NORWICH PUBLIC SCHOOLS

EDUCATIONAL SPECIFICATIONS

John M. Moriarty Elementary School
20 Lawler Lane
Norwich, CT 06360

PREPARED FOR:

Norwich Board of Education
526 East Main Street
Norwich, CT 06360

PREPARED BY:

Construction Solutions Group, LLC
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Project Overview

In 2021, the City of Norwich and the Norwich School Building Committee commissioned a Master Plan study of the overall school system to address significant disparities in educational opportunities across the various schools in the district, identify and correct a number of significant issues with the facilities in the district, including age, disrepair, poor conditions, lack of space for programs, storage, parking, and conference rooms.

Over time, the boundary areas where school age children live has changed significantly. Reconfiguration and equalization of students among schools is long overdue. Enrollment in the district is projected to remain stable, with marginal increases, over the next decade.

The district elementary school buildings are currently in extremely poor condition – each with considerable maintenance and repair needs projected over the next twenty years. These factors were reviewed in considerable detail during the establishment of the Master Plan. This district-wide study concluded that the cost to repair the seven elementary schools would exceed the cost to construct four new elementary schools to support the district's projected enrollment and renovate as new Teachers' Memorial Global Studies Magnet Middle School.

Over the years, the community invested in several renovations to schools; however, due to limited financial resources and lack of an overall comprehensive plan for twenty-first century learning, the results did not resolve the issues.

As part of the Master Plan, a determination was made to:

- Decommission two of the existing elementary schools (Thomas W. Mahan Elementary School and Veterans Memorial Elementary School), Adult Education, Bishop Early Learning Center, Central Office (90 Town Street), Special Education Central Office (201 Hickory Street) and the Norwich Transition Academy at Case Street School (30 Case Street)
- Convert the Huntington Elementary School to a Central Office, combining staff from 90 Town Street, 201 Hickory Street, Bishop Early Learning Center third floor and students and staff from the Norwich Transition Academy)
- Convert the Wequonnoc Elementary School to Adult Education
- Build new schools on the sites of the existing John B. Stanton Elementary School, Moriarty Magnet Elementary School and Uncas Elementary School and demolish the existing buildings following construction.
- Building a new school on the site of the former Greeneville Elementary School
- "Renovate as New" Teachers' Memorial Global Studies Magnet Middle School

Kelly STEAM Magnet Middle School, newly renovated, is not a part of the proposed facility improvements recommended in the study.

Following the adoption of the Master Plan, the City of Norwich held a referendum in 2022, where voters approved $385 million of funding for a School Construction Program. The John M. Moriarty Elementary School Project is part of the second phase of the project. The conditions of this building are outlined in the project rationale section of the document.

The following Educational Specifications were developed in collaboration with Acting Superintendent, Susan Lessard; Assistant Principal Elizabeth Hanlon, Uncas Elementary School Principal Peter Camp and other Norwich Public Schools staff.

Rationale for the Project

In 2021, the School Building Committee and the Norwich Board of Education commissioned the architectural firm, Drummey Rosanne Architects, Inc. (DRA), to conduct a facility assessment and Master Plan for the improvement of all Norwich Public Schools. The intent of the Facility Study was to provide a comprehensive analysis of all existing components of the facilities, as well as the development of a Master Plan to transform the existing buildings into code compliant facilities that incorporate all State safety recommendations, accommodate the existing and future academic programs, and support the future school population.

The facility condition study and the master plan evaluated the following elements:

- Mechanical systems, electrical systems, HVAC systems, and building controls
- Existing technology and possible upgrades
- ADA review of building and associated facilities
- Building and fire code and security alarm system review
- Roof systems and exterior building envelope
- Playgrounds and parking
- Security and security monitoring system
- Existing and future academic programs

The Study found that the infrastructure and most of the buildings' original components are in poor to fair condition throughout the district. The majority of the programmatic spaces are lacking in fundamental requirements such as security, technology, power distribution and building controls to regulate temperature and air quality. Much of the following information was verified through interviewing the staff and administration.

The district originally contemplated undertaking all of the repairs over the next 5-7 years, but ultimately deemed the approach inefficient, expensive and highly disruptive to the educational program. The School Building Committee and Board of Education opted to apply for a school construction grant to construct a new school on the site of the existing John M. Moriarty Elementary School and demolish the existing building following construction. This grant will enable the district to address the following key issues:

- Equalize the educational opportunities for all students in the district
- Eliminate expensive on-going annual repairs and associated repetitive disruption to the educational program
- Re-establish confidence in the integrity of the facility and give students, parents and staff peace of mind
- School Safety is a concern across the district's facilities, with each having multiple access points through the buildings.
- Increase average district classroom size of approximately 650 square feet to current standards to avoid marginalizing educational opportunities. Today's educational practices with enhanced technology and

an average classroom student occupancy of 24 students require a minimum of 800 square feet.

- Replace existing mechanical equipment which has exceeded its useful service life and limited ability to regulate room temperatures and air quality
- Replace outdated building controls. There are inherent challenges associated with interfacing new building control systems with older, pre-existing mechanical equipment. The costs for installing building systems, upgrades and equipment increases annually due to the aging infrastructure.
- Install an updated HVAC system with new controls to improve comfort and health by addressing air quality
- Upgrade the original, basic electrical and plumbing infrastructure
- The need for additional classrooms, small learning spaces, offices, conference rooms and therapy rooms needed to support teaching and learning

In evaluating the problems noted above, it became apparent that a new school would be required to remedy all the deficiencies outlined. Therefore, the School Building Committee and the Board of Education is recommending that the existing John M. Moriarty Elementary School be decommissioned and demolished and a new school be constructed on the same site to meet the educational needs of the district and the John M. Moriarty Elementary School community. This will require the educational program to remain active in the old school while construction of the new building occurs.

The intention is to hire an architectural/engineering firm and Construction Management firm that has experience designing and constructing new schools while the current school continues to operate to further this plan.

Long Range Educational Plan

Mission and Vision

It is the Mission of the John M. Moriarty Elementary School and Norwich Public Schools to provide each student a rigorous, effective teaching and learning environment where equality is the norm, excellence is the goal, student health and safety is assured.

Guiding Beliefs

Every decision the Norwich Public Schools makes, and every policy created, is grounded in these guiding beliefs. We believe that ALL children can and will learn when:

- Every student has highly effective teachers
- Every school has highly effective leaders
- Students are ensured a safe, personalized and differentiated learning environment that is intentionally universally-designed
- Multiple pathways are provided for students to access instruction.
- Multiple opportunities are offered for all students to demonstrate their learning.
- Educators successfully partner with families.
- Students are held to high expectations
- Students are actively engaged in their own learning.
- Relevant, timely and practical data systems, and the outputs of those systems, such as assessments and data analysis, drive continuous improvement.

Components of the master plan process consisted of four distinct phases.

The first phase analyzed demographics and enrollment as well as City population centers.

The second phase established options to address the needs of the district. The current district schools and building sites were analyzed, building conditions were documented, and goals as well as supporting costs were identified for each building. Additionally, several educational priorities were established including:

- Aligning enrollments across facilities, as some enrollments are too small to be educationally and fiscally effective.
- Adopting the most effective and economical size for elementary schools in the City of Norwich, which was determined to be four schools with 550-600 students each.
- Providing parity throughout all the district elementary schools.

The third phase reviewed all of the options and a determination was made regarding the best path forward.

The fourth and final phase is implementation, which began in March 2023. During this phase the project team is developing specific plans to accomplish the specific goals and objectives identified in the Master Plan with regard to the John M. Moriarty Elementary School.

Academic Goals

PRIORITIES

The eight priority areas are a framework for specific measurable outcomes and actions that will focus and organize the Strategic Plan for public education in Norwich over the next five years.

1. Teacher and Leader Support
2. Personalized Learning Districtwide
3. Globally Competent Graduates
4. Climate and Social Emotional Learning
5. Informed Instructional Decision Making
6. Student-Centered Resource Investment
7. Narrowing and Closing of Equity and Opportunity Gaps
8. Family and Community Engagement

STUDENT LEARNING GOALS

All Norwich Public School students will be challenged to develop, embrace and attain learning goals that encapsulate the following elements as a means to prepare them to be independent thinkers and collaborative team players invested in building a better future.

- Inquiry: Students show intellectual curiosity and wonder about the world. Students ask thoughtful questions and seek out answers.
- Expression: Students communicate what they know and what they need to know. Students construct arguments with evidence and critique the reasoning of others.

- Critical Thinking: Students analyze, synthesize, and draw conclusions from information. Students generate solutions to problems using both creative and critical thought. Students keep an open mind to different viewpoints.
- Collaboration: Students contribute to the overall effort of the group. Students work well with diverse individuals in various situations. Students initiate and cultivate community partnerships.
- Organization: Students sift through ideas and data, arranging them wisely and making sense of them. Students set manageable goals, plan, and monitor time to achieve them.
- Attentiveness: Students focus on the task at hand and focus on details of their work.
- Perseverance: We demonstrate and model for our students, tenacity in tackling tasks despite difficulty or delay in achieving success and recognizing the learning opportunities inherent in mistakes and the value of taking risks.
- Reflection: We review and think about our actions and work with the purpose of learning more about ourselves.

Enrollment Data and Proposed Project Capacity

A 10-year enrollment projection was conducted by MP Planning Group, an independent consultant hired by the building committee through CSG. For purposes of the grant applications, the State of Connecticut reviews the enrollment data for a period of eight years starting with the year of the grant application submittal. According to the study the John M. Moriarty Elementary School will enroll students in grades Pre-K – 5th grade, with the enrollment projected to be 548 students.

Interior Building Environment

The following is a general description of each space, it is understood that **all spaces,** other than storage, will be built with the following items included:

- Air conditioned and adequate air ventilation to meet current codes
- Fire alarm system with horn/strobe and voice T.T.S. (Text to Speech) in building interior and exterior
- School-wide intercom system in building interior and exterior linked with the Emergency Notification System
- Sprinkler system
- Emergency lighting as required by code
- Wall mount telephones
- Room darkening shades on all windows, and glass panels on doors
- Door locking hardware shall meet NPS specifications and keying system
- Soft color, dimmable LED lighting
- Acoustical insulation for soundproofing
- ADA compliant building standards
- Wireless/internet access
- Multiple electrical outlets and USB charging outlets
- Natural Lighting will be provided wherever possible

Academic Core Programs – approximately 25,680 sq. ft. in total

5 – Pre-K classrooms, each approximately 920 sq. ft. in size

4 – Kindergarten classrooms, each approximately 920 sq. ft. in size

Common to all Pre-K and Kindergarten classrooms:

- Teaching station (1) per classroom to include teacher's desk, chair, four-drawer file cabinet, lockable storage/wardrobe cabinet to accommodate a co-teaching model
- Student bathroom facilities
- Space for up to 20 students in each classroom (Pre-K not to exceed 20 students)
- Countertop cabinets with a sink
- Cabinets for secured storage and project display/storage for learning materials
- Integrated modern technology with one-to-one devices, Wireless Access Point (WAP) in each classroom
- Touchscreen, smartboard, or overhead projection racks with screen; most current school technology on the teaching wall
- Magnetic white boards and tack boards
- Resilient tile, high density flooring and base and vitreous painted walls with acoustic ceilings
- Curriculum storage closet or millwork for storage of materials is a must have.
- Lockers for grades Pre-K and K shall be included within each classroom space.

20 – Academic Core Classrooms (serving Grades 1-5), each approximately 760 sq. ft. in size

Common to all Core Classrooms:

- Teaching station (1) per classroom to include teacher's desk, chair, four-drawer file cabinet, lockable storage/wardrobe cabinet
- Space for 24 students in each classroom
- Countertop and cabinets with a sink
- Cabinets for secured storage and project display/storage for learning materials
- Integrated modern technology with one-to-one devices, Wireless Access Point (WAP) in each classroom
- Touchscreen, smartboard, or overhead projection racks with screen; most current school technology on the teaching wall
- Magnetic white boards and tack boards
- Teacher computer with 22-inch display (1)
- Wireless keyboard/mouse with auxiliary HDMI input
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings
- Curriculum storage closet or millwork for storage of materials is a must have.
- Lockers for 1st grade shall be included with each classroom space, lockers for grades 2-5 shall be placed outside of each classroom in the hallway.

3 – Reading Intervention Classrooms, each approximately 200 sq. ft. in size

- Teacher's workstation, chair, four-drawer file cabinet, lockable storage/wardrobe cabinet
- Space for 5-10 students in each classroom
- Cabinets for secured storage and project display/storage for learning materials
- Integrated modern technology with one-to-one devices, Wireless Access Point (WAP)
- Touchscreen, smartboard, or overhead projection racks with screen; most current school technology on the teaching wall
- Magnetic white boards and tack boards

- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings
- Full-spectrum lighting with variable light level switching or addressable
- Curriculum storage closet or millwork for storage of materials is a must have.
- Adjustable shelving for materials
- Flexible seating for students (tables and chairs with a variety of seating options)

3 – Math Intervention Classrooms, each approximately 200 sq. ft. in size

- Teacher's workstation, chair, four-drawer file cabinet, lockable storage/wardrobe cabinet
- Space for 5-10 students in each classroom
- Cabinets for secured storage and project display/storage for learning materials
- Integrated modern technology with one-to-one devices, Wireless Access Point (WAP)
- Touchscreen, smartboard, or overhead projection racks with screen; most current school technology on the teaching wall
- Magnetic white boards and tack boards
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings
- Full-spectrum lighting with variable light level switching or addressable
- Curriculum storage closet or millwork for storage of materials is a must have.
- Adjustable shelving for materials
- Flexible seating for students (tables and chairs with a variety of seating options)
- Curriculum materials closet

5 – MLL/TESOL Intervention Classroom, each approximately 200 sq. ft. in size

- Teacher's workstation, chair, four-drawer file cabinet, lockable storage/wardrobe cabinet
- Space for 5-10 students in each classroom
- Cabinets for secured storage and project display/storage for learning materials
- Integrated modern technology with one-to-one devices, Wireless Access Point (WAP)
- Touchscreen, smartboard, or overhead projection racks with screen; most current school technology on the teaching wall
- Magnetic white boards and tack boards
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings
- Full-spectrum lighting with variable light level switching or addressable
- Curriculum storage/materials closet or millwork for storage of materials is a must have.
- Adjustable shelving for materials
- Flexible seating for students (tables and chairs with a variety of seating options)

Special Education – approximately 7,300 sq. ft. in total

3 – Special Education Resource Classroom, each approximately 500 sq. ft. in size

- Teacher's workstation, chair, four-drawer file cabinet, lockable storage/wardrobe cabinet
- Space for 5-10 students in each classroom
- Cabinets for secured storage and project display/storage for learning materials
- Integrated modern technology with one-to-one devices, Wireless Access Point (WAP)
- Touchscreen, smartboard, or overhead projection racks with screen; most current school technology on the teaching wall
- Magnetic white boards and tack boards
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings

- Full-spectrum lighting with variable light level switching or addressable
- Curriculum storage closet or millwork for storage of materials is a must have
- Adjustable shelving for materials
- Flexible seating for students (tables and chairs with a variety of seating options)

2 – OT/PT Rooms, each approximately 650 sq. ft. in size with bathroom

This room is significantly different than most of the other educational spaces due to the specialized activities that take place here. Items and corresponding activities include:

- Space for up to 10 students, 2 teachers and 10 paraprofessionals
- Full-spectrum lighting with variable light level switching
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings
- Shelving for materials and supplies
- Platform swing
- Crash pads
- Storage closet or millwork for storage of materials is a must have
- OT/PT equipment

2 – S.T.A.R.S Program Spaces, each approximately 350 sq. ft. in size and 2 offices for certified staff

- Space for up to 5 students, 3 three teachers and 5 paraprofessionals
- Comfortable chairs/desks/tables to accommodate 5-8 students; flexible/adaptable/easily movable workstations
- Adult workstations
- Bookshelves
- Built-in counters with below-counter shelving
- Secured storage for materials
- Interactive LED Panel (at least 75")
- Wall/ceiling mounted speakers
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings
- Magnetic whiteboards (wall-to-wall) on front or side walls
- Full-spectrum lighting with variable light level switching
- Storage closet or millwork for storage of materials is a must have

Offices for Certified Staff Shall include the following;

- 4' desk (1)
- Desk chair (1)
- File Storage

3 – S.T.R.I.V.E Program Spaces, each approximately 1,000 sq. ft. in size with bathroom

- Comfortable chairs/desks/tables to accommodate up to 10 students; flexible/adaptable/easily movable workstations
- Teacher desk/chair
- Bookshelves
- Built-in counters with below-counter shelving
- Secured storage for materials
- Interactive LED Panel (at least 75")
- Wall/ceiling mounted speakers
- Resilient tile that allows for easy movement of furniture
- Magnetic whiteboards (wall-to-wall) on front or side walls

- Bulletin boards
- A bathroom to be utilized by this space shall be placed outside of the space in close proximity to the room for use by the students.
- Lockers shall be included in each space for student use

2 – Conference Rooms, each approximately 300 sq. ft. in size

- Conference table
- Seating for 10
- Credenza
- Resilient tile
- Interactive LED Panel (32-50" display)
- Auxiliary (AUX) ports for plugging into display, magnetic whiteboard
- Bulletin board
- Conference telephone center

2 – Book Rooms, each approximately 100 sq. ft. in size

- Lockable room with shelving

1 – School Based Health Center with Dedicated Entrance – approximately 500 sq. ft. in total

1 – Treatment Room, approximately 150 sq. ft. in size

- Upper and lower medical cabinets with sink
- Guest chairs (2)
- Examination table
- Wall mounted otoscope board with power supply
- Scale

1 – Shared Office for Medical Provider and Medical Assistant, approximately 150 sq. ft. in size

- 4' desks (2)
- Desk chairs (2)
- 6' bookcase (1)

1 – Behavioral Health Office, approximately 140 sq. ft. in size

- 4' desk (1)
- Desk chair (1)
- 30" round table (1)
- Guest chair (1)

1 – Handicap Accessible Bathroom, approximately 60 sq. ft. in size

- Lavatory with toilet and hand sink

Administration and Support Services – approximately 3,261 sq. ft. in total

Administration offices, including front office, staff work and meeting spaces and conference rooms

- Main entrance
- Secure vestibule (80 sq. ft)– the secure vestibule shall consist of two sets of doors to create a secure space. There shall be a transaction window located within this space to allow visitors to be credentialed by security before entering the main building.

- The secure vestibule shall include entrance mats or grates to catch debris from people entering the building
- Office for School Resource Officer to be located on the 3-5 side, approximately 86 sq.ft. in size
- Main administrative offices to be located at the front, adjacent to the main entry and connected by a security vestibule, allowing visual controlled access to the building through the administration reception waiting area. A dedicated 911 phone shall be located in the main office for the purpose of informing office staff if 911 is called from any facility phone. All exit/entry doors to have electronic hardware that will activate on notification from striking of a panic button. Glazing will be minimal and secure.
- Parent waiting area

1 – Main Office – Reception and Secretarial area, approximately 600 sq. ft. in size

- Secretarial workstations (4) behind main counter
- Reception area with 5 comfortable visitor chairs
- Station for head monitor (1)
- Lockable storage wardrobes
- Lockable four-drawer filing cabinets (2)
- Fire-rated student file storage (5)
- Base and wall cabinet storage
- Network copier and fax machine
- Bulletin boards
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings
- Electronic security system (Raptor)

1 – Principal's Office, approximately 150 sq. ft. in size

- Desk and chair
- Table
- Seating for 6
- Lockable storage/wardrobe
- Lockable lateral files
- Large wall unit bookcase (1)
- Interactive LED panel (32-50" display)
- Security "panic" button with dedicated phone line
- Resilient tile
- Aux ports for plugging into display.

2 – Assistant Principal's Offices, each approximately 120 sq. ft. in size

- Desk and chair
- Table
- Seating for 6
- Lockable storage/wardrobe
- Lockable lateral files
- Large wall unit bookcase (1)
- Interactive LED panel (32-50" display)
- Security "panic" button with dedicated phone line
- Resilient tile
- Auxiliary (AUX) ports for plugging into display

1 – Vault for Personnel Records Storage, approximately 80 sq. ft. in size

- Keypad access hardware (1)
- Fireproof lockable file cabinets (4)

1 – Workroom and Supply Storage, approximately 150 sq. ft. in size

- Counter with cabinets below and shelving above
- Copier
- Worktable
- Resilient tile
- Staff mail boxes

1 – Conference room, approximately 250 sq. ft. in size

- Conference table
- Seating for 12
- Credenza
- Interactive LED panel (32-50” display)
- Auxiliary (AUX) ports for plugging into display
- Magnetic whiteboard
- Resilient tile
- Bulletin board
- Wireless Access Point
- Conference telephone center

1 – Administrative Restrooms (single occupant), approximately 50 sq. ft. in size

- Toilet
- Lavatory
- Tile floors

1 – Psychologist Office, approximately 140 sq. ft. in size

- Desk and chair
- Four-drawer lockable file cabinet (1)
- Fire-rated student records file storage
- Base and wall cabinet storage
- Bulletin boards
- Lockable storage wardrobe
- Table and counter space
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings

2 – Social Worker Offices, each approximately 140 sq. ft. in size

- Desk and chair
- Four-drawer lockable file cabinet (1)
- Fire-rated student records file storage
- Base and wall cabinet storage
- Bulletin boards
- Lockable storage wardrobe
- Laptop computer (1)
- Table and counter space
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings

2 – Speech Language Offices, each approximately 140 sq. ft. in size

- Desk and chair
- Four-drawer lockable file cabinets (1)
- Fire-rated student records file storage
- Base and wall cabinet storage
- Bulletin boards
- Lockable storage wardrobe
- Table and counter space
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings

1 – Secure Storage for Files and Testing Materials, approximately 50 sq. ft. in size

- Lockable room
- Shelving

1 – Counseling General Storage, approximately 50 sq. ft. in size

- Lockable room
- Shelving

1 – Nurse's Office, approximately 775 sq. ft. in size

- Office (300 sq. ft.)
- Desk with chair (1)
- Laptop computer (1)
- Built-in counters with shelving below around perimeter of the room
- Four-drawer file cabinets (2) and two-drawer file cabinets (2)
- Double cabinets (full size) (2)
- Double cabinet (half-size) (1)
- Double-locked medicine cabinet (1)
- Locking wall cabinet (1)
- Large closet with shelving and doors
- Refrigerator
- Sink with hot and cold water, soap, and towel dispenser
- Microwave
- Scale
- Reception Area (150 sq. ft.) with 3 chairs
- Exam Room (150 sq. ft.) with cots (2) and privacy curtains
- Lavatory (100 sq. ft.) within Health Clinic with toilet and hand sink
- Private resting rooms (2) centrally located adjacent to main office and counseling (75 sq. ft.) with wheelchair (1), eye-wash station, resilient tile, and large bulletin board (1)
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings

Learning Commons (Library) – approximately 2,540 sq. ft. in total

The Library/Media Center will be designed to become the learning hub of the school. It will continue to be where teachers encourage students to develop a passion for reading. This will also serve as a place where student-centered activities happen with the integration of technology. This area will include a welcoming Makerspace to encourage students to be creative problem-solvers, take risks and think critically. Students will have the opportunity to engage in hands-on activities using various materials as well as the latest technology.

The Library/Media Specialist will collaborate with the classroom teachers on various projects and use this space to show students how to locate and evaluate important information.

1 – Main Area Gathering Space with Rooms Off Main Learning Commons, approximately 820 sq. ft. in size

1 – Reading Room Stacks/Circulation Center, approximately 900 sq. ft. in size

- Located in the center of the Media Center adjacent to the workroom and Media Specialist office
- Minimum of 3 WAP and supplemental data jacks located throughout for student access to LAN and internet
- Flexible book shelving that can be reconfigured for a collection of 10,000 -15,000 volumes with open sight lines possible for optimum adult supervision
- Monitors throughout space
- Rolling bookshelves for a limited collection of books
- Areas with comfortable seating
- Printer
- Resilient high-density flooring or carpet and base and vitreous painted walls with acoustic ceilings
- Bulletin boards to display student work and promotional materials
- Staff computers (2) for circulation desk area

1 – Media Center Specialist Office, approximately 100 sq. ft. in size

- Desk and chair
- Four-drawer lockable file cabinets (1)
- Base and wall cabinet storage
- Bulletin board
- Lockable storage wardrobe
- Network copier and fax machine
- Laptop computer (1)
- Resilient high-density flooring or carpet and base and vitreous painted walls with acoustic ceilings

1 – Maker Space, approximately 600 sq. ft. in size

- Seating and work tables for 24 students
- Base and Upper Cabinets with Sink
- General Storage Cabinets for materials and supplies
- Tack Boards and Marker Boards
- Cord reels above tables to provide power
- Resilient high-density flooring or carpet and base and vitreous painted walls with acoustic ceilings

Music Program – approximately 2,160 sq. ft. in total

The following spaces need to be designed for maximum sound attenuation:

1 – General Music Classroom, approximately 950 sq. ft. in size

- Performer chairs (28)
- Music stands (28)
- Large Move and Store Music Stand Cart (1)
- Chair Move and Store Carts (3)
- Built-in counters/cabinets with storage above and below
- Teaching station (1) per classroom to include teacher's desk, chair, four-drawer file cabinet, lockable storage/wardrobe cabinet

- Incorporate new music technologies, WAP
- Electrical convenience power
- Touchscreen, smartboard, or overhead projection racks with screen; most current school technology on the teaching wall
- Storage closet or millwork for equipment
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings

1 – Band Room with Sink for Instrument Cleaning, approximately 1,050 sq. ft. in size

- Performer chairs (50)
- Music stands (50)
- Large Move and Store Music Stand Cart (1)
- Chair Move and Store Carts (3)
- Built-in counters/cabinets with storage above and below
- Teaching station (1) per classroom to include teacher's desk, chair, four-drawer file cabinet, lockable storage/wardrobe cabinet
- Incorporate new music technologies, WAP
- Electrical convenience power
- Touchscreen, smartboard, or overhead projection racks with screen; most current school technology on the teaching wall
- Magnetic white boards and tack boards
- Laptop computer (1)
- Appropriate sound management materials on walls and floor
- Resilient high-density flooring and base and vitreous painted walls
- Acoustic ceilings and full-spectrum lighting with variable light level switching

1 – Instrument Storage Room, approximately 160 sq. ft. in size

- Built-in shelving to accommodate an array of stringed, percussion and wind instruments

Arts Program – approximately 1,177 sq. ft. in total

1 – Art Room, approximately 950 sq. ft. in size

- Ample natural light
- Tables (8)
- Chairs (32)
- Teacher desk/chair
- Four-drawer lockable file cabinet, storage/wardrobe cabinet
- Vertical storage with shelves and doors
- Built-in counter space with storage above and below
- Document camera
- Wall/ceiling mounted speakers
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings
- Walls should be functional workspaces and for showcasing student work
- Multiple magnetic whiteboards (wall-to-wall) on front and side walls
- Bulletin boards lining the back wall
- Wireless keyboard/mouse
- Aux HDMI input
- Include ample storage space within the room
- Free-standing deep utility sinks (2) with sediment traps dispersed through the classroom

- Electrical convenience power throughout perimeter
- Uninterrupted flat counter space with under-counter storage cabinets and open shelving
- Deep and wide drawer shelving with suspension hardware
- Touchscreen, smartboard, or overhead projection racks with screen; most current school technology on the teaching wall
- Integrated modern technology, WAP
- Gallery/exhibit display outside of the classroom

1 – Kiln Room approximately 150 sq. ft. in size

- Large kiln
- Sturdy, rack-style shelving for student projects
- Dedicated ventilation
- Electrical disconnect for kiln
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings

1 – Art Storage Room with built-in shelving, approximately 77 sq. ft. in size

- Wide and sturdy shelving to support various art supplies

Physical Education – approximately 5,585 sq. ft. in total

1 – Gymnasium with Curtain Divider, approximately 5,000 sq. ft. in size

- All-purpose wood floor system with essential markings
- Removable protective matting
- High school main basketball court (50'x84') (1) with (2) cross courts
- Adjustable basketball backboards to swing out/up for non-use
- Volleyball set up with necessary inserts and markings
- Bleacher seating 1- side
- Ceiling mounted air destratification fans
- Sound system
- Ropes, nets and basketball hoops
- Padding on walls and floor for physical education programs
- Suspension equipment and/or storage rooms for pads
- Room dividing curtain/mesh to bisect the space for dual activities
- High full spectrum lighting for efficiency and color correction for multipurpose activities.
- Acoustic wall panel
- Climbing rock walls
- Electronic scoreboard (1)
- Digital messaging board (1)
- Divider for flexible space
- De-mountable Platform for Student Performances

1 – Office for PE Teacher, approximately 140 sq. ft. in size

- Desk and chair
- Four-drawer lockable file cabinets (1)
- Bulletin board
- Lockable storage wardrobe
- Resilient high-density flooring and base and vitreous painted walls with acoustic ceilings

1 – PE Storage Room, approximately 145 sq. ft. in size

- Sealed concrete floor
- Minimum 10-foot ceiling to maximize storage

1 – Platform / Chair Storage Room, approximately 300 sq. ft. in size

- Sealed concrete floor

Student and Faculty Dining – approximately 3,020 sq. ft in total

1 – Cafeteria Student Dining Area Including Servery, approximately 2,520 sq. ft. in size (assumes 4 lunch waves)

Typical acoustical treatments for the walls to dampen sound are needed. The cafeteria should be constructed adjacent to the kitchen. Multiple student traffic flows should be considered in the placement of the food serving line. Placement of student restrooms in the vicinity of the cafeteria should be considered in the design to provide student convenience.

- The room should accommodate risers with handicapped accessibility
- Seating for approximately 150 students per lunch wave in 4 waves (preschool students eat in their classrooms)
- Lighting and sound systems to support the instructional use of the space
- State-of-the-art public technology including a Smart TV
- Acoustical treatment of wall and ceiling to support the use of the space
- Resilient tile flooring durable and washable, with slip resistant finish
- Provide windows with abundant natural light and create relationships to exterior
- Provide exterior dining
- Vitreous painted or masonry walls for durability and high lay-in ceilings, durable and washable
- High output LED lighting for efficiency and color correction for dining and multipurpose activities
- Portable (fold in half on wheels) cafeteria round tables
- Convenience power for cleaning equipment and staff/visitor laptops
- Numerous WAP for LAN and internet use by staff, students, and visitors
- Several Monitors throughout space
- Hand washing stations (4)
- Adjacent student restrooms

1 – Staff Dining Lounge includes Mother's Room & Restroom, approximately 500 sq. ft. in size

- Tables and chairs for up to 15 staff members
- Cabinets and countertop with sink
- Microwave oven
- Refrigerator
- Dedicated electrical circuits for refrigerator and microwave
- Interactive LED panel (at least 75")
- Wall/ceiling mounted speakers
- Resilient tile that allows for easy cleanup
- Magnetic whiteboards
- Bulletin boards
- Staff mailboxes
- Staff Restroom
- Mother's Room

Food Services – approximately 2,177 sq. ft. in total

1 - Preparation Area and Serving Area: 1,500 sq. ft

- Double sink preparation tables (2) each with standard faucet (1) and pre-rinse faucet (1)
- Slicing machine (1)
- Warmers (2)
- Food processor (1)
- Small ice making machine (1)
- Upright blast chiller (1)
- Double deck convection ovens (2)
- Combi-Oven (1)
- Convection steamer (1)
- 30 gallon pasta kettle – (1)
- 12-burner range (1)
- Three-compartment sink assembly with drain boards for pot and pan washing; each compartment shall measure 27" x 27" x 16" deep; pre-rinse spray assembly required at one sink compartment
- Dishwasher/Tray station
- Recycling center for paper, liquids etc.
- Hot and cold food station
- Deli station
- Express stations for self-serve foods and dry display snacks
- Refrigerated merchandisers for bottled beverages.
- Cashier stations strategically located at the exit from the Servery
- Mobile condiment stations to be located at the exit of the Servery
- Grease-trap to be located outside of the building for ease of maintenance.
- Utility Distribution System with quick disconnect devices for all services.
- Walk-in refrigerators and freezers will require back-up generator power; audio/visual temperature alarm; refrigeration control alarm; temperature alarms to be wired to Building Monitoring System
- Water conservation methods
- Provide High Efficiency Energy Star Label Equipment and lighting.
- Exhaust hoods: Demand Control Ventilation Package
- Temperature maintenance, water filtration and sanitation to promote food safety.
- Exterior in-line grease trap to conform to FOG Program
- Preparation area shall have durable easy to clean floor of either quarry tile or chemical resistant non-slip epoxy flooring.

1 – Dry Storage Room, approximately 159 sq. ft. in size

- Shelving designed to accommodate canned goods and various non-refrigerated food items.
- Quarry tile flooring durable and washable, or epoxy with slip resistant finish

1 – Walk-in Cooler, approximately 162 sq. ft. in size

- Shelving for product storage
- Linked to building management system for notification of temperature failure
- Connected to emergency generator in case of power failure
- Quarry tile flooring durable and washable, or epoxy with slip resistant finish

1 – Walk-in Freezer, approximately 190 sq. ft. in size

- Shelving for product storage
- Linked to building management system for notification of temperature failure

- Connected to emergency generator in case of power failure
- Quarry tile flooring durable and washable, or epoxy with slip resistant finish

1 – Kitchen Staff Bathroom and Lockers, approximately 106 sq. ft. in size

- Toilet room with sink
- Lockers (8) for personal items

1 – Director's Office, approximately 60 sq. ft. in size

- Desk/chair
- Visitor seating
- Lockable teacher storage wardrobe (1)
- Lockable four-drawer filing cabinet (1)
- Resilient tile
- Magnetic whiteboard
- Bulletin boards
- Laptop computer (1)
- Adjacent to kitchen area

Custodial Services – approximately 350 sq. ft. in total

1 – Custodial Office with Bathroom, approximately 150 sq. ft. in size

- Desk/chair
- Visitor seating
- Lockable teacher storage wardrobe (1)
- Lockable four-drawer filing cabinet (1)
- Resilient tile
- Magnetic whiteboard
- Bulletin boards
- Laptop computer (1)
- Adjacent to kitchen area
- Steel storage shelves
- Lockable tool cabinets
- Wall-mounted tool hanging system
- Water spigot with hose rack
- Minimum of 100-amp electrical service
- PPE cabinet and first aid cabinet
- Combustible Storage container
- Meet all applicable OSHA workplace standards
- Grease resistant epoxy finish over concrete
- Overhead rollup door
- Direct access to outside

2 – Custodial Storage Rooms, approximately 100 sq. ft. in size each

- Sealed Concrete Floor
- Wide and Sturdy Industrial Shelving for the storage of custodial supplies

Building Systems

At minimum, the new building will require the following systems to meet the programmatic needs of the school:

Telecommunications

The telecommunications infrastructure shall consist of a state-of-the-art, voice, video, and data network. The network is to be designed to provide users voice, video, and data communication across the globe. The video camera system shall the ability to be viewed through an app. The video cameras shall have the ability to be programmed to the viewing rights of different user groups as determined by the administration.

The building's voice network will provide telephone and intercom service to all academic and administrative spaces. The locations of the head end for the new system should be centralized. A typical user will have the capability to call room to room or access outside local and long-distance lines using access codes. All users will have the option to answer intercom calls via the “hands free” speakerphone or pick up the handset for privacy. Administrators will have the added capability to perform all-call and zone pages from various locations. All-call and zone-paging functions can be routed to the speakerphone or the traditional ceiling-mounted speaker. All users will also have access to voicemail. The voice mail system is capable of individual mailboxes as well as public boxes for homework assignments, event notification, school information, or other various announcements.

The digital network shall consist of CAT6 or better and fiber optic cabling. A typical classroom will be wired with CAT6 or better to accommodate a minimum of eight computers or peripherals with a ceiling ethernet port for additional wireless access. Classrooms shall have multiple accessible electric outlets for charging stations. Labs and specialty areas will range from 30 devices and administrative areas from two devices per occupant. In addition to supporting the data network, the fiber optic cabling will support the video network. All computers on the network will have Internet access. The IT Head end room and UDF rooms listed in building services shall be equipped as follows;

- Full size server racks (4)
- Half size network racks (4)
- Patch panel racks (4)
- Dedicated space for utility and telecom entrance
- Redundant electrical power for all equipment racks
- Uninterruptible Power Supplies for all network equipment. Ceiling cable conduits run throughout the room and to each rack.
- Dedicated HVAC for the room
- Dedicated air filtration system
- Dedicated fire suppression system
- Electronic security system including alarm notification of temperature, power outages, loss of internet connection, and utilizing uninterruptible power supplies
- Network switches shall be POE, capable of being trunked, and manageable from a Web portal similar to Extreme Switching's products.

CAT6 or better should be employed at a minimum, including 1 GB to desktop and 10GB trunks to all interconnections to all of the data closets. Also, one, or ideally two 1 GB drops in the ceiling for wireless APs should be installed for support of the wireless infrastructure. All assembly areas such as the Gym, MPR, and LMC shall have a minimum of three ceiling/wall mounted drops for wireless APs.

Integrated voice, video, and data in all spaces with a minimum of five data locations in each classroom and within the computer lab. Head-end equipment for distribution is to be located in the head-in room. Internet and cable television access is also required. The technology infrastructure should support the highest feasible speeds over both wired and wireless infrastructure. An integrated telephone and intercom system with dial-out capabilities and paging from each area of the school is needed. The school-wide intercom system shall include both the interior and exterior of the school and be linked with the Emergency Notification System

Security / Safety

School security is a high-priority concern, and it is recommended that the design professionals selected for this project design the latest school safety measures. They must meet the Connecticut school safety standards and it is advised that they include and utilize a school safety design professional as part of the overall architectural/engineering team.

Security and video surveillance systems are to be provided for selected areas of the school, primarily at points of entry and high traffic areas of the school. The security system should cover all public areas (MPR, Gym, Lunchroom, LMC, Main Office, Hallways, Etc.) The security system should use both infrared and motion sensing technology. Exterior doors should have electronic contacts that activate video cameras. A monitoring console for video surveillance should allow the viewing of all exterior doors, parking lots, and delivery areas. Panic buttons should be provided for immediate access to the local Police Department via a telephone dial-out switch. Video cameras shall have the ability to be viewed through an app. and video cameras shall have the ability to be programmed to the viewing rights of different user groups as determined by the administration

All zone and ID naming should be consistent throughout each system and not tied to a grade level or subject to facilitate future moves.

Complete fire alarm system with sprinklers, pull stations, horns, flashing, lighting, voice evacuation in areas of large assembly, smoke and heat detectors, battery backup, and plastic shields on pull stations is required. Depending upon the building design, the fire alarm system should be integrated and monitored through one location. The fire alarm system should have a direct connect to the local Fire Department in case of activation. The Fire alarm system shall incorporate voice, and T.T.S. (Text to Speech) to both the interior & exterior. Fire and burglary system shall have radio backup system. The main fire panel and annunciator should mirror each other.

MEP Systems

A fully digital energy management and building management system to monitor and control mechanical systems for heating, ventilation, air conditioning, and interior and exterior lighting with appropriate manual overrides is required. All systems shall have the ability to be controlled by an app. The system shall be non-proprietary, and the school shall have the ability to program the system to their needs independent of the vendor or manufacturer.

There is to be a lighting plan to promote an optimal learning environment. Lighting should be designed with motion sensors and automatically dimmable to maximize the use of natural lighting in all areas of the building with supplemental artificial lighting to ensure appropriate foot candles of low-glare brightness and illumination. External lighting should be environmentally friendly. Exterior lighting should be controlled by an app. In case of an emergency or if the school goes into a shelter. Exterior lights should be controllable by a School/ Town member through an app.

All light fixtures, controls, motors, switches, and electrical components must be of an energy-conscious design to reduce the use of electricity. All operating systems must be monitored and controlled by an energy management system capable of reducing peak demand and load shedding.

An on-site emergency generator should be provided as part of the project. It should at a minimum power all data closets including environmental temperature control, HVAC equipment, food service, refrigeration units, gymnasium including locker rooms, emergency systems, lighting, and main office areas.

General Building Features

Interior surfaces, carpeting, and related interior finishes should be used that are easy to maintain.

All counter tops shall be solid surface, laminates may be considered.

All restrooms, locker rooms, kitchen, and laundry areas and eye-wash stations are to have self- priming floor drains and hose bibs for ease of cleaning.

All restroom stalls to be full-thickness phenolic plastic.

Multiple bottle filler/drinking fountain stations are to be installed throughout the facility. There shall be drinking fountains near the playgrounds.

Swipe cards on exterior doors at main and secondary entrances

A fully programmable clock and bell system is requested that will allow the school administration flexibility of bell signals as needed. Clocks must be located in all spaces throughout the school. Choice of tones and loudness levels must be part of the program that can be modified by the administration. All bells shall be programmable separately and or as groups. The school should have the ability to form groups with any room in the building. (NTP time synchronization) this system should be programmable by school staff without the aid of a vendor.

Site Development

- The site shall provide separate traffic flows for school buses and parent/student drop-off.
- In the zone for school buses there shall be access for PK-2 students and also 3-5 students to include a hub where students wait for pick up (with a communications center (TV or digital announcement), phone, computers.
- In the zone for parent/pick up and drop off there shall be access for Pk-2 and 3-5 students to include a hub where students wait for pick up (with a communications center (TV or digital announcement), phone, computer)
- Each zone should be at a different side of the school (parent pick up on one side of the building independent from bus traffic)
- Bus and Parent pick up traffic flow should be away from main entrances and faculty parking (perhaps one at the cafeteria and one at the gym)
- Bioswale to prevent intruders if necessary.
- Site landscaping for safety
- Separate primary and intermediate playgrounds (2)

The design of the school should include concrete sidewalks be constructed around the perimeter of the building. Concrete curbs should be used adjacent to those sidewalks. An entry plaza will be constructed at the main entrance consisting of scored concrete or pavers, trees, benches and a flagpole and an

electronic marquee for school notifications. Site lighting will be provided throughout the parking lots and along pedestrian ways around and into the building.

Currently the state requires all new schools, at a minimum, to achieve a "Green Design" equivalent to LEED Silver. This is an important area of concern and one expressed by many members of the community. They would like to see this as an opportunity to enhance the design and environmental impacts of the construction and long-term maintenance of the building and site. The design professionals should consider "sustainable construction practices" that not only reduce the carbon footprint but also provide a safer, cleaner building environment for the occupants. The design professionals should provide energy models with their conceptual design that will estimate the costs and benefits of various energy saving options. Long term sustainable energy, such as solar panels should be considered in the design to lower annual operating costs.

Community Use

The school facility will be utilized by the community for a variety of purposes, including Parks & Recreation programs, emergency preparedness and community polling and meeting space.

Program Diagrams and Program Matrix

SUMMARY: PROPOSED ARCHITECTURAL PROGRAM

Projected Enrollment: 548 Students

City of Norwich - Educational Specifications for the John M. Moriarty Elementary School - Space Allocation Table			
Academic Classrooms			
Pre-K Classrooms with Bathrooms	5	920	4,600
Kindergarten Classrooms with Bathrooms	4	920	3,680
Academic Core Classrooms, Grades 1-5	20	760	15,200
Reading Intervention	3	200	600
Math Intervention	3	200	600
MLL/TESOL Intervention	5	200	1,000
Total	**40**		**25,680**
Special Education			
Special Education Resource Classroom	3	500	1,500
OT/PT Room with shared Bathroom	2	650	1,300
S.T.A.R.S Program Space with 2 Offices	2	350	700
S.T.R.I.V.E Program Space	3	1,000	3,000
Conference Room	2	300	600
Book Rooms	2	100	200
Total	**14**		**7,300**

School-Based Health Center (Medical, Dental and Mental Health)			
Treatment Room	1	150	150
Office for Medical Provider and Assistant	1	150	150
Behavioral Health Office	1	140	140
ADA Bathroom	1	60	60
Total	**4**		**500**
Administration and Support Spaces			
Secure Vestibule	1	80	80
School Resource Officer Office for Grades 3-5	1	86	86
Main Office: Reception, Secretarial Area	1	600	600
Principal's Office	1	150	150
Assistant Principal's Office	2	120	240
Vault for Personnel Records	1	80	80
Work Room / Supply Storage	1	150	150
Conference Room	1	250	250
Administrative Restrooms	1	50	50
Psychologist Office	1	140	140
Social Worker Office	2	140	280
Speech Language Office	2	140	280
Secure Storage for Files and Testing Materials	1	50	50
Counseling General Storage	1	50	50
Nurses Office	1	775	775
Total	**18**		**3,261**
Learning Commons			
Learning Common Main Area	1	820	820
Stacks / Circulation	1	900	900
Media Center Specialist Office	1	100	100
Workroom	1	120	120
Maker Space	1	600	600
Total	**5**		**2,540**
Music Programs			
General Music Classroom	1	950	950
Band Room	1	1,050	1,050
Instrument Storage Room	1	160	160
Total	**3**		**2,160**
Arts Programs			
Art Room	1	950	950
Kiln Room	1	150	150
Storage	1	77	77
Total	**3**		**1,177**
Physical Education Programs			
Large Gym	1	5,000	5,000
PE Office	1	140	140

PE Storage	1	145	145
Platform / Chair Storage	1	300	300
Total	**4**		**5,585**
Student & Faculty Dining Services			
Student Dining	1	2,520	2,520
Staff Dining Lounge includes Mother's Room & Restroom	1	500	500
Total	**3**		**3,020**
Food Services			
Kitchen: Preparation Area + Serving Area	1	1500	1500
Dry Food Storage	1	159	159
Walk-in Cooler	1	162	162
Walk-in Freezer	1	190	190
Staff Bathroom / Locker	1	106	106
Director's Office	1	60	60
Total	**6**		**2,177**
Custodial Services			
Custodial Office with Bathroom	1	150	150
Custodial Storage Area	2	100	100
Total	**3**		**350**
Total Program Area			**53,750**
Total Building Core / Circulation / Interior Walls @ 40%			**21,575**
Total Building Area			**75,325**