area for library, technology, math, and science/social studies.
- A large enough floor space for whole group instruction and gatherings on the floor and without sacrificing comfortable space for tables that seat 4- 6 students.

Color, lighting, furniture that helps to help delineate different learning zones – quiet vs. active; independent vs. small group; working with a variety of technology

Infrastructure that supports and enhances current and future technology (including multiple outlets on walls)

Furniture and equipment specifically designed for third grade students

Utility sink in classroom with hot and cold water

Close proximity to other third grade classrooms

Technology – document camera, interactive white board with projector, etc.

Counter space for teacher work area

Recess displayed ledges in hallway walls to display student

Program Activities

Support activities in a flexible learning environment that accommodates a multitude of teaching models and instructional strategies.

Loose Furnishings

Student desks and chairs

Rectangular tables with chairs for small group activities

Computer stations

Teacher Desk and Chair

Fixed Equipment

| | |
|---|-----|
| Magnetic white board | yes |
| Tack board & display boards | yes |
| Projection screen/surfaces | yes |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinet's | yes |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---------------|----------------|-----------------------------|
| floor material: | TBD | base material: | TBD |
| wall material: | TBD | finish: | TBD |
| ceiling material: | TBD | height: | 8'-0" minimum |
| hardware: | ada compliant | lighting | multi level direct/indirect |
| fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting

HVAC systems including Air Conditioning

Natural and indirect Lighting

Operable windows

Technology

| | |
|--------------------------------|---------------------------------------|
| Power outlet - floor and walls | yes |
| Media projection system | yes |
| Smart board technology | yes |
| Voice, video and data ports | yes |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the schools technology plan |

Educational Program Specifications – Grade Three Storage

Quantity: 3
Proposed SF: 60

Program Storage Needs:

Adequate storage – bookcases, cubbies, drawer units all designed for easy access for students
Built in closet for teachers.
Countertop work space for teacher work space.
Overhead wall cabinets with doors

Space Design Concept

The storage room should be designed for storage for both instructional student materials and teacher resource materials.

Program Activities

Storage of educational materials.

Loose Furnishings

Lateral file cabinet
Rugs for meeting areas

Fixed Equipment

Display and book shelves
Secure storage cabinet
Children's storage space (cubbies/hangers)

Educational Program Specifications – Grade Four

Program Objectives/Goals - The goals of the North Stonington Elementary School’s fourth grade experience is to provide opportunities for the students to achieve their personal best by becoming confident readers and mathematicians, responsible and respectful young students, and lifelong learners in a positive and safe environment. The daily instruction guides the students to transition from becoming students who are learning to read to independent learners who learn by reading. The integrated environment is designed to encourage independence in all aspects of a child’s development with support of the regular and special education faculty.

Program Requirements and Activities- Currently North Stonington Elementary School has three full day fourth grade classrooms. The fourth grade program is departmentalized with each classroom dedicated to math, science or social studies. All fourth grade teachers teach literacy in either homogeneous or heterogeneous groupings. Each classroom needs space for center-based and whole group activities which include multi-sensory approach to learning. Technology – document camera, interactive white board with projector, etc.
 SRBI– small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place
 Differentiated Instruction – small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place
 State and Federal mandates (Special Education, Curricular, Data Driven instruction, Standards, etc.)

Space Occupancy: Each of the three classrooms typically houses a class of 17 to 22 students with a highly qualified grade four teacher. Throughout a typical week the speech-language pathologist, reading teacher, special education teacher and the occupational therapist will be involved in the children’s instruction. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching models and age appropriate activities. There is a need for one door for entrance and exit; 2 windows – 1 of which is deemed an emergency exit.

Existing Conditions:

- Current space and storage limitations
- Extremely limited electric outlets, limited ‘drop’ for technology – these drops dictate room arrangement
- Cold water only in utility sink
- Lack of small multiple group instructional areas
- Limited children’s storage space and resource storage space;

CONCEPT DESIGN - The fourth grade classrooms are adjacent to each other and are located on the second floor north wing of the building and are adjacent to the third and fifth grade classrooms that are housed in this wing of the building



Educational Program Specifications – Grade Four Storage

Quantity: 3
Proposed SF: 60

Program Storage Needs:

Adequate storage – bookcases, cubbies/lockers drawer units all designed for easy access for students
Built in closet for teachers.
Countertop work space for teacher work space.
Overhead wall cabinets with doors

Space Design Concept

The storage room should be designed for storage for both instructional student materials and teacher resource materials.

Program Activities

Storage of educational materials.

Loose Furnishings

Lateral file cabinet

Fixed Equipment

Display and book shelves
Secure storage cabinet

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Grade Five

Program Objectives/Goals – The goals of the North Stonington Elementary School’s fifth grade experience is to meet the instructional, academic and behavioral needs of every fifth grader through a tiered, multi-grouped learning environment which will lead to confident readers and mathematicians, responsible and respectful young students, and lifelong learners in a positive and safe environment. The daily instruction guides the students to transition from becoming students who are learning to read to independent learners who learn from reading. The integrated environment is designed to encourage independence in all aspects of a child’s development with support of the regular and special education faculty.

Program Requirements and Activities- Currently North Stonington Elementary School has three full day fifth grade classrooms. The fifth grade program is departmentalized with each classroom dedicated to math, science or social studies. All fifth grade teachers teach literacy in either homogeneous or heterogeneous groupings. There is a need in each classroom for a number of instructional strategies including whole group and small group instruction as well as independent work. Technology – document camera, interactive white board with projector, etc. SRBI– small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place Differentiated Instruction – small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place State and Federal mandates (Special Education, Curricular, Data Driven instruction, Standards, etc.)

Space Occupancy: Each of the three classrooms typically houses a class of 17 to 22 students with a highly qualified grade five teacher. Throughout a typical week the speech-language pathologist, reading teacher, special education teacher and the occupational therapist will be involved in the children’s instruction. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching models and age appropriate activities. There is a need for one door for entrance and exit; 2 windows – 1 of which is deemed an emergency exit.

Existing Conditions:

- Current space and storage limitations
- Extremely limited electric outlets, limited ‘drop’ for technology – these drops dictate room arrangement
- Cold water only in utility sink

CONCEPT DESIGN - The fifth grade classrooms are adjacent to each other and are located on the second floor west wing of the building and are adjacent to the sixth grade classrooms that are housed in this wing of the building



Educational Program Specifications – Grade Five Storage

Quantity: 3
Proposed SF: 60

Program Storage Needs:

Adequate storage – bookcases, cubbies, drawer units all designed for easy access for 8 and 9 year olds
Coat area for adults
Countertop work space for teacher work space.
Built in cabinetry with ample counter space
Bookshelves accessible for students and higher shelving for teacher materials

Space Design Concept

The storage room should be designed for storage for both instructional student materials and teacher resource materials.

Program Activities

Storage of educational materials.

Loose Furnishings

Lateral file cabinet

Fixed Equipment

Display and book shelves
Secure storage cabinet

Educational Program Specifications – Grade Six

Program Objectives/Goals – The goals of the North Stonington Elementary School’s sixth grade experience is to meet the instructional, academic and behavioral needs of every fifth grader through a tiered, multi-grouped learning environment which will lead to confident readers and mathematicians, responsible and respectful young students, and lifelong learners in a positive and safe environment. The daily instruction guides the students to transition from becoming students who are learning to read to independent learners who learn from reading. The integrated environment is designed to encourage independence in all aspects of a child’s development with support of the regular and special education faculty.

Program Requirements and Activities- Currently North Stonington Elementary School has three full day fifth grade classrooms. The fifth grade program is departmentalized with each classroom dedicated to math, science or social studies. All fifth grade teachers teach literacy in either homogeneous or heterogeneous groupings. There is a need in each classroom for a number of instructional strategies including whole group and small group instruction as well as independent work.

Technology – document camera, interactive white board with projector, etc.

SRBI– small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place
Differentiated Instruction – small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place

State and Federal mandates (Special Education, Curricular, Data Driven instruction, Standards, etc.)

Space Occupancy: Each of the three classrooms typically houses a class of 17 to 22 students with a highly qualified grade five teacher. Throughout a typical week the speech-language pathologist, reading teacher, special education teacher and the occupational therapist will be involved in the children’s instruction. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching models and age appropriate activities. There is a need for one door for entrance and exit; 2 windows – 1 of which is deemed an emergency exit.

Existing Conditions:

Current space and storage limitations

Extremely limited electric outlets, limited ‘drop’ for technology – these drops dictate room arrangement

Cold water only in utility sink

CONCEPT DESIGN - The sixth grade classrooms are adjacent to each other and are located on the second floor west wing of the building and are adjacent to the fifth grade classrooms that are housed in this wing of the building



Educational Program Specifications – Grade Six Storage

Quantity: 3
Proposed SF: 60

Program Storage Needs:

Adequate storage – bookcases, cubbies, drawer units all designed for easy access for 8 and 9 year olds

Coat area for adults

Countertop work space for teacher work space.

Built in cabinetry with ample counter space

Bookshelves accessible for students and higher shelving for teacher materials

Space Design Concept

The storage room should be designed for storage for both instructional student materials and teacher resource materials.

Program Activities

Storage of educational materials.

Loose Furnishings

Lateral file cabinet

Fixed Equipment

Display and book shelves

Secure storage cabinet

North Stonington Elementary School

Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Special Education

Program Objectives

The special education department serves approximately 8.5% of the students attending North Stonington Elementary School. The early intervention and PPT process identifies those students who have a demonstrated disability that impacts their learning and requires specialized instruction to progress in the curriculum. The staff of teachers, social workers, psychologists, speech and language pathologists, occupational and physical therapists, and paraprofessionals provides a continuum of services in self-contained and mainstream settings. The diversity of educational and behavioral student needs necessitates a variety of spaces to accommodate instructional activities.

Goals

- Establish a program to offer a free, appropriate, public education to all disabled students in the least restrictive environment and to include interaction with non-disabled peers.
- Comply with ADA requirements and OCR regulations.
- Design a program to provide full access to all students.
- Develop a program focused on specific content combined with general education, specialized instruction, study skills, and remediation for students with disabilities.
- Provide functional and hands-on strategies and materials for students with significant cognitive deficits.
- Provide adequate opportunities for the development of skills in technology.

Program Activities to be Accommodated

Special Education consist of Learning Strategy Classes, Special Education Academic and Elective Courses and Special Education Services including Speech and Language Services, Psychological Services, Social Work Services, Adaptive Living Skills and Alternative Day Programs. Other appropriate services as determined by the students individual education program (IEP) are also included. As each of the above are fairly specialized, so are their respective activities. Activities range from regular classroom instruction to testing, learning fundamental living skills in a residential-like environment, specialized physical education and other specialized activities aimed at the individual

Space Occupancy and Design Criteria

The individual utilization the space include the student's special education teacher, professionals and aides. The following is a partial list of design elements that should be incorporated into the all spaces to accommodate students with special needs:

- Sensory friendly lighting and acoustics would be beneficial for students with autism, hearing difficulties, and attention deficits.
- Self-contained programs should be placed with ready access to the mainstream classrooms.
- Special education classrooms must provide efficient emergency egress.
- Self-contained settings should be close to exits to allow for easy access to transportation.
- All classrooms should have ample locked storage space for materials and records.
- Self-contained, flexible work stations should support both individual and small group instruction.
- Classroom technology in special education settings should be equal to that offered in mainstream settings.
- All classrooms should be equipped with a telephone line, clock, multiple outlets, whiteboards, bulletin boards, and wiring for computer network capability and internet access.
- Each classroom should have audiovisual capability and the flexibility to accommodate large and small group activities and individual instruction.
- General education classrooms will require commensurate standards for the inclusion of special education students.
- Access to technology should be provided in all spaces.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas.
- Ceiling height and windows should maximize natural light and accommodate daylighting.
- Side-lites must be provided adjacent to all classroom doors.
- Cabinets and casework appropriate to the instructional studio function should be provided.
- Speaker systems should be incorporated into all instructional spaces.
- Whiteboards, Tack boards and projection screens should be provided in each instructional space.

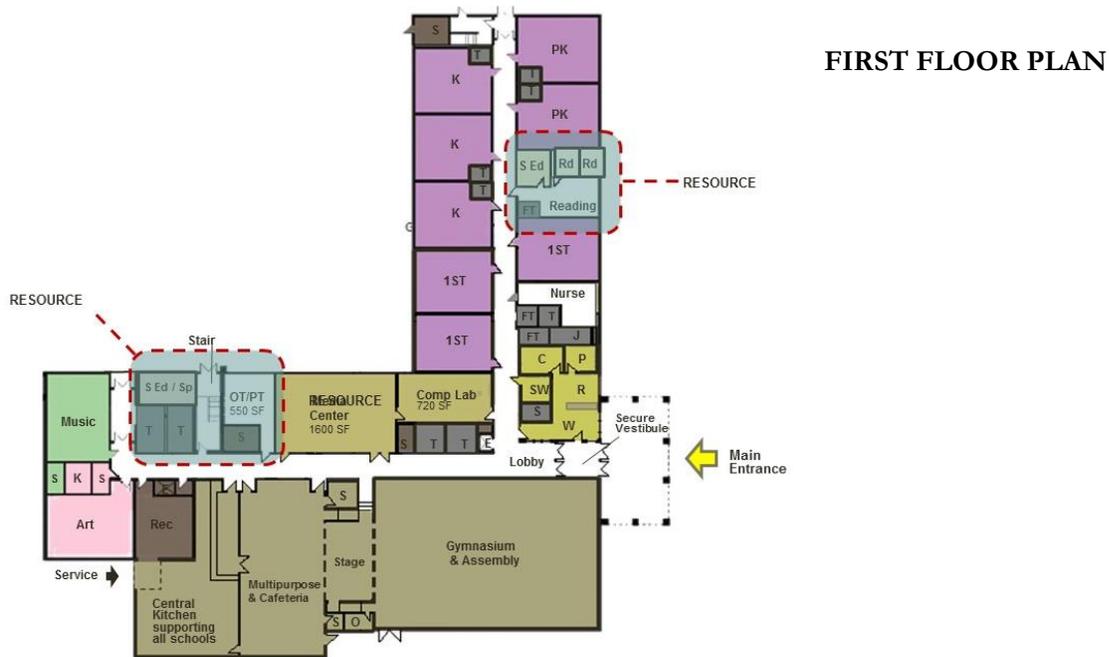
Existing Conditions

The following table identifies the utilization of existing instructional spaces and notes the net classroom area. The capacity of each space. The existing facility lack the appropriate support space for the specific special education programs.

Current Space Limitations:

Lack of instructional classrooms, media storage space, offices, teacher work room and conference rooms. The resource room are inadequate in size

CONCEPT DESIGN - The special education and resource rooms are located on the main and second floors of the building.



North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Resource Room

Quantity: 2

Proposed SF: 450 to 500 SF Each

Space Design Concept

The small group classroom should be designed for an integrated approach to technology and multiple furniture arrangements and classroom configurations. The space will function as an instructional classroom for six to eight students, and will be dispersed among the general classrooms.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction.

Loose Furnishings

Computer Workstations with chairs (8 Each)

Mobile computer stations (2 Each)

Work Tables

Teacher Desk and Chair

Lateral file cabinet

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 2 at 12 linear feet |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes |
| Flag Bracket & Flag | yes |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning

Natural and indirect/direct Lighting

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Smart boards | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Educational Program Specifications – Social Worker

Quantity: 1
Proposed SF: 150 to 175 SF

Space Design Concept

The space should be designed to accommodate typical private office equipment and a small conference table for up to four individuals.

Program Activities

Individual counseling

Fixed Equipment

| | |
|------------------------|-----|
| Shelves | yes |
| Secure storage cabinet | yes |

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 2 at 12 linear feet |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes |
| Flag Bracket & Flag | yes |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Smart boards | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Psychologist

Quantity: 1
Proposed SF: 150 to 175 SF

Space Design Concept

The space should be designed to accommodate typical private office equipment and a small conference table for up to four individuals.

Program Activities

Individual counseling

Fixed Equipment

Shelves yes
Secure storage cabinet yes

Fixed Equipment

Acoustical treatment yes
Marker/white board (Multiple) yes – 2 at 12 linear feet
Tack board & display boards yes – 2 at 4 linear feet
Projection screen/surfaces yes
Flag Bracket & Flag yes
Display and book shelves yes
Tall wardrobe and storage cabinet yes – lockable 8 linear feet
Fixed cabinets and accessible work surfaces yes

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting

Technology

Power outlet - floor and walls yes – as appropriate
Media projection system yes
Smart boards yes
Voice, video and data ports yes – phone / intercom and data
Security yes
Portable sound system yes
Technology equipment yes – per the district's technology plan
Wireless & Hard wired Network yes – per the district's technology plan
Integrated public address system yes

Educational Program Specifications – Speech and Language Pathologist

Quantity: 1
Proposed SF: 125 to 150 SF

Space Design Concept

The space should be designed to accommodate typical private office equipment and a small conference table for up to four individuals.

Program Activities

Small group instruction, therapy activities and testing

Fixed Equipment

| | |
|------------------------|-----|
| Shelves | yes |
| Secure storage cabinet | yes |

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 1 at 12 linear feet |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes |
| Flag Bracket & Flag | yes |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Smart boards | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Special Education Conference Room

Quantity: 1
Proposed SF: 250 to 300 SF

Space Design Concept

The space should be designed to accommodate a small conference table for up to twelve individuals.

Program Activities

Small group instruction and meetings

Fixed Equipment

| | |
|------------------------|-----|
| Shelves | yes |
| Secure storage cabinet | yes |

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 1 at 8 linear feet |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes |
| Flag Bracket & Flag | yes |
| Display and book shelves | yes |
| Lower storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Smart boards | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Educational Program Specifications – Remedial Reading Room

Program Objectives/Goals: The goal of the teachers in the Remedial Reading Room is to assess, diagnose and provide intensive, systematic instruction for students not meeting benchmark in reading.

Program Requirements and Activities- North Stonington Elementary School is fortunate to have 3 highly qualified reading specialists who provide remedial reading instruction specific to the needs of each child. There is a need for a number of instructional strategies including small group instruction as well as independent work.

Technology – computers for teacher and student use

SRBI– small group instruction; 1:1 instruction simultaneous to other independent and small group academic tasks taking place

Differentiated Instruction – small group instruction or 1:1 instruction simultaneously

State and Federal mandates (Special Education, Curricular, Data Driven instruction, Standards, etc.)

Space Occupancy: Each of the three reading specialists have their own instructional areas to work with students in kindergarten through fifth grade. The space should be designed as a flexible learning environment that is able to accommodate a number of teaching models and age appropriate activities. There is a need for one door for entrance and exit; 2 windows – 1 of which is deemed an emergency exit.

Existing Conditions:

Current space and storage limitations

Extremely limited electric outlets, limited ‘drop’ for technology – these drops dictate room arrangement

Cold water only in utility sink

Movable bookcases separate instructional areas.

Three teacher desks

Educational Program Specifications – Remedial Reading Storage

Quantity: 1
Proposed SF: 125

Program Storage Needs:

Adequate storage – bookcases
Built in cabinetry with ample counter space
Bookshelves for reading materials used school-wide

Space Design Concept

The storage room should be designed for storage for both instructional student materials and teacher resource materials.

Program Activities

Storage of educational materials.

Loose Furnishings

Lateral file cabinet

Fixed Equipment

Display and book shelves
Secure storage cabinet

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – OT/PT Room

Program Objectives/Goals: The North Stonington OT/PT's mission is to provide a safe, nurturing learning community where all children ages 3-21 feel supported in their development of motor skills, self-help skills, language and social emotional skills. This environment is designed to encourage exploration and independence in all aspects of a child's development.

Program Requirements and Activities: Currently the North Stonington OT/PT room provides services for students that have goals and objectives written for these services on their Individual Education Plans. Students participate in gross motor, fine motor, sensory motor and self-help tasks.

- The motor room needs to have a space for hanging adaptive equipment such as swing with a 6 foot radius.
- Set-up for at least at least one student computer
- A lavatory is needed in the motor room to work on bathroom routines and self-help/dressing activities.
- A sink and counter also need to be available for self-help and food preparation activities.
- A one way window and observation area for parents to observe therapy sessions

Space Occupancy: The OT/PT room typically houses students from the ages of 3-21 throughout the day working on several different needs. The OT and PT both work within the room. Throughout the day there could be motor groups of up to 12 students at a time with a therapist, teacher and Para-professional. The space should be designed as a flexible learning environment for fine motor, visual motor, gross motor, self-help and sensory motor activities.

Existing Conditions: Currently we share the space with the SLP. We have limited storage areas for all of the equipment. We do not currently have a private space to work on self-help activities. Space is limited for gross motor tasks.



Educational Program Specifications – OT/PT Room

Quantity: 1
Proposed SF: 500 – 550 SF

Space Design Concept: The OT/PT Room space requirements will include a large open floor space for movement, storage areas (which may include specially designed storage cabinets) and structured ceiling that can support hanging adaptive equipment. The following is a partial list of design elements that should be incorporated into the OT/PT Room:

Designated building area on the first floor.

A larger physical space with a large area for mats and stretching activities.

A space for hanging adaptive equipment from the ceiling, such as swings, with a 6 foot radius.

A space for a sensory table (water, sand, rice, etc.)

Sink and counter tops in the room

A Handicapped accessible bathroom

Large floor space for scooter board activities

Circular tables for small group fine motor/writing activities

Observation area with one way window so that parents/teachers can observe therapy sessions

Large storage space for large equipment and adaptive equipment

Program Activities

Support activities in a flexible learning environment that accommodates development of motor skills, self-help skills, language and social emotional skills.

Loose Furnishings

| | |
|---|-----|
| Computer station with wireless capabilities | yes |
| 2 Teacher desks and chairs | yes |
| Lateral/vertical file cabinets | yes |

Fixed Equipment

| | |
|--|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Display and book shelves | yes – 8 linear feet |
| Tall wardrobe and storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surface | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpeting and/or Area Rugs | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi-level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – OT/PT Storage

Quantity: 1

Proposed SF: 250

Program Storage Needs: (we need a lot of storage)

Storage space for special needs equipment and instructional materials because classroom set-up is continually changing based on needs and program and themes of the week.

Storage for large motor skill development such as tricycles

Storage for large therapy balls, equipment, adaptive equipment, chairs swings, etc

Storage space for games and fine motor equipment and materials

Space Design Concept

The classroom should be designed for a variety of instructional areas with storage for instructional supplies, large equipment and teacher resource materials.

Program Activities

Storage of educational materials.

Loose Furnishings

Lateral file cabinet

Fixed Equipment

Cabinets for large equipment storage

Cabinets for small equipment

Secure storage cabinet

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications Special Education Storage

Quantity: 1
Proposed SF: 200 to 250 SF Each

Space Design Concept

The storage should be designed to accommodate art supplies, media storage, student projects, and FCS department specific equipment.

Program Activities

Storage of educational materials.

Fixed Equipment

Shelves yes – 12 inch deep, maximum 5 shelves high
Secure storage cabinet yes

Finishes

Floor material: VCT
Base material: Rubber
Wall material: Block / Sheetrock
Wall Finish: Paint
Ceiling material: Acoustical Tile
Ceiling height: 8'-0" minimum
Hardware: ADA compliant - Lockable
Lighting: Standard
Fire extinguisher & suppression: Per code

Special Requirements

HVAC systems exhaust

Technology

Power outlet - walls yes
Security yes – per the districts security plan

Educational Program Specifications - Music

Program Objectives

The Arts have been identified by the U.S. Congress, the College Board, The Partnership for 21st Century Skills, the National Association of Secondary Principals, and the U.S. Department of Education as part of the core curriculum which all students should take as part of their high school program. Music education's mandate in contemporary American education, as stated by the Music Educator's National Conference, is to provide a varied, significant, and cumulative musical experience for every student. The North Stonington Elementary School Music Department offers diverse learning and performing opportunities in vocal and instrumental music. The program provides opportunities for all students to:

- Recognize the role and importance of music in their own lives and in their cultures
- Perform music from a wide variety of cultural and aesthetic perspectives
- Think critically and creatively
- Work collaboratively
- Develop self-discipline through practice and striving for excellence in their musical performances

Program Activities to be accommodated

Students in grades K-5 participate in a variety of classes in music. Classes may include Band, Orchestra, and, Chorus.

Space Occupancy and Design Criteria

The individuals utilizing the space include students and Music teachers. A special education paraprofessional or a teacher's aide may share space for the instruction of individuals with special needs. The following is a partial list of design elements that should be incorporated into the Music Classroom/rehearsal room spaces:

- The rehearsal room configuration should maximize flexibility for small and large groups.
- Access to technology should be provided throughout the individual and group instructional spaces.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas.
- Ceiling height and windows should maximize natural light and accommodate daylighting.
- Sidelites must be provided adjacent to all classroom doors.
- Cabinets and casework appropriate to the instructional rehearsal spaces should be provided.
- Special consideration should be given for sound transmission to minimize sound infiltration into the adjacent space.
- Speaker systems should be incorporated into all instructional spaces.
- Whiteboards, Tack boards and projection screens should be provided in each instructional space.
- Storage should be provided for student instruments.
- Sinks should be provided in a work room and at the instrument repair area.
- Music instrument equipment storage cabinets should be provided in the band rehearsal room.
- Computer workstations and data connections must be provided at each instructional space.
- Video recording equipment.
- Enhanced ventilation requirements.
- Ceiling heights appropriate to Band and Chorus rehearsal rooms should be provided.

Existing Conditions

The following table identifies the utilization of existing music rehearsal and instructional spaces and notes the net classroom area. The capacity of each space. The existing music rooms lack the appropriate support space for instrument and general storage. Appropriate storage cabinets are needed for instrument storage

Current Space Limitations:

Lack of instructional classrooms, instrument and general storage space.

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

CONCEPT DESIGN - The music rehearsal room and music storage rooms are adjacent to each other and are located on the main floor west wing of the building enabling all students to access the program. Located at the end of the west wing the zoning of the space allows for sound and acoustic separation.



Educational Program Specifications – General Music Rehearsal Room

Quantity: 1
Proposed SF: 1,000 to 1,200 SF

Space Design Concept

The General Music Rehearsal Room will house the various vocal classes and vocal ensembles and an acoustically appropriate space with high ceilings large enough to accommodate 30 students. A lockable storage area that will house a piano, risers and records. Access to the auditorium and stage is necessary for final rehearsals.

Program Activities

Support the instruction and practice of various levels of vocal programs

Program Adjacencies

Access to piano storage - separate
Access to portable risers

Loose Furnishings

Music stands w/ carts
Program equipment
Storage for music folders
Chairs
Mobile computer stations
Teacher Desk and Chair
Lateral file cabinet

Fixed Equipment

| | |
|---|------------------------|
| Acoustical treatment | yes |
| Marker/white board | yes – with music staff |
| Tack board & display boards | yes |
| Projection screen/surfaces | yes |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinet | yes |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|-----------------------------|---------|----------------|
| floor material: | Carpet | | |
| base material: | Rubber | | |
| wall material: | Block / Gyp | finish: | Paint |
| ceiling material: | Acoustical Tile | height: | 18'-0" minimum |
| hardware: | ada compliant | | |
| lighting | multi-level direct/indirect | | |
| fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
HVAC systems including Air Conditioning
Natural and indirect Lighting
Operable windows
Acoustical Controls and Sound Transmission

Technology

| | |
|--------------------------------|---------------------------------------|
| Power outlet - floor and walls | yes |
| Media projection system | yes |
| Smart boards | yes |
| Voice, video and data ports | yes |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the schools technology plan |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications - Art

Program Objectives

The Arts have been identified by the U.S. Congress, the College Board, The Partnership for 21st Century Skills, the National Association of Secondary Principals, and the U.S. Department of Education as part of the core curriculum which all students should take as part of their school program. The North Stonington Elementary School Art program offers diverse learning opportunities in art. Courses emphasize problem solving, visual literacy and higher order thinking skills and offer all students the opportunity to:

Recognize the role and importance of art and artists in society, culture, and history
Communicate visually
Express their own feelings and ideas

Opportunities exist for students to display their artwork within the school, district, and the greater community. The arts play a profound role in learning. Experiences in the arts are basic to learning. The arts curriculum offers one way to formulate questions, construct knowledge, express meaning, and solve problems. The arts enhance language facility and the development of expressive skills. Self-esteem, social awareness, critical thinking, sensitivity to others, sensitivity to one's environment, and problem solving are all enhanced with the dynamics of arts infused approach.

Program Activities to be Accommodated

Art classrooms are needed to accommodate all art courses. A kiln room is needed for the clay component. Display cases for student work should be created throughout the school as well as an art exhibition space at the main entrance of the school

Space Occupancy and Design Criteria

The individual utilization the space include the students and Art department teachers. A special education paraprofessional, or a teacher's aide may share space for the instruction of individuals within the regular art studio. The following is a partial list of design elements that should be incorporated into the studio spaces:

- The art classroom configuration should maximize flexibility and provide lecture as well as studio space.
- Access to technology should be provided through the studio.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas.
- Ceiling height and windows should maximize natural light and accommodate delighting.
- Sidelites must be provided adjacent to all classroom doors.
- Cabinets and casework appropriate to the instructional studio function should be provided.
- Special consideration should be given for sound transmission at operable and standard walls to minimize sound infiltration into the adjacent space.
- Speaker systems should be incorporated into all instructional spaces.
- Whiteboards, Tack boards and projection screens should be provided in each instructional space.
- Storage should be provided for ongoing student projects within the studio and in storage rooms.
- Large deep sinks with clay-traps.
- Adjustable multi directional lighting.
- Dedicated Kiln Room
- Enhanced ventilation requirements.
- Student display shelving in all studios.

Existing Conditions

The following table identifies the utilization of existing instructional spaces and notes the net classroom area.

Proposed Program and Concept Plan

The educational program space outlined below is based on renovating the existing facility to meet the program objectives established for North Stonington Elementary School.

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

CONCEPT DESIGN - The art room, kiln room and storage rooms are adjacent to each other and are located on the main floor west wing of the building enabling all students to access the program. The southern and west orientation provides natural light to the program space.



North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications - Art Classroom

Quantity: 1

Proposed SF: 1,200 to 1,250 SF Each

Space Design Concept

The classroom should be designed for an integrated approach to technology and multiple furniture arrangements and classroom configurations. The space will function as an office for the teacher.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction. Display of student work and appropriate storage for on-going projects is required in each studio.

Loose Furnishings

Modular rectangular art tables with chairs
Circular tables for small groups with chairs
Mobile computer stations
Teacher Desk and Chair
Lateral file cabinet

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 2 at 12 linear feet |
| Tack board & display boards | yes – minimum 20 linear feet |
| Projection screen/surfaces | yes |
| Display and book shelves | yes – 12 linear feet |
| Tall wardrobe and storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---|---|---------|-------|
| Floor material: | Polished Concrete | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Open ceiling | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |
| Floor drains with clay traps and access panels. | | | |

Special Requirements

Specialty lighting
Deep sinks with clay traps
HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Operable windows

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Educational Program Specifications - Art Kiln Room

Quantity: 1
Proposed SF: 100 to 150 SF Each

Space Design Concept

The storage should be designed to accommodate storage, of art department specific equipment and the Kiln.

Program Activities

Kiln and storage of educational materials.

Fixed Equipment

Shelves yes – 12 inch deep, maximum 5 shelves high
Secure storage cabinet yes

Finishes

Floor material: Polished Concrete
Base material: Rubber
Wall material: Block / Sheetrock
Wall Finish: Paint
Ceiling material: Acoustical Tile
Ceiling height: 8'-0" minimum
Hardware: ADA compliant - Lockable
Lighting: Standard
Fire extinguisher & suppression: Per code

Special Requirements

HVAC systems exhaust
Kiln with dedicated exhaust

Technology

Power outlet - walls yes
Security yes – per the districts security plan

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications - Art Storage

Quantity: 1
Proposed SF: 150 to 250 SF Each

Space Design Concept

The storage should be designed to accommodate art supplies, media storage, student projects, drying racks and art department specific equipment.

Program Activities

Storage of educational materials.

Fixed Equipment

Shelves yes – 12 inch deep, maximum 5 shelves high
Secure storage cabinet yes

Finishes

Floor material: Polished Concrete
Base material: Rubber
Wall material: Block / Sheetrock
Wall Finish: Paint
Ceiling material: Acoustical Tile
Ceiling height: 8'-0" minimum
Hardware: ADA compliant - Lockable
Lighting: Standard
Fire extinguisher & suppression: Per code

Special Requirements

HVAC systems exhaust

Technology

Power outlet - walls yes
Security yes – per the districts security plan

Educational Program Specifications – Technology Education

Program Objectives

The Technology/Computer Education Department provides a link from the traditional areas of study to the technologies of the future. The department goal is to expose students to a wide array of technological experiences.

Program Activities to be Accommodated

The Technology/Computer Education Coursework focuses on the development and application of technology and the effect that technology has on people, society and the environment. Course strands include Digital Communications, Keyboarding Skills, Presentations and word processing.

Space Occupancy

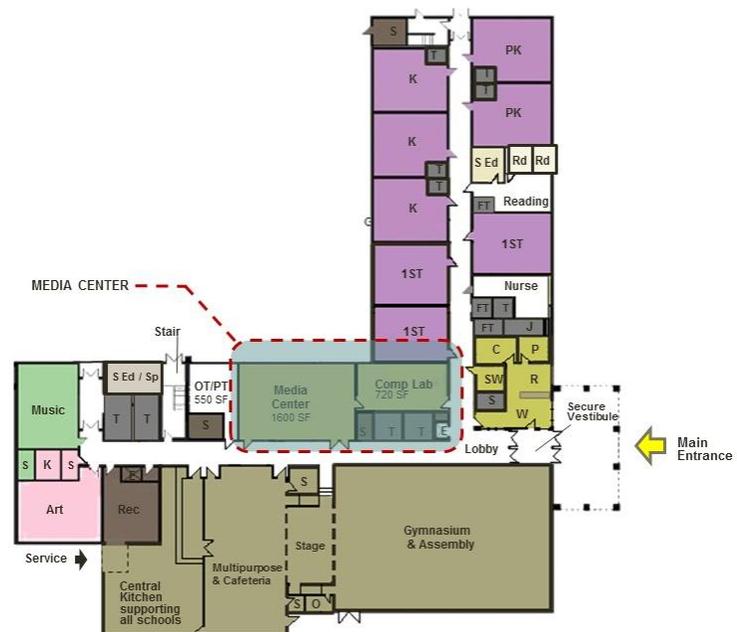
The individual utilization the space include the students and teachers. The following is a partial list of design elements that should be incorporated into the technology education spaces:

- The Lab configuration should maximize flexibility and provide lecture as well as practical applications.
- Access to technology should be provided through the Labs
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas.
- Ceiling height and windows should maximize controlled natural light.
- Cabinets and casework appropriate to the instructional function should be provided.
- Special consideration should be given for sound transmission at operable and standard walls to minimize sound infiltration into the adjacent space.
- Speaker systems should be incorporated into all instructional spaces.
- Whiteboards, Tack boards and projection screens should be provided in each instructional space.
- Storage should be provided for ongoing student projects within the lab and in storage rooms.
- Enhanced ventilation requirements.

Existing Conditions

The existing labs although adequate in size, lack the appropriate support space and equipment, storage.

CONCEPT DESIGN - The computer room is adjacent to the media center and is located on the main floor west wing of the building enabling all students to access the program.



North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Technology Computer Lab

Quantity: 1
Proposed SF: 700 to 750 SF Each

Space Design Concept

The lab should be designed for an integrated approach to technology and multiple furniture arrangements and room configurations.

Program Activities

Support a number of teaching styles, including lectures, small group and individual instruction. The lab will be equipped with computer work stations and planning areas for all students. Large format printing, storage of printing and electronic supplies and presentations of student work need to be accommodated.

Loose Furnishings

Workstations with side tables for large format documents
Circular tables for small groups with chairs
Mobile computer stations
Teacher Desk and Chair
Lateral file cabinet
Electronic equipment such as printers, scanners and copiers

Fixed Furnishings

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 2 at 12 linear feet |
| Tack board & display boards | yes – minimum 20 linear feet |
| Projection screen/surfaces | yes |
| Display and book shelves | yes – 12 linear feet |
| Tall wardrobe and storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|-------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Open ceiling | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi-level direct/indirect and task lighting | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
Dedicated electrical circuits with a UPS back up system
HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Operable windows

Technology

| | |
|----------------------------------|---|
| Power outlet - floor and walls | yes – as appropriate to provide multiple workstation configurations |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Educational Program Specifications – Technology Education Storage

Quantity: 1
Proposed SF: 150 to 250 SF Each

Space Design Concept

The storage should be designed to accommodate supplies, media storage, student projects, and department specific equipment.

Program Activities

Storage of educational materials.

Fixed Equipment

Shelves yes – 12 inch deep, maximum 5 shelves high
Secure storage cabinet yes

Finishes

Floor material: Polished Concrete
Base material: Rubber
Wall material: Block / Sheetrock
Wall Finish: Paint
Ceiling material: Acoustical Tile
Ceiling height: 8'-0" minimum
Hardware: ADA compliant - Lockable
Lighting: Standard
Fire extinguisher & suppression: Per code

Special Requirements

HVAC systems exhaust

Technology

Power outlet - walls yes
Security yes – per the districts security plan

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Media Center

Program Objectives

The mission of the library is to ensure that students develop both an enjoyment of reading and the information gathering skills that enable them to be independent, effective, responsible, critical, and creative users of ideas and information. Data should be available in a variety of formats, including print, non-print, and electronic.

The media center also coordinates the use and maintenance of instructional equipment. The library will consist of student seating areas with tables and study carrels, technology areas for student access to computers and AV equipment, classroom areas for instruction, shelving and storage for materials, a circulation area, small group meeting area, production room, library staff offices and workroom, storage room for equipment, and a professional library area for teachers.

The media center will consist of a staff and student production area, offices for the media director and secretary, secured storage areas, and areas for copying and laminating.

Program Activities to be Accommodated

The library will house individual and class research using/viewing print, non-print, and computer resources; student instruction and activities in classroom areas; student pleasure reading; circulation of materials; student copying and compilation of research; library staff processing of materials; storage of materials and equipment; and professional reading and research for teachers.

Space Occupancy and Design Criteria

The library will have seating for up to 60 students, including space for a minimum of 20 computers, a small group meeting area, offices for the library media specialists; library assistants; and professional library to seat a minimum of 12 at tables and carrels. The media center will provide area for the Media director, secretary, and assistants; teachers, staff, and students involved in media production.

The following is a partial list of design elements that should be incorporated into the spaces:

- The Media Center configuration should maximize flexibility and provide lecture as well as general seating and computer workstation space.
- Access to technology should be provided through the Media Center.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in designated areas.
- Ceiling height and windows should maximize natural light and accommodate day-lighting.
- Sidelites must be provided adjacent to all doors.
- Cabinets and casework appropriate to the media center functions should be provided.
- Special consideration should be given for sound transmission.
- Speaker systems should be incorporated into designated instructional areas.
- Whiteboards, Tack boards and projection screens will be provided at each designated instructional areas
- Dedicated storage should be provided.
- Adjustable multi directional lighting.
- Enhanced ventilation requirements.
- The library workroom should be located near the circulation desk-and should have a sink. Maximum sight lines and visibility throughout the library space for supervision are needed.

Existing Conditions

The following table identifies the utilization of the existing media center spaces. The existing media center configuration does not provide clear sight-lines and lacks the appropriate support space.

Current Space Limitations:

The library / Media Center lack amenities in the support spaces.

Proposed Program and Concept Plan

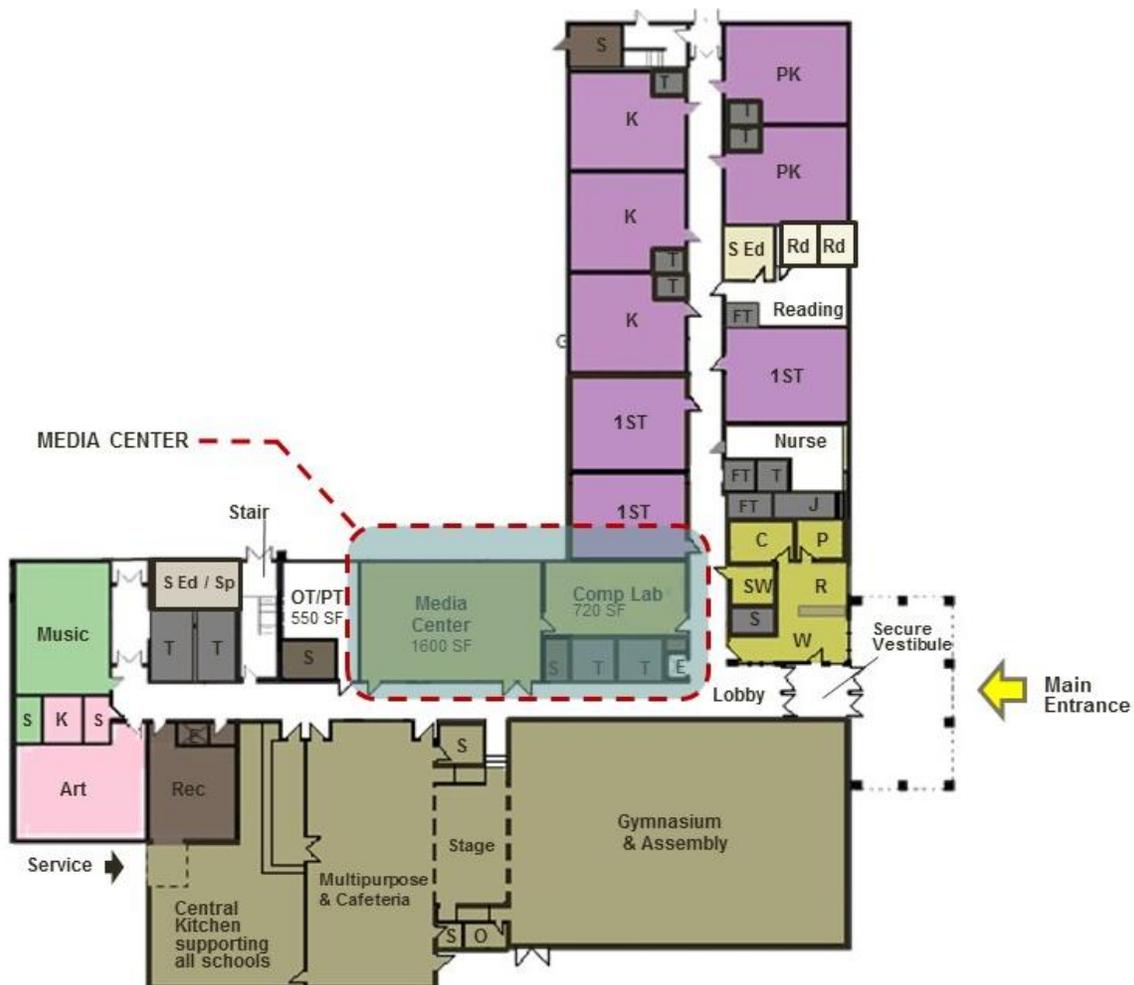
The educational program space outlined below is based on renovating the existing facility to meet the program objectives established for North Stonington Elementary School.

Program Requirements

Student seating areas with tables and study carrels, technology areas for student access to computers and AV equipment, classroom areas for instruction, shelving and storage for materials, a circulation area, small group meeting area, production room, library staff offices and workroom, storage room for equipment, and a professional library area for teachers.

Design Concept:

The Media Center, storage, office and workrooms are located on the main level. A single level space with high ceiling, abundant natural light and easy access to the student and the community.



North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications - Media Center

Quantity: 1
Proposed SF: 1,750 to 2,250 SF

Space Design Concept

The media center should be designed for an integrated approach to technology and multiple furniture arrangements and classroom configurations.

Program Activities

The library will have seating for up to 60 students, including space for a minimum of 20 computers, a small group meeting area, offices for the library media specialists; library assistants; and professional library to seat a minimum of 12 at tables and carrels.

Loose Furnishings

Tables with chairs
Circular tables for small groups with chairs
Mobile computer stations
Carrels
Shelving

| | |
|-------------------------------|-----|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes |
| Tack board & display boards | yes |
| Projection screen/surfaces | yes |
| Display and book shelves | yes |

Finishes

| | | | |
|---------------------------------|---|---------|-------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Open ceiling | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Operable windows

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Educational Program Specifications - Media Center Work Room and Office

Quantity: 1
Proposed SF: 150 to 250 SF

Space Design Concept

The office/workroom should be designed to accommodate the media specialists desk and the work/planning area, copier, limited equipment and secure media storage.

Program Activities

Media Directors office including the planning and preparation area.

Loose Furnishings

| | |
|-------------------------------|------------------|
| Desks and Chair | |
| Computer stations | |
| Work table and Chair | |
| Lateral/vertical file cabinet | yes – 4 required |

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 1 at 8 linear feet |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | yes |
| Display and book shelves | yes – 8 linear feet |
| Tall wardrobe and storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Operable windows

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications - Media Center Storage

Quantity: 1
Proposed SF: 200 to 250 SF Each

Space Design Concept

The storage should be designed to accommodate supplies, media storage and department specific equipment.

Program Activities

Storage of educational materials.

Fixed Equipment

| | |
|------------------------|--|
| Shelves | yes – 12 inch deep, maximum 5 shelves high |
| Secure storage cabinet | yes |

Finishes

| | |
|---------------------------------|--------------------------|
| Floor material: | VCT |
| Base material: | Rubber |
| Wall material: | Block / Sheetrock |
| Wall Finish: | Paint |
| Ceiling material: | Acoustical Tile |
| Ceiling height: | 8'-0" minimum |
| Hardware: | ADA compliant - Lockable |
| Lighting | Standard |
| Fire extinguisher & suppression | Per code |

Special Requirements

HVAC systems exhaust

Technology

| | |
|----------------------|---------------------------------------|
| Power outlet - walls | yes |
| Security | yes – per the districts security plan |

Educational Program Specifications – Multi-Purpose Room Cafeteria/Assembly

Program Objectives/Goals: The North Stonington Elementary School Multi-Purpose serves a multitude of functions for the school and entire North Stonington community. The Multipurpose room should be designated as the cafeteria and assembly area with use of the stage. The food service program is a vital part of today's educational service and is an integral part of the overall educational plan for a school facility program. Nutrition requirements based on a healthy diet, sufficient time for serving, and eating arrangements must be given a high priority as they contribute to the health and welfare of all students and staff. The dining area should accommodate a minimum of 200 students at a time. The cafeteria should be designed as a comfortable and multifunctional space as it typically serves as a banquet facility, school dance venue, meeting room, and home to other after school and community activities. After school hours the town of North Stonington makes use of the room for Park and Recreation activities, Boy and Girl Scouts, Middle and High School Events, large town meetings and location for the town emergency shelter.

The kitchen/food preparation area that will accommodate hot and cold meal serving lines is imperative. A separate washing/disposal area for elimination of waste and cleaning utensils should be maintained. This area should be readily accessible to the serving area for quick redistribution of food to the young students. There should be an access area for quick and convenient disposal of solid waste products and paper trash without distraction to diners or school traffic.

Program Requirements and Activities- The main school use for the Multi-purpose room would be to serve as the cafeteria and assembly room.

- Technology – Whiteboard/Smart-board capabilities
- Sound System
- Stage for assemblies
- Storage space for cafeteria tables.

Space Occupancy: Daily students, kindergarten through grade five, eat lunch in 25 minute lunch waves. Currently there are 20 cafeteria tables to seat half of the student population during one lunch wave. The space should be designed as a flexible environment that is able to accommodate a number of lunch wave and appropriate assembly activities. The room is also used for after school activities such as Drama Club and enrichment clubs, athletic activities for the Middle and High School, scouts, town meetings, park and recreation and other community use activities. There is a need for six doors for entrance and exit as well as emergency exits; Windows are a necessary for natural light.

Existing Conditions:

- Serves as the gymnasium, cafeteria, and a community room.
- Extremely limited electric outlets, limited 'drop' for technology – these drops dictate room arrangement
- Tile floor that is continually slippery for PE classes
- Projection screen on stage
- 20 cafeteria tables that are stored within the room even during PE classes
- Small area off the stage with the handicapped elevator used as office for PE teacher
- Limited space for PE storage – old cold storage closet
- Storage of folding chairs under the stage

Space Design Concept:

The Cafeteria and Multi-purpose Room should be designed for appropriate set up of the cafeteria tables for lunch, storage of the cafeteria tables when not in use, for an integrated approach to technology, and a physical space large enough for various learning tasks and gatherings



North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Multi-Purpose Room / Assembly

Quantity: 1

Proposed SF: 3,500 – 4,000

Space Design Concept:

The Multi-purpose Room should be designed for appropriate set up of the cafeteria tables for lunch, storage of the cafeteria tables when not in use, for an integrated approach to technology, and a physical space large enough for various learning tasks and gatherings.

- Infrastructure that supports and enhances current and future technology (including multiple outlets on walls)
- Furniture and equipment designed for multi-aged students and adults

Stage should be designed for presentations both for school and community use. The sound and technology systems must support such activities as Drama Club presentations, Band and Chorus Concerts, banquets, and Town Meetings.

Program Activities

- The North Stonington Elementary School Multi-Purpose serves a multitude of functions for the school and entire North Stonington community including the cafeteria and assemblies.

Loose Furnishings

20 cafeteria tables with attached seating

2 rectangular tables

Fixed Equipment

| | |
|-------------------------------|--------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes |
| Tack board & display boards | yes – 2 at 6 linear feet |
| Projection screen/surfaces | yes |
| Sound system | yes – |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | VCT / VET | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block/Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning

Natural and indirect/direct Lighting

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Educational Program Specifications – Cafeteria / Multi-Purpose

Quantity: 1
Proposed SF: 2,500 to 3,050 SF

Space Design Concept

A multi-functional space that is used to serve students lunch and provides options for large and small assemblies.

Program Activities

Student dining area

Loose Furnishings

Tables with chairs
Raised platform
Vending machines

| | |
|-------------------------------|-----|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes |
| Tack board & display boards | yes |
| Projection screen/surfaces | yes |
| Display and book shelves | no |

Finishes

| | | | |
|---------------------------------|---|---------|-------|
| Floor material: | VCT / VET | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical and Open ceiling | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
Drinking Fountains
HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Power requirements for portable hot and cold food serving units

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district’s technology plan |
| Wireless & Hard wired Network | yes – per the district’s technology plan |
| Integrated public address system | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Kitchen & Servery

Quantity: 1
Proposed SF: 1,500 to 2,000 SF

Space Design Concept

An efficient commercial kitchen with appropriate support spaces.

Program Activities

Preparation and serving meals, primarily lunch.

Loose Furnishings

Food preparation and serving utensils equipment
Tables
Portable carts
Portable serving stations
Portable hot and cold food storage units

| | |
|-------------------------------|---|
| Acoustical treatment | Acoustical Tile |
| Marker/white board (Multiple) | yes – Limited to the offices and planning areas |
| Tack board & display boards | yes |
| Projection screen/surfaces | no |
| Display and book shelves | no |

Finishes

| | | | |
|---------------------------------|---|---------|-------|
| Floor material: | Quarry Tile | | |
| Base material: | Tile | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical and Open ceiling | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
Drinking Fountains
Hand Sinks
Food preparation equipment
HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Power requirements for portable hot and cold food serving units

Technology

| | |
|----------------------------------|--|
| Power outlet - walls | yes – as appropriate |
| Media projection system | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Kitchen Storage

Quantity: 3

Proposed SF: 150 to 350 SF Depending on the specific use.

Space Design Concept

The storage should be designed to accommodate supplies, food prep and service related products.

Program Activities

Storage of food service related materials.

Fixed Equipment

Shelves yes – 12 inch deep, maximum 5 shelves high
Secure storage cabinet yes

Finishes

Floor material: VCT
Base material: Rubber
Wall material: Block / Sheetrock
Wall Finish: Paint
Ceiling material: Acoustical Tile
Ceiling height: 8'-0" minimum
Hardware: ADA compliant - Lockable
Lighting: Standard
Fire extinguisher & suppression: Per code

Special Requirements

HVAC systems exhaust

Technology

Power outlet - walls yes
Security yes – per the districts security plan

Educational Program Specifications – Physical Education & Fitness

Program Objectives

The physical education/health programs goal is to facilitate all students so that they can develop their physical capacities and capabilities in order to help them understand their strengths and weaknesses. The athletics program is designed to give students an opportunity to develop and demonstrate strengths in activities such as basketball, soccer, etc.

Program Activities to be Accommodated

The facilities will accommodate physical education and athletic activities for the entire student population. The facilities required to achieve the department's goal for physical education/health and athletics, are identified below.

- Main gymnasium (4 Teaching Stations)
- Storage for all equipment
- Separate boys' and girls' locker rooms
- Athletic Directors Office
- Office, Lockers, Toilet and shower facilities for the PE Staff
- Outdoor Equipment Storage

Space Occupancy and Design Criteria

The individual's utilization the space include the students and teacher, volunteers and the community. The following is a partial list of design elements that should be incorporated into the design of the PE spaces:

- The Gymnasiums should maximize flexibility and provide adequate seating for state wide competitions.
- Access to technology should be provided through the instructional and office areas.
- Digital projection systems should be utilized for visual display.
- Interactive whiteboards should be installed in all instructional areas.
- Ceiling height and windows should maximize natural light and accommodate day-lighting.
- Sidelites must be provided adjacent to all instructional classroom doors.
- Cabinets and casework must be provided in all instructional classrooms.
- Speaker systems should be incorporated into all instructional spaces.
- Whiteboards, Tack boards and projection screens should be provided in each instructional space.
- Adjustable multi directional lighting.
- Video recording infrastructure must be installed in the gymnasiums for the live recording of events.
- Enhanced ventilation requirements.
- Masonry, ceramic tile and similar finish products should be used in all locker/toilet rooms.
- Natural light should be provided in the gymnasiums.
- Provisions for the storage of equipment for all sports activities.
- All facilities should meet Title IX requirements.

Existing Conditions: The following table identifies the utilization of existing instructional program spaces. The most significant program deficiency in the Physical Education Department is the shared use of the space as an auditorium and cafeteria.

Current Space Limitations:

Lack of instructional space for health, equipment storage space, inadequate office.
Shared use of space with cafeteria and assembly functions

Proposed Program and Concept Plan

The program developed for the Physical Education program is based on meeting the curriculum need of North Stonington Elementary School. Right sizing the program areas, addressing ADA/OCR; and resolving the natural light environmental issues have been the programming priorities. In developing the plan a key component was the introduction of a new gymnasium space that addressed all the safety concerns identified under the existing conditions report.

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Design Concept: The existing gymnasium will be renovated to meet code and a dedicated physical education function. The space will also be available for school wide assemblies.



Educational Program Specifications – Gymnasium

Quantity: 1
Proposed SF: 6,500 to 8,500 SF

Space Design Concept

The Main Gymnasium should be designed to accommodate a full size court for basketball and seating for 150 Spectators. The Gyms will be designed with an integrated approach to technology, and will function as a physical education instructional area for 2 classes.

Program Activities

Primarily PE activities and should support a number of teaching styles, including lectures, small group and individual instruction. Appropriate storage for equipment for the gym.

Loose Furnishings

Physical Ed Equipment

Fixed Equipment

| | |
|---|----------------------------------|
| Acoustical treatment | yes – Acoustical Deck and panels |
| Marker/white board (Multiple) | no |
| Tack board & display boards | no |
| Projection screen/surfaces | yes – Retractable |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | | | |
|---------------------------------|--|---------|-------|
| Floor material: | Wood resilient sports flooring | | |
| Base material: | Wood | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Wall material: | Wall padding | | |
| Ceiling material: | Open ceiling painted with acoustical deck | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Maximize natural light – Avoid potential for glare | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
Basketball backboards
HVAC systems including Air Conditioning
Mechanically operated divider curtains or rigid folding partitions
Climbing wall
Protection for all equipment
Provision for floor scansions for volleyball and other sports.
Access to power and data in the floor
Retractable bleachers

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district’s technology plan |
| Wireless & Hard wired Network | yes – per the district’s technology plan |
| Integrated public address system | yes |

Educational Program Specifications – PE Storage

Quantity: 2
Proposed SF: 350 to 500 SF

Space Design Concept

The storage should be designed to accommodate department specific equipment separated as indoor and outdoor equipment.

Program Activities

Storage of PE Equipment.

Fixed Equipment

Shelves yes – 12 inch deep

Finishes

| | |
|---------------------------------|--------------------------|
| Floor material: | VCT |
| Base material: | Rubber |
| Wall material: | Block / Sheetrock |
| Wall Finish: | Paint |
| Ceiling material: | Acoustical Tile |
| Ceiling height: | 8'-0" minimum |
| Hardware: | ADA compliant - Lockable |
| Lighting | Standard |
| Fire extinguisher & suppression | Per code |

Special Requirements

HVAC systems exhaust

Technology

| | |
|----------------------|---------------------------------------|
| Power outlet - walls | yes |
| Security | yes – per the districts security plan |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Administrative Offices

Program Objectives/Goals: The administrative offices will be designed to support the efficient operation of North Stonington Elementary School. The administrative suite has space for the waiting and reception area, office area for two support/secretarial staff and the office of the school principal. The administrative offices should be located at the main school entrance and provide control for all visitors and students entering and leaving the school.

Program Requirements and Activities: The administrative facilities will accommodate offices, and other administrative support spaces including the following:

- Offices
- Conference Room
- Work Room
- General & student record storage
- Secretarial stations
- Waiting Area
- Storage Space/ Closet
- Handicapped Accessible Toilet

Space Occupancy: The administrative office space is utilized by the administration, faculty and staff, students, parents, volunteers and the community.

Existing Conditions - The existing office space is not located at the direct entrance of the building and does pose a security risk. Visitors entering the building must walk a distance to check in at the office. There is a small waiting area with four chairs and the staff mailboxes in the same location. The school's secretary is separated from the waiting area by a tall counter. Student records are stored in the main room. Off of the secretaries space is a conference room, a small work room with an office Para-professional's desk, a copy machine, a refrigerator and a microwave and finally a small office for the principal. There is no restroom in the area.

Space Design Concept: The administrative office area provides space for the school's communication, organization and administrative functions.

- The main office entrance will lead all visitors to pass through the office for improved security
- Built-in, fireproof cabinetry for student records and school documents
- Principal office with built-in cabinets and meeting space
- Ceiling height and windows should maximize natural light and accommodate day-lighting
- Side-lites must be provided adjacent to all doors
- Cabinets and secretarial workstations
- Waiting areas should be provided.
- Individualized temperature control for all spaces.
- Communication and video security control to all spaces and egress points.
- Restroom for faculty, staff and visitors
- Exit Door



Educational Program Specifications – Principal’s Office

Quantity: 1
Proposed SF: 200 to 250 SF

Space Design Concept: The office should be designed to allow visibility of central work area and include adequate space for a small conference/meeting area. Built in cabinetry and desk will support space organization

Program Activities - Administrative office of the principal and small meeting groups

Loose Furnishings

| | |
|-----------------------------|-----------------------------|
| Conference table and chairs | Yes |
| Computer station | Yes – Wireless capabilities |
| Desk and Chair | Yes |
| Lateral file cabinet | Yes |
| Book Shelves | Yes |

Fixed Equipment

| | |
|---|-----------------------|
| Acoustical treatment | yes |
| Marker/white board | no |
| Tack board & display boards | yes – 6 linear feet |
| Projection screen/surfaces | no |
| Display and book shelves | no – Loose Furnishing |
| Tall wardrobe and storage cabinet | yes |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|-------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical | | |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Natural and indirect/direct Lighting
Operable windows

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district’s technology plan |
| Wireless & Hard wired Network | yes – per the district’s technology plan |
| Integrated public address system | yes |
| Television hook-up | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications –Main Office/Conference Room

Quantity: 1
Proposed SF: 250 to 400 SF

Space Design Concept

The conference rooms should seat 10 to 16 individuals in a comfortable setting. The large conference room should include voice, video, and data and digital projection.

Program Activities

Meeting space and small group presentation

Loose Furnishings

Conference table for small groups with chairs 14 to 16 in the large conference room.

Fixed Equipment

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board | yes – 1 at 8 linear feet |
| Tack board & display boards | yes – 2 at 4 linear feet |
| Projection screen/surfaces | yes |
| Flag Bracket & Flag | yes |
| Display and book shelves | yes |
| Storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting Multi-Level
HVAC systems including Air Conditioning

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | yes |
| Interactive Whiteboard | yes |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | yes |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Educational Program Specifications – Main Office Waiting Area

Quantity: 1
Proposed SF: 50 to 100 SF Each

Space Design Concept

There will be one designated waiting area for the Main Office. It will be located adjacent to the reception/secretarial area with seating for 6 to 8.

Program Activities

Waiting area for students and visitors

Loose Furnishings

Comfortable seating
Small tables

Fixed Equipment

| | |
|---|--------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | | | |
|---------------------------------|------------------------|---------|---------------|
| Floor material: | Carpet | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Standard | | |
| Windows | Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Display stand for school related information.

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – data ports |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Secretarial Area

Quantity: 1

Proposed SF: 500 to 600 SF (Room for two secretaries)

Space Design Concept

The secretarial stations will be designed to facilitate efficient operations and planning functions of the school. The space should be open and inviting to all visitors, yet also provide privacy of records. Secure casework must be provided for storage of records and supplies. There should be a counter that designates the waiting area from the secretarial area.

Program Activities

Support administrative staff and school operations.

Loose Furnishings

Computer Workstations with chair

Work Tables

Desk and Chair

Lateral file cabinet

Visitor Chairs

Fixed Equipment

| | |
|---|--------------------------|
| Acoustical treatment | yes |
| Marker/white board | yes |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | yes |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes – lockable |
| Staff Mailboxes | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Tile | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting Task lighting
HVAC systems including Air Conditioning
Natural Lighting
Operable windows

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |
| Television hook-up | yes |

Educational Program Specifications – Administrative Office Storage

Quantity: 1
Proposed SF: 100 to 250 SF Each

Space Design Concept

Storage of records and main office supplies in a secure fire rated storage cabinet

Program Activities

Student record storage

Loose Furnishings

Work Table
File cabinets

Fixed Equipment

| | |
|---|-----|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | yes |
| Fixed cabinets and accessible work surfaces | yes |
| Safe | yes |

Finishes

| | | | |
|---------------------------------|-------------------|---------|---------------|
| Floor material: | VCT | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Standard | | |
| Windows | No | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning
Sink and counter space

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Health Office / Nurse

Program Objectives/Goals: The elementary school health office works to maintain student health through screening performed during the school year, medicating and supporting students with health plans, and aiding and comforting ill or injured students. The nurse and health aide help students achieve and maintain high standards of health. The school nurse also acts as a resource person for health education programs, families, students and provides support to school personnel. The nurse should be involved in the coordination with special education students.

Program Requirements and Activities: - Currently North Stonington Elementary School 382 students who are serviced by fulltime nurse and half-time school health aide in the Health Office. The program encompasses many activities, including routine and special physical examinations, screening tests, vision and height/weight assessments, hearing assessments, scoliosis exam, and follow-up immunization against communicable disease.

- Supporting students with healthcare plans
- Responding to students with injuries or common illnesses
- Yearly screenings
- Maintaining student health records
- Verifies student health forms to ensure health of the community

Space Occupancy: The health office must have space for the following:

- Nurse's Office Space
- Waiting area for up to 5 students
- Area for children with infection who need to be isolated
- Handicapped accessible restroom with storage

Existing Conditions: The Health Room is currently made up of an office where two desks, all file cabinets and storage cabinets, and bench for students are waiting for help. The second room has the sink, two beds that provide no privacy, locked medicine cabinet and a storage cabinet as well as the restroom. During screenings, there is no room for ill children.

Educational Program Specifications – Health Office

Quantity: 1
Proposed SF: 650

Program Requirements

The Health Office should have adequate private space for health examinations, conferences with students/parents, rest, and isolation. An accessible toilet must be included in the overall health program area.

Space Design Concept:

Student Records Vault

Waiting area for up to 5 students (the current one only houses two comfortably)

Examination Area/Room (with dressing room) ** within the exam area/room- a separate area for medication pass and diabetics- currently there is no privacy for these students. Not only do other students walk in on them but parents and teachers *

- o Sink & storage
- o ** 20 feet of open space within the office for vision screenings

Nurse's Office Space – two desks (The nurse's desk be in a separate room, with glass windows for supervision and a door for privacy for conversations with parents and teachers)

Isolation Space (currently houses two students and acts as nurse storage)

Handicap Bathroom and sink (the nurse's office currently uses the Main Office bathroom)

Program Activities

Support the health and well-being of the North Stonington Elementary School community

Loose Furnishings:

2 Desks and Chairs
Waiting area chairs or bench
Beds

Fixed Equipment

| | |
|---|-----|
| Marker/white board | yes |
| Tack board & display boards | no |
| Projection screen/surfaces | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinets | yes |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---------------|----------------|-----------------------------|
| floor material: | TBD | base material: | TBD |
| wall material: | TBD | finish: | TBD |
| ceiling material: | TBD | height: | 8'-0" minimum |
| hardware: | ada compliant | lighting | multi level direct/indirect |
| fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
HVAC systems including Air Conditioning
Natural and indirect Lighting
Operable windows

Technology

| | |
|--------------------------------|---------------------------------------|
| Power outlet - floor and walls | yes |
| Media projection system | no |
| Smart-boards | no |
| Voice, video and data ports | no |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the schools technology plan |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Health Office Storage

Quantity: 1
Proposed SF: 150

Program Needs:

Storage space for special needs equipment
Locked storage for medical supplies
Lavatory storage for student training
Storage for extra clothing
Fireproof file cabinets for student records

Program Activities

Storage of health related equipment and secure medicine storage cabinet

Loose Furnishings

Lateral file cabinet

Fixed Equipment

| | |
|---|-----|
| Storage space for special needs equipment | yes |
| Medical supply storage | yes |
| Secure storage cabinet | yes |

Educational Program Specifications – Faculty Lounge and Workroom

Program Objectives/Goals: The Faculty Lounge and Workroom serves as a space for the teachers to collaborate, work, eat meals and prepare materials for students.

Program Requirements and Activities: The faculty and staff utilize this room to meet and collaborate in teams, prepare work for students, communicate with families by phone, and prepare and eat meals.

Faculty Lounge

Appliances, seating, and room for adults to eat, and socialize
Team collaboration

Space Occupancy: The 65 faculty and staff members use the space throughout the day and evening as well as PTO members and community members.

Existing Conditions:

The room has two copy machines, a laminator, large work table, a refrigerator, two microwaves, a small counter space with a sink and two rectangular tables with 10 chairs. One of the two school faculty restrooms is adjacent to the faculty room.

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Faculty Lounge

Quantity: 1
Proposed SF: 350 to 550 SF Each

Space Design Concept:

Faculty Lounge: A space with comfortable seating that teachers can use in their free or lunch time for informal discussions with co-workers. The space can be adjacent to the work room and have faculty toilets nearby.

- Appliance for refrigeration and preparation of food
- Table and chairs seating for at least 20 adults
- Private area for phone calls
- Comfortable seating for at least 5 – 6 adults

Program Activities

Provide appropriate and comfortable area for break and lunch times and space for preparation of instructional materials.

Loose Furnishings

Faculty Lounge

Circular table for small groups with chairs
Comfortable Chairs

Fixed Equipment

| | |
|---|--------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Tile | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Educational Program Specifications – Faculty Workroom

Quantity: 1

Proposed SF: 300 to 450 SF Each

Space Design Concept:

Workroom: A space for faculty and staff to copy and prepare work for classroom and students.

- Two copy machines
- Heavy Duty Laminator
- Large table for project work
- Seating

Program Activities

Provide appropriate and comfortable area for break and lunch times and space for preparation of instructional materials.

Loose Furnishings

Workroom

Computer Workstation with chair

Copy Machines

Laminator

Work table and chairs

Bookcases

Fixed Equipment

| | |
|---|--------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | yes |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|---|---------|---------------|
| Floor material: | Tile | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical Tile | height: | 8'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Multi level direct/indirect | | |
| Windows | Operable with blinds - Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

HVAC systems including Air Conditioning

Technology

| | |
|----------------------------------|--|
| Power outlet – floor | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Faculty Lounge/Workroom Storage

Quantity: 1
Proposed SF: 150 to 250 SF Each

Program Activities

Storage of food and eating materials
Storage of food and educational materials

Loose Furnishings

Refrigerator
Copiers
Laminators
Work table and chairs
Bookcases

Fixed Equipment

| | |
|--|-----|
| Storage space | yes |
| Storage cabinet | yes |
| Storage space for each teacher's materials | yes |
| Curriculum material shelves | yes |
| Secure storage cabinet | yes |

Technology

| | |
|---------------------|-----|
| Power outlet – wall | yes |
|---------------------|-----|

Educational Program Specifications – Facilities Management and Support

Program Objectives

The physical plant and building systems infrastructure at North Stonington Elementary School must meet the latest building, Fire and Life Safety codes adopted by the State of Connecticut. In addition the renovated facility must meet and/or exceed the High Performance building standards adopted by the State, and achieve a LEED Silver or equivalent certification. Alternative energy systems, energy efficiency and sustainable design solutions, should be implemented in the development of the project to attain the communities goal of environmental stewardship.

Program Activities to be Accommodated

The facilities management department is responsible for the maintenance of North Stonington Elementary School and will address the building systems and spaces identified below:

- Main Boiler Plant
- Emergency Generator
- Electrical Service and distribution
- Power Backup Systems
- Domestic Hot and Cold Water Systems
- Heating, Ventilation and Air Conditioning
- Fire Alarm Systems
- Sprinkler Systems
- Waste Water Systems
- Storm Drainage Systems
- Alternative Energy Systems
- Plant Maintenance / Custodial
- Building Receiving and Storage
- Equipment Storage
- Toilet Facilities
- Janitors Closets
- Maintenance Shop
- Custodial Lounge and Work room
- Custodial Locker Rooms
- Building and Grounds Office and Records Storage

Space Occupancy and Design Criteria

The individuals utilizing the facilities management and maintenance spaces include custodians and building engineers and contract staff, and school administration. The following is a partial list of design elements that will be incorporated into the design of the Building Systems:

- **Fire Protection Systems**
 - The existing service entrances are recommended to be retained and reconfigured for final special layout.
 - The system distribution is recommended to be reconfigured based on final special layout.
 - All sprinkler heads are recommended to be replaced.
 - Complete system is recommended to be recertified at project completion.
 - Stage protection to be modified to current requirements.
- **Plumbing Systems**
 - Replace all existing domestic cold water mains and modify service entrance for new special layout.
- **Natural Gas**
 - Combine natural gas services of multiple boiler rooms for centralized network.

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

- **Sanitary Service**
 - Completely camera survey exiting sanitary network in conjunction with complete cleaning of all pipes.
 - Reconfigure pipes to accommodate new special layouts.
- **Storm System**
 - Completely camera survey existing storm network in conjunction with complete cleaning of all pipes to accommodate adding and connecting new risers.
 - All drains shall be replaced.
- **Domestic Hot Water**
 - Provide centralized domestic hot water production for facility.
 - Maintain pool area as separate high efficiency plant.
 - Replace all existing domestic hot water mains.
- **Heating**
 - Replace heating system throughout (boilers pumping, distribution piping, terminal units) with one central plant. {3 boilers cleaver brooks 4s series, 2 at 500, 1 at 150; 2 100hp vfd pumps}
- **Ventilation**
 - Provide air conditioning in all spaces. New roof mounted units serving classrooms (1 per 8 classrooms).
 - All major spaces to receive new roof mounted air handling units with hot water coils.
 - Each individual space to be provided with variable air volume air conditioning. The building to be provided with high efficiency centralized airconditioning network. Central chiller preferred. Alternates systems to be evaluated.
 - Replace all exhaust fans.
 - Replace all existing exhaust ductwork.
 - Remove all unit ventilators in school.
 - Replace temperature control system throughout with electric/electronic.
- **Electrical Systems**
 - Provide new emergency generator for school.
 - Allow for replacing of all corridor lighting in and high school.
 - Upgrade (increase) electrical service entrance at high school (2 - 3000 a mdp's, 480v)
 - Replace all existing electrical panels prior >91.
 - Allow for replacing of all lighting in school with energy efficiency lighting.
 - Modify existing telephone system for new layouts.
 - Modify clocks for new layouts.
 - Provide new fire alarm throughout facilities (expand existing network).
- **Security System**
 - Provide a new security system based on video surveillance and a proximity card access and monitoring system
- **Technology Infrastructure**
 - Install an updated wired and wireless infrastructure throughout the facility
- Ceiling height and windows should maximize natural light and accommodate day-lighting.

Existing Conditions: The current condition of the building systems are described in the Section three of the study. The existing space for maintenance, storage, toilets and circulation is adequate; however the specific locations are not adequate at the upper levels of the academic wing.

Current Space Limitations:

Lack of dispersed storage space through all levels of the building.

Proposed Program and Concept Plan

The program developed for the Building maintenance and support facilities is based on meeting the latest codes and the space requirements of the energy's systems that will be designed for North Stonington Elementary School. Addressing ADA/OCR and resolving the natural light environmental issues will be programming priorities. The proposed plan will provide the opportunity for additional storage.

Design Concept:

The design approach reorganizes the existing program to meet the following priorities:

- Provide dispersed space for general storage, janitor's closet and mechanical equipment.
- The use of smaller energy efficient equipment will reduce the boiler plant footprint and increase general storage capacity.
- Toilet facilities will be renovated and made accessible throughout the facility.

Program Requirements

The key spaces requirements of the Facilities Management office includes, space for the building MEP & FP Systems, Storage, Maintenance department space, building circulation and toilets.

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Maintenance Offices & Workroom

Quantity: 1
Proposed SF: 200 to 300 SF

Space Design Concept

The maintenance office and work room space should be centrally located and have access to an exterior ramp. The space will function as a meeting room for the custodial staff and will house maintenance related equipment. The space will function as a changing area for staff, include toilets and shower facilities and be adjacent to the team rooms

Program Activities

Planning and support area for the maintenance staff.

Loose Furnishings

| | | |
|------------------------------------|----------------------|-----------------|
| Rectangular art tables with chairs | Extension ladder | Custodial carts |
| Computer stations | Thirty foot man lift | Flat cart |
| Lateral and Vertical file cabinet | Pallet jack | Vacuum Cleaners |
| Workbench with Vise | Desk Mover | Floor Machines |
| Maintenance Tools | Hand Truck | First Aid Kit |
| Stepladders | Floor Fans | Sweepers |

| | |
|---|------------------------------|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | yes – 1 at 12 linear feet |
| Tack board & display boards | yes – minimum 10 linear feet |
| Projection screen/surfaces | no |
| Book shelves | yes – 12 linear feet |
| Storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |
| Sink | |

Finishes

| | | | |
|---------------------------------|------------------------|---------|-------|
| Floor material: | VCT / VET | | |
| Base material: | Rubber / Vinyl | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Acoustical ceiling | | |
| Hardware: | ADA compliant | | |
| Lighting | Standard | | |
| Windows | Maximize natural light | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Specialty lighting
Deep sinks, eyewash and body shower
HVAC systems including Air Conditioning
Natural and indirect/direct Lighting

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | yes – per the district's technology plan |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Educational Program Specifications – Maintenance Storage

Quantity: 2

Proposed SF: 150 to 500 SF Each

Space Design Concept

Storage rooms shall be provided throughout the school. The larger storage areas should be located in the basement level adjacent to the custodial work room and the boiler plant. Chemical and combustible material storage should be in appropriately rated and vented rooms and cabinets. Equipment that uses gasoline should be stored in rooms with direct access to the exterior and in fire rated rooms.

Program Activities

Storage of maintenance related supplies and equipment.

Loose Furnishings

Industrial Shelves

Chemical Storage Cabinets

Fixed Equipment

| | |
|---|-------------------------------|
| Acoustical treatment | yes – Provide sound isolation |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Storage cabinet | yes – lockable 8 linear feet |
| Fixed cabinets and accessible work surfaces | yes |

Finishes

| | | | |
|---------------------------------|-------------------|---------|----------------|
| Floor material: | Concrete | | |
| Base material: | N/A | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | Sheetrock | height: | 10'-0" minimum |
| Hardware: | ADA compliant | | |
| Lighting | Standard | | |
| Windows | no | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Explosion proof fixtures

HVAC systems including Air Conditioning

Technology

| | |
|----------------------------------|---------------------------------|
| Power outlet - floor and walls | yes – as appropriate |
| Media projection system | no |
| Smart boards | no |
| Voice, video and data ports | yes – phone / intercom and data |
| Security | yes |
| Portable sound system | no |
| Technology equipment | no |
| Wireless & Hard wired Network | no |
| Integrated public address system | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Facilities Boiler Plant

Quantity: 1
Proposed SF: 1000 to 1,500 SF

Space Design Concept

The boiler room will house the heating equipment for the operation of the school.

Program Activities

Mechanical room for boiler plant operation.

Loose Furnishings

Safety equipment
First Aid Kit

Fixed Equipment

| | |
|---|---|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet (post notices) |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes -Limited |

Finishes

| | | | |
|---------------------------------|-------------------|---------|-------|
| Floor material: | Concrete | | |
| Base material: | None | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | None | | |
| Hardware: | ADA compliant | | |
| Lighting | Utility Standard | | |
| Windows | No | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Ventilation of equipment per code

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Voice and data ports | yes – phone / intercom and data |
| Security | yes |
| Technology equipment | yes – related to the equipment in the room |
| Wireless & Hard wired Network | yes – Access should be available |
| Integrated public address system | yes |

Educational Program Specifications – Electrical Room

Quantity: 1
Proposed SF: 400 to 550 SF

Space Design Concept

The Electrical room will house the electrical switch gear, distribution panels and other designated equipment for the operation of the school.

Program Activities

Electrical room for boiler plant operation.

Loose Furnishings

Safety equipment
First Aid Kit

Fixed Equipment

| | |
|---|---|
| Acoustical treatment | yes |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet (post notices) |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | yes -Limited |

Finishes

| | | | |
|---------------------------------|-------------------|---------|-------|
| Floor material: | Concrete | | |
| Base material: | None | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | None | | |
| Hardware: | ADA compliant | | |
| Lighting | Utility Standard | | |
| Windows | No | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Ventilation of equipment per code

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Voice and data ports | yes – phone / intercom and data |
| Security | yes |
| Technology equipment | yes – related to the equipment in the room |
| Wireless & Hard wired Network | yes – Access should be available |
| Integrated public address system | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – Loading Dock and Receiving

Quantity: 1
Proposed SF: 150 to 400 SF

Space Design Concept

Centralized delivery for food service and supply deliveries/share loading dock space

Program Activities

Staging area for all deliveries

Loose Furnishings

Hand Dolly

Fixed Equipment

| | |
|---|---|
| Acoustical treatment | no |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet (post notices) |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | | | |
|---------------------------------|-------------------|---------|-------|
| Floor material: | Concrete | | |
| Base material: | None | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | None | | |
| Hardware: | ADA compliant | | |
| Lighting | Utility Standard | | |
| Windows | No | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Ventilation of equipment per code
Area drain in dock recess area
Dock-leveler and bumper

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Voice and data ports | yes – phone / intercom and data |
| Security | yes |
| Technology equipment | yes – related to the equipment in the room |
| Wireless & Hard wired Network | yes – Access should be available |
| Integrated public address system | yes |

Educational Program Specifications – Sprinkler Room

Quantity: 1
Proposed SF: 250 to 300 SF

Space Design Concept

Sprinkler room for the fire suppression system

Program Activities

Mechanical equipment space

Loose Furnishings

none

Fixed Equipment

| | |
|---|---|
| Acoustical treatment | no |
| Marker/white board (Multiple) | no |
| Tack board & display boards | yes – 1 at 4 linear feet (post notices) |
| Projection screen/surfaces | no |
| Flag Bracket & Flag | no |
| Display and book shelves | no |
| Tall wardrobe and storage cabinet | no |
| Fixed cabinets and accessible work surfaces | no |

Finishes

| | | | |
|---------------------------------|-------------------|---------|-------|
| Floor material: | Concrete | | |
| Base material: | None | | |
| Wall material: | Block / Sheetrock | finish: | Paint |
| Ceiling material: | None | | |
| Hardware: | ADA compliant | | |
| Lighting | Utility Standard | | |
| Windows | No | | |
| Fire extinguisher & suppression | per code | | |

Special Requirements

Ventilation of equipment per code
Area drain in dock recess area

Technology

| | |
|----------------------------------|--|
| Power outlet - floor and walls | yes – as appropriate |
| Voice and data ports | yes – phone / intercom and data |
| Security | yes |
| Technology equipment | yes – related to the equipment in the room |
| Wireless & Hard wired Network | yes – Access should be available |
| Integrated public address system | yes |

North Stonington Elementary School Facilities Study & Educational Specifications

June 1, 2016

Educational Program Specifications – General Toilets and Janitors Closets

Quantity: 2
Proposed SF: 150 to 750 SF

Space Design Concept

The toilets should be located in pairs with a men's and women's (boys and girls) toilet on each level of the school. Additional toilets will be located in proximity to the assembly spaces such as the auditorium and gymnasiums etc. All Toilets will be accessible with a HC stall. Kindergarten and Pre-Kindergarten classrooms will include individual toilets.

Program Activities

Rest room for all occupants

Loose Furnishings

Toilet accessories such as soap, toilet paper etc.

Fixed Equipment

| | |
|-----------------------------|----------------|
| Acoustical treatment | yes |
| Toilet accessories | yes |
| Toilet Partitions | yes – lockable |
| Accessible counter surfaces | yes |

Finishes

| | | |
|---------------------------------|--------------------------------------|-----------------------|
| Floor material: | Ceramic Tile | |
| Base material: | Ceramic Tile 6 feet high minimum | |
| Wall material: | Block / Tile | finish: Ceramic Tile |
| Ceiling material: | Moisture resistant Acoustical Tile | height: 8'-0" minimum |
| Hardware: | ADA compliant | |
| Lighting | Multi-level direct | |
| Windows | Translucent - Maximize natural light | |
| Fire extinguisher & suppression | per code | |

Special Requirements

HVAC systems including Air Conditioning
Sensor activated
Floor drains
Changing tables in specific toilets

Technology

| | |
|----------------------------------|--|
| Power outlet - walls | yes – as appropriate |
| Voice and data ports | yes – phone / intercom and data |
| Security | yes |
| Technology equipment | no |
| Wireless & Hard wired Network | yes – per the district's technology plan |
| Integrated public address system | yes |

Educational Program Specifications – General Building Envelope

Design Concept

The building envelope consists of the masonry exterior wall, window system, skylights and roof. Based on the goal of optimizing the energy efficiency and conservation, all systems with the exception of the masonry cavity walls will be replaced.

Special Requirements

- Roof pitch with a 1/2" per foot slope
- White reflective roof
- Energy efficient triple pane windows – Window type Hoppers/Awning and/or Sliders
- Sunshade devices will be installed
- Additional insulation of exterior wall if feasible.
- Photovoltaic panels at designated areas of the building.