

MIDDLETOWN PUBLIC SCHOOLS

Middletown, RI

Conceptual Scope of Work - Option D

Version 1.0

December 3, 2021



Middletown High School

1. Address Physical Needs and Deficiencies in Stage I Existing Conditions Study: (Warm-Safe-Dry, Health and Safety, Infrastructure / Asset Protection)

- Exterior Envelope
 - Replace original curtainwall system (19,000 sf)
 - Replace (5) exterior windows (300 sf)
 - Repair roof coating above locker room (16,920 sf)
 - Replace sloped roof at cafeteria and gym (17,800 sf)
 - Replace original roof at library and science wing (22,212 sf)
 - Add new chimney cap
 - New exterior doors and frames (20)
 - Replace columns enclosures at gym and cafeteria (21)
 - Add insulated metal panel fascia and soffit around building (9,800 sf)
 - Replace all exterior sealant
- Site
 - Courtyard improvements
 - Improve asphalt parking lot pavement and curbs
 - Replace concrete sidewalks (17,200 sf)
 - Repair stone and concrete retaining walls
 - Replace concrete site stairs
 - Replace (10) non-compliant steel guardrails
 - Add new stormwater drainage system at cafeteria plaza
 - Replace (4) ramps and stoops at egress doors in courtyards
 - Add new mow strip around perimeter of building (3,000 lf)
 - Provide an accessible route to lower fields
 - Add new fire water service for sprinkler system
- Interior
 - Selective floor abatement and replacement (21,056 sf)
 - ADA Upgrades
 - New elevator from main level to upper level
 - Replace (4) handicapped stair lifts and add (2) new platform lifts
 - Modify main entry into administration and admin counter for full accessibility
 - Modify (5%) of existing lockers for full accessibility
 - Add (3) cane detection rails to projecting display cases
 - Code Upgrades
 - Replace (50) non-compliant 32-inch-wide room doors
 - Provide new door closers on (85) doors
 - Replace non-fire-rated doors at cafeteria and gymnasium
 - Upgrade non-code-compliant stair guardrails and handrails
 - Add one-hour fire-rated enclosure at (2) stairs

- Firestop penetrations in stairs, cafeteria, gymnasium, and electrical rooms
 - Smoke seal all corridor walls
- Limited improvements to kitchen
 - New coiling door at cafeteria / kitchen servery
 - Renovate staff toilet
- Renovate (12) toilet rooms and (2) locker rooms
- Abate pipe insulation and floor in utility tunnels
- Remove (2) oil tanks in utility tunnel
- Replace wood shop equipment, dust collection system, and spray booth
- Fire Protection:
 - Add new fire protection system
- Plumbing:
 - Replace domestic water service and infrastructure in their entirety
 - Replace domestic water heaters with new high-efficiency equipment
 - Provide grease interceptors in the existing kitchen
 - Provide compliant emergency showers/eyewash stations in the nurse's suite and science classrooms
 - Provide plaster traps at sinks in art classrooms
 - Provide backflow preventers at janitor's sinks for soap dispensers
 - Provide acid neutralization at science classrooms
- Mechanical:
 - Replace (2) two existing boilers with (3) three new high efficiency gas fired condensing boilers at minimum 94% efficiency. Boilers shall be 4.5 million BTUH each
 - Replace (2) two floor mounted pumps, expansion tanks, air separators and all hydronic accessories for a complete mechanical room installation
 - Replace all hot water piping and insulation within the building
 - Replace two existing air handling unit systems with new gas fired heating, DX cooling, energy recovery wheel and VFD fans for the administration and science labs
 - Replace three existing air handling unit systems with new gas fired heating, energy recovery wheel and VFD fans for the cafeteria and gym
 - Provide (1) one gas fired makeup air unit for the kitchen
 - Provide (4) four new air handling unit with energy recovery and associated ductwork providing displacement ventilation to the new proposed media center addition as well as for the new renovated fitness/weight room and chorus room.
 - Provide (1) one new air handling unit with cross plate heat exchanger and associated ductwork providing overhead mixed air system to the newly renovated locker rooms.
 - Provide (2) two new unit ventilators for the music and physical education rooms
 - Building controls shall be upgraded to current technologies for control, monitoring and trending of all HVAC systems
 - Replace all existing roof mounted exhaust fans
 - Provide new exhaust systems for all renovated science rooms, vocational education labs and toilet rooms
 - Provide (1) one new 2-ton ductless cooling unit and associated refrigerant piping and outdoor condenser for the new elevator machine room
 - Provide dedicated cooling to one data closet - minimum of (1) 2-ton unit
- Electrical:
 - Improvements to electrical infrastructure
 - Replace original equipment and obsolete Frank Adams equipment
 - New fire alarm system with addressable voice evacuation
 - Upgrade intrusion alarm system
 - New intercom and clock systems
 - New access control system

- Upgrade CCTV security system
 - New lighting controls
 - New lighting where lighting has not recently been replaced/upgraded
 - Upgrade emergency generator standby system
 - Provide new bi-directional antenna (BDA) system
 - Upgrade communications structured cabling system
 - Provide additional receptacles in classrooms and throughout the building
 - Install lightning protection system
2. Address Necessary Educational Improvements:
- New vocational technology labs (pre-engineering, computer science, and bio-med)
 - Renovate pre-engineering lab workshop (old wood shop)
 - Plan for future vocational technology expansion
 - New media center addition (3,770 gsf)
 - New science labs (6) and (1) art room
 - New fitness/weight room
 - New extended learning lab
 - New small group seminar room in original lecture hall
 - Relocate chorus to existing cafeteria stage
 - Relocate the transition academy from Gaudet M.S.
 - Relocate guidance and school resource officer
 - Re-assign classrooms for better organization
 - Courtyard improvements

Joseph H. Gaudet Middle School/Learning Academy

1. Address Physical Needs and Deficiencies in Stage I Existing Conditions Study:
(Warm-Safe-Dry, Health and Safety, Infrastructure / Asset Protection)
- Exterior Envelope
 - Replace original windows at boiler room (650 sf)
 - Replace deteriorated Kalwall at stairs on west elevation (400 sf)
 - Repair roof at north side of gym entry lobby
 - Replace sloped roof at cafeteria (6,240 sf)
 - Repair and reclad (4) original canopies
 - Replace uninsulated porcelain panels
 - Add new chimney cap
 - New exterior doors and frames (32)
 - Replace original sloped siding at planetarium (3,000 sf)
 - Add high performance coating to exposed structure at planetarium
 - Replace all exterior sealant
 - Selective masonry repairs
 - Site
 - Courtyard improvements
 - Improve asphalt parking lot pavement and curbs
 - Replace concrete sidewalks (12,020 sf)
 - Repair stone and concrete retaining walls
 - Replace concrete site stairs
 - Replace (2) non-compliant steel guardrails
 - Replace (5) stoops at egress doors in courtyards
 - Add new mow strip around perimeter of building (3,100 lf)
 - Add new fire water service for sprinkler system

- Interior
 - Selective floor abatement and replacement (51,032 sf)
 - ADA Upgrades
 - Add (2) new handicapped platform lifts
 - Modify original main entry for full accessibility
 - Modify (5%) of existing lockers for full accessibility
 - Code Upgrades
 - Replace (50) non-compliant 32-inch-wide room doors
 - Provide new door closers on (25) doors
 - Replace non-fire-rated doors at gymnasium and electric room
 - Upgrade non-code-compliant stair guardrails and handrails
 - Add one-hour fire-rated enclosure at (3) stairs and original main lobby
 - Establish corridor along cafeteria with new one-hour fire rated wall
 - Firestop penetrations in stairs, lecture hall, cafeteria, gym, and electrical rooms
 - Fireproof (6) exposed steel beams in stairs
 - Smoke seal all corridor walls
 - Limited improvements to kitchen
 - New coiling door at cafeteria / kitchen servery
 - Renovate staff toilet
 - Renovate (18) toilet rooms and (2) locker rooms
 - Update finishes and chairs in planetarium
- Fire Protection:
 - Add new fire protection system
- Plumbing:
 - Replace domestic water service and infrastructure
 - Replace domestic water heaters with new high-efficiency equipment
 - Provide backflow preventor at janitor's sinks for soap dispenser
- Mechanical:
 - Replace the (2) two existing boilers with (3) three new high efficiency gas fired condensing boilers at minimum 94% efficiency. Boilers shall be 4 million BTUH each
 - Replace (1) existing 280-ton chiller with a new 350-ton chiller
 - Replace (7) seven floor mounted pumps, expansion tanks, air separators and all hydronic accessories for a complete mechanical room installation
 - Replace all piping and insulation within the building
 - Replace all existing unit ventilators with equivalent capacity unit ventilator
 - Replace all existing roof mounted exhaust fans
 - Add new building management system (BMS)
 - Building controls shall be upgraded to current technologies for control, monitoring and trending of all HVAC systems
 - Existing equipment shall remain as follows:
 - The variable refrigerant flow (VRF) system main administration
 - The (4) four existing rooftop units providing heat and A/C to the gym
 - Provide (2) two new air handling units with energy recovery and associated ductwork for displacement ventilation to the new media center addition in the courtyard.
 - Provide exhaust systems for all renovated toilet rooms
 - Add Alternate: Remove all existing unit ventilators and provide new air handling units with energy recovery and associated ductwork providing displacement ventilation to all classrooms
- Electrical:
 - Improvements to electrical infrastructure
 - New service switchboard

- Replace original equipment and obsolete Frank Adams equipment
 - New fire alarm system with addressable voice evacuation
 - Upgrade intrusion alarm system
 - New intercom and clock systems
 - New access control system
 - Upgrade CCTV security system
 - New lighting controls
 - New lighting where lighting has not recently been replaced/upgraded
 - Provide occupancy sensors throughout the building
 - Upgrade emergency generator standby system
 - Provide new bi-directional antenna (BDA) system
 - Provide uninterruptible power supply system (UPS)
 - Upgrade communications structured cabling system
 - Provide additional receptacles in classrooms and throughout the building
 - Install lightning protection system
2. Address Necessary Educational Improvements:
- District administration addition for consolidation of facilities (“Newer and Fewer” Bonus)
 - Re-organization of administration to establish separate entrances for L.A and M.S.
 - New media center addition (4,600 gsf)
 - New small two-story resource room additions (2,000 gsf)
 - New learning commons (3), science labs (3), and (1) art room
 - Renovated planetarium
 - Re-establish and renovate original lecture hall
 - Relocate the transition academy to the High School
 - Re-assign classrooms for better organization
 - Courtyard improvements

Aquidneck Elementary School

1. Address Physical Needs and Deficiencies in Stage I Existing Conditions Study:
(Warm-Safe-Dry, Health and Safety, Infrastructure / Asset Protection)
- Exterior Envelope
 - Replace sloped roof at gym (3,600 sf)
 - Add new chimney cap
 - New exterior doors and frames (8)
 - Repair masonry at old canopies and repoint 1954 wing
 - Replace (2) lower-level original windows on south side
 - Replace all exterior sealant
 - Site
 - Improve asphalt parking lot pavement and curbs
 - Replace concrete sidewalks (1,000 sf)
 - Repair concrete retaining wall
 - Replace concrete site stairs
 - Replace (3) non-compliant steel guardrails
 - Replace (7) wood egress stair from lower-level classrooms
 - Add new mow strip around perimeter of building (390 lf)
 - Regrade swale at rear of 1994 wing
 - Provide an accessible route to the playground
 - Address playground accessibility
 - Add new fire water service for sprinkler system

- Interior
 - Selective floor abatement and replacement (15,020 sf)
 - ADA Upgrades
 - New elevator to replace LULA
 - Add (1) new handicapped platform lift at stage
 - Code Upgrades
 - Replace (5) non-compliant 32-inch-wide room doors
 - Provide new door closers on (30) doors
 - Replace non-fire-rated doors at cafeteria
 - Upgrade non-code-compliant stair guardrails and handrails
 - Add one-hour fire-rated enclosure at (1) stair
 - Firestop penetrations in stairs, cafeteria, gym, and electrical rooms
 - Smoke seal all corridor walls
 - Fix shut transoms above corridor doors in 1954 wing
 - Renovate (7) toilet rooms
 - Relocate and create new kitchen
 - Provide new ceiling in cafeteria (1,900 sf)
 - Repair exterior walls in cafeteria
 - Replace counters and sinks in 1994 classrooms
 - Fix shut transoms above corridor doors in 1954 wing
- Fire Protection:
 - Add new fire protection system
- Plumbing:
 - Provide grease interceptor(s) in kitchen
 - Provide compliant eyewash in nurse's room
 - Provide plaster traps on art room sinks
 - Provide backflow preventor at janitor's sinks for soap dispenser
- Mechanical:
 - Replace (8) eight inline mounted pumps, expansion tanks, air separators and all hydronic accessories for a complete mechanical room installation
 - Replace (25) twenty-five wall mounted unit ventilators and associated outside air louvers in the 1994 and original wings
 - Replace (2) two existing air handling unit systems with new hot water heating, energy recovery wheel and VFD fans for the gym
 - Provide (1) one air handling unit system with new hot water heating, energy recovery wheel and VFD fans for the cafeteria
 - Provide (1) one gas fired makeup air unit for the kitchen
 - Provide (1) one new air handling unit with hot water heating, ventilation, DX cooling, energy recovery and associated ductwork providing overhead mixing system to the new media center
 - Replace all existing roof mounted exhaust fans
 - Building controls shall be upgraded to current technologies for control, monitoring and trending of all HVAC systems
 - Provide dedicated cooling to (1) one data closet – minimum of (1) 2-ton unit
 - Provide one (1) new 2-ton ductless cooling unit and associated refrigerant piping and outdoor condenser for the new elevator machine room
 - Add Alternate: Provide (4) four new air handling unit with energy recovery and associated ductwork providing displacement ventilation to the new Pre-K/K addition
- Electrical:
 - Improvements to electrical infrastructure
 - New fire alarm system
 - Upgrade intrusion alarm system

- Upgrade CCTV security system
 - Upgrade access control system
 - New lighting where lighting has not recently been replaced/ upgraded
 - Provide occupancy sensors throughout the building
 - Provide new bi-directional antenna (BDA) system
 - Upgrade communications structured cabling system
 - Install lightning protection system
 - Add emergency generator standby system
2. Address Necessary Educational Improvements:
- New relocated kitchen and expanded cafeteria
 - New media center addition (1,590 gsf)
 - New secure vestibule at handicapped entrance
 - New learning commons at lower level
 - Re-assign classrooms for better organization
 - Add alternate for Pre-K and Kindergarten addition

Forest Avenue Elementary School

1. Address Physical Needs and Deficiencies in Stage I Existing Conditions Study: (Warm-Safe-Dry, Health and Safety, Infrastructure / Asset Protection)
- Exterior Envelope
 - Add new chimney cap
 - New exterior doors and frames (3)
 - Repair masonry at old canopies, and repoint 1954 wing and chimney
 - Replace (2) lower-level original windows on south side
 - Replace (14) original windows in 1957 wing
 - Replace large wood window system in 1957 wing (1,900 sf)
 - Replace windows in 1994 wing
 - Clean and touch-up EIFS on 1994 wing
 - Remove and infill door at exterior storage room
 - Replace all exterior sealant
 - Site
 - Add wheel stops to parking along building
 - Refurbish fire access lane around building
 - Add new mow strip around perimeter of building (800 lf)
 - Replace ramp at end of 1957 wing
 - Add accessible sidewalk to rear of 1994 wing
 - Drainage improvements (playground and downspouts)
 - Provide an accessible route to the playground
 - Add new fire water service for sprinkler system
 - Interior
 - Selective floor abatement and replacement (12,786 sf)
 - ADA Upgrades
 - New elevator to replace LULA
 - Code Upgrades
 - Replace (5) non-compliant 32-inch-wide room doors
 - Provide new door closers on (32) doors
 - Replace non-fire-rated doors at cafeteria
 - Upgrade non-code-compliant stair guardrails and handrails
 - Add one-hour fire-rated stair enclosure at upper-level of 1994 wing

- Firestop penetrations in stairs, cafeteria, gym, and electrical rooms
 - Smoke seal all corridor walls
- Renovate (11) toilet rooms
- Limited improvements to kitchen
 - New coiling door at cafeteria / kitchen server
 - Fix exhaust hood
- Replace counters and sinks in 1994 classrooms
- Fire Protection:
 - Add new fire protection system
- Plumbing:
 - Provide backflow preventor at janitor's sinks for soap dispenser
- Mechanical:
 - Replace existing air handling unit that serves the gym
 - Provide code compliant kitchen exhaust system with Melink controls for the kitchen hood. Provide dedicated make-up air unit for the kitchen
 - Building controls shall be upgraded to current technologies for control, monitoring and trending of all HVAC systems
 - Provide exhaust systems for all renovated toilet rooms
 - Existing equipment shall remain as follows:
 - Boilers, pumps, and all hydronic accessories
 - Air handlers and rooftop ERV serving the cafeteria and classroom wings
 - Add Alternate #1: Remove all existing unit ventilators and provide new air handling units with energy recovery providing displacement ventilation to the classroom wings
- Electrical:
 - Improvements to electrical infrastructure
 - New fire alarm system
 - Upgrade intrusion alarm system
 - Upgrade CCTV security system
 - Upgrade access control system
 - New lighting where lighting has not recently been replaced/upgraded
 - Provide emergency lights in toilet rooms and other public spaces
 - Provide occupancy sensors throughout the building
 - Provide new bi-directional antenna (BDA) system
 - Upgrade communications structured cabling system
 - Provide additional receptacles in classrooms and throughout the building
 - Provide uninterruptible power supply system (UPS)
 - Install lightning protection system
 - Add emergency generator standby system

2. Address Necessary Educational Improvements:

- Limited kitchen improvements
- Expanded media center
- Add alternate for learning common/resource support addition