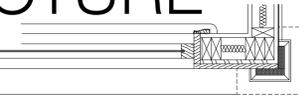


PROJECT TITLE:

# WESTPORT SCHOOLS BEDFORD MS ADA BATHROOM RENOVATIONS

**cusatoARCHITECTURE**  
architecture - planning - interiors



41 otter trail westport ct 06880  
www.cusatoARCHITECTURE.COM  
203.395.4663

## BID SET 072318

### SCHEDULE OF DRAWINGS

A1 - PLANS

A2 - ELEVATIONS, DETAILS

P1 - PLUMBING PLAN

E1 - ELECTRICAL PLAN

M1 - MECHANICAL PLAN

F1 - FIRE PROTECTION PLAN

### GENERAL NOTES:

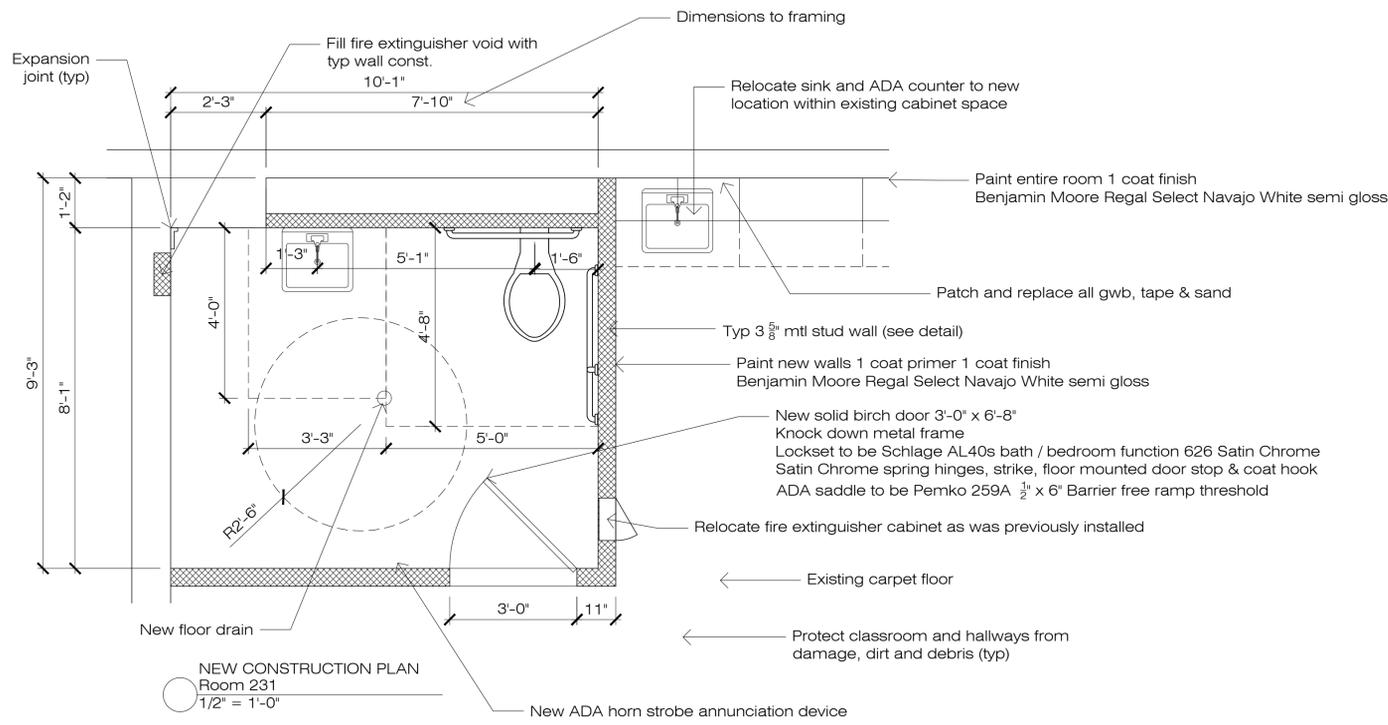
- 1) The contractor shall check and verify all dimensions and conditions prior to starting work and notify the architect of any discrepancies.
- 2) Contractor(s) shall obtain any and all permits as required by the town.
- 3) All work shall be as per building construction code of the State of CT and per zoning regulation for the town.
- 4) Contractor shall field measure and verify all existing conditions. Discrepancies shall be reported to the architect or engineer and resolved prior to proceeding with work.
- 5) The contractor shall be responsible for visiting the site and familiarizing themselves with existing conditions.
- 6) The contractor shall be solely responsible for all safe working conditions and shall observe all safety requirements established by jurisdictional agencies and the owner. Where conflicts exist, the more stringent will apply. Care shall be taken to avoid endangering personnel or the structure.
- 7) All drawings to be used in conjunction with the specifications.
- 8) All dimensions shall be verified by the contractor. The general contractor shall coordinate and be responsible for the approved size and location of all openings through roofs, floors and walls.
- 9) All sections and details are to be considered typical and apply for the same and similar conditions unless otherwise specifically noted.
- 10) Contractor shall furnish and be solely responsible for all temporary bracing required to maintain stability of the structure during construction.
- 11) The general contractor shall coordinate the work of all trade and sub contractors unless otherwise noted.
- 12) All contractors shall cooperate in coordinating construction.
- 13) All cutting and patching shall be done by the General Contractor and shall be the responsibility of the GC to see that the final patch is not visible after finishes.
- 14) The contractor shall protect, with appropriate fencing, and not damage trees, plantings or shrubs where work or operation of work is required at exterior of the building.
- 15) The storage of materials and equipment on site shall be located where directed by owner and architect.
- 16) All glass within 18" of floor shall be tempered safety glass.
- 17) All operable windows to be adequately flashed caulked and weather-stripped.
- 18) The contractor, by submitting his bid, represents that they have visited the site and agrees with plans and details as representing the full extent of construction. If contractor has found that plans and details vary significantly from what is physically in the field, they shall notify the architect or owner before submitting bid.
- 19) Contractor to carry appropriate insurance, workmen's comp and liability in the sums prescribed by authorities having jurisdiction over the project.
- 20) Contractor to be responsible for contacting Call Before You Dig to locate and familiarize themselves all existing underground utilities

### DEMOLITION NOTES:

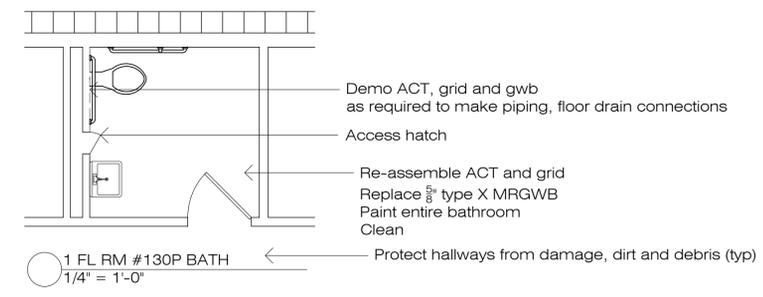
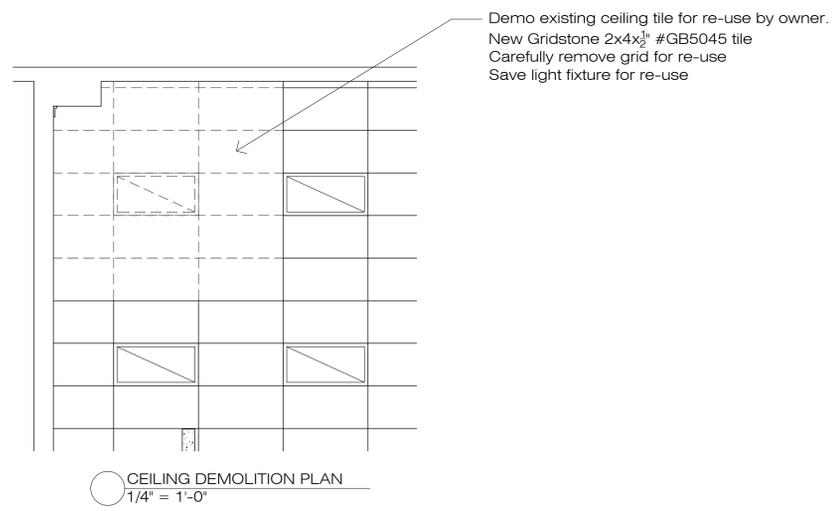
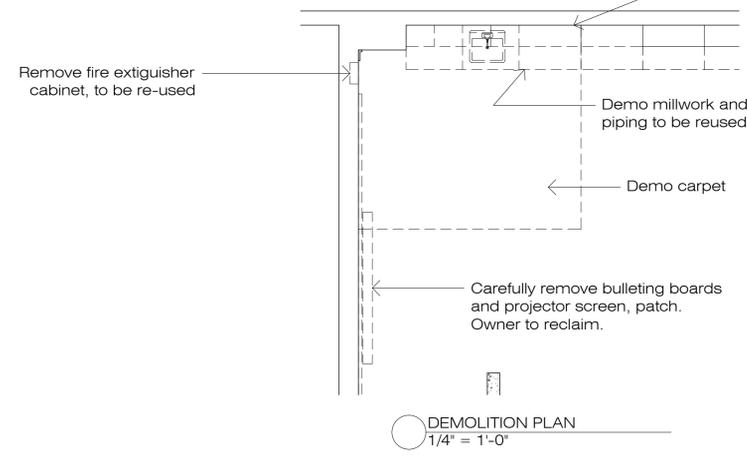
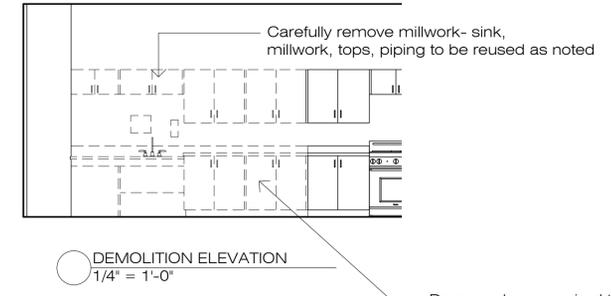
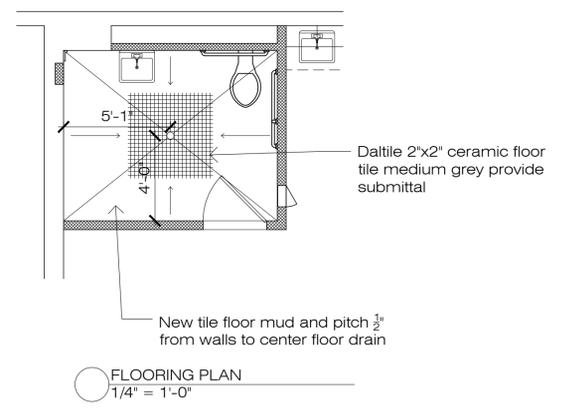
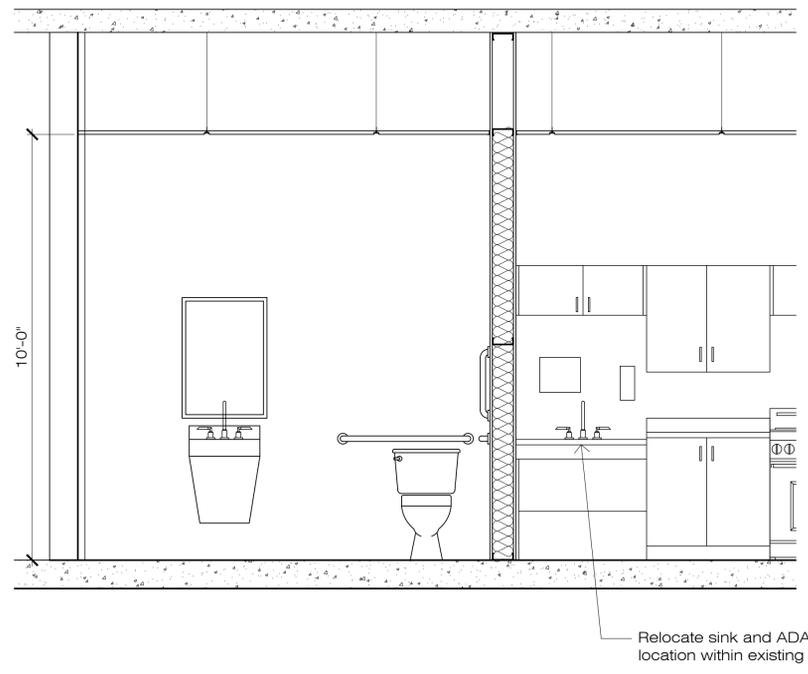
- Obtain necessary demolition permits.
- Check with the Fire Department and Utility Companies.
- Inspect for Hazardous Materials.
- Demolish building components completely and remove from the site.
- Use methods required to complete Work within limitations of all governing regulations.
- Remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- Demolish concrete and masonry in sizes that will be suitable for acceptance at recycling or disposal facilities, unless otherwise shown to remain.
- Remove all disconnected, abandoned utilities on site.
- Take care to protect utilities, fences, landscaping, etc. to remain on site
- Completely remove below-grade construction, including foundation walls and footings.
- Below-Grade Areas: Completely fill below-grade areas and voids resulting from building demolition operations to average grade level with satisfactory soil materials.
- Damages: Promptly repair damages to adjacent facilities caused by demolition operations.
- Do not burn demolished materials.
- Disposal: Transport demolished materials off [Owner's] property and legally reuse, salvage, recycle, or dispose of materials.
- Consult owner for coordination of valuable material removal before demo

### The following codes are to be followed as amended by 2016 Connecticut State Building Code:

- 2012 International Code Council (ICC) International Building Code
- 2012 International Code Council (ICC) International Residential Code
- 2012 International Code Council (ICC) International Existing Building Code
- 2012 International Code Council (ICC) International Mechanical Code
- 2012 International Code Council (ICC) International Plumbing Code
- 2012 International Code Council (ICC) International Energy Conservation Code
- 2014 National Fire Protection Association (NFPA) 70 - National Electrical Code
- 2009 International Code Council (ICC) ANSI A117.1 - Accessible and Usable Buildings and Facilities



- NOTES:
- Contractor to provide dumpster, periodic and final cleaning
  - Contractor to coordinate & provide core boring to all trades
  - Contractor to liaise with owner's representatives for schedule and logistic coordination
  - Contractor to provide blocking for all wall mounted equipment and utility hangars
  - Provide architect with submittals for all materials to be used



cusatoARCHITECTURE  
 architecture - planning - interiors  
 41 otter trail westport ct 06880  
 www.cusatoARCHITECTURE.COM  
 203.395.4663

PROJECT TITLE:  
 BEDFORD MIDDLE SCH.  
 WESTPORT, CT

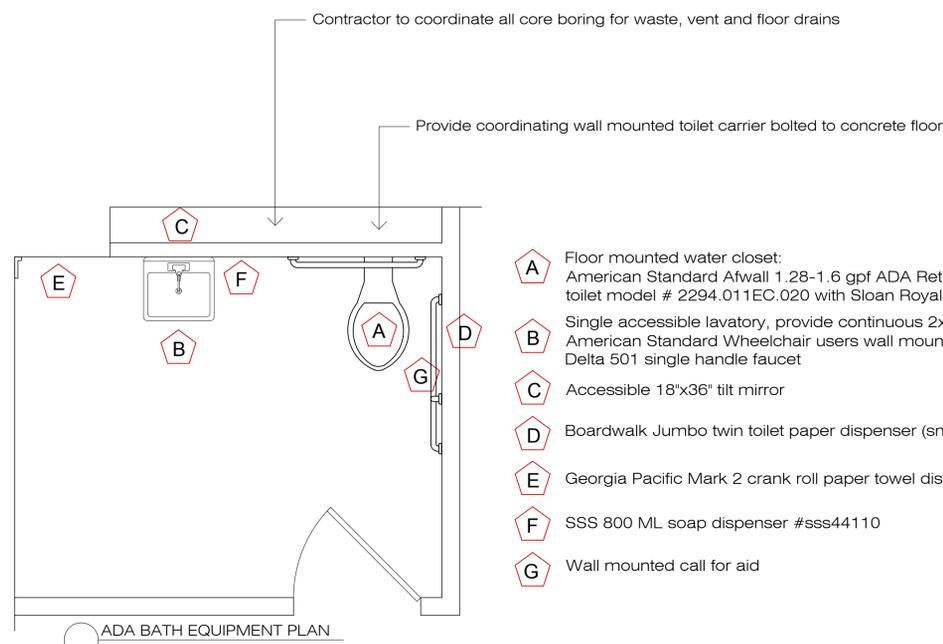
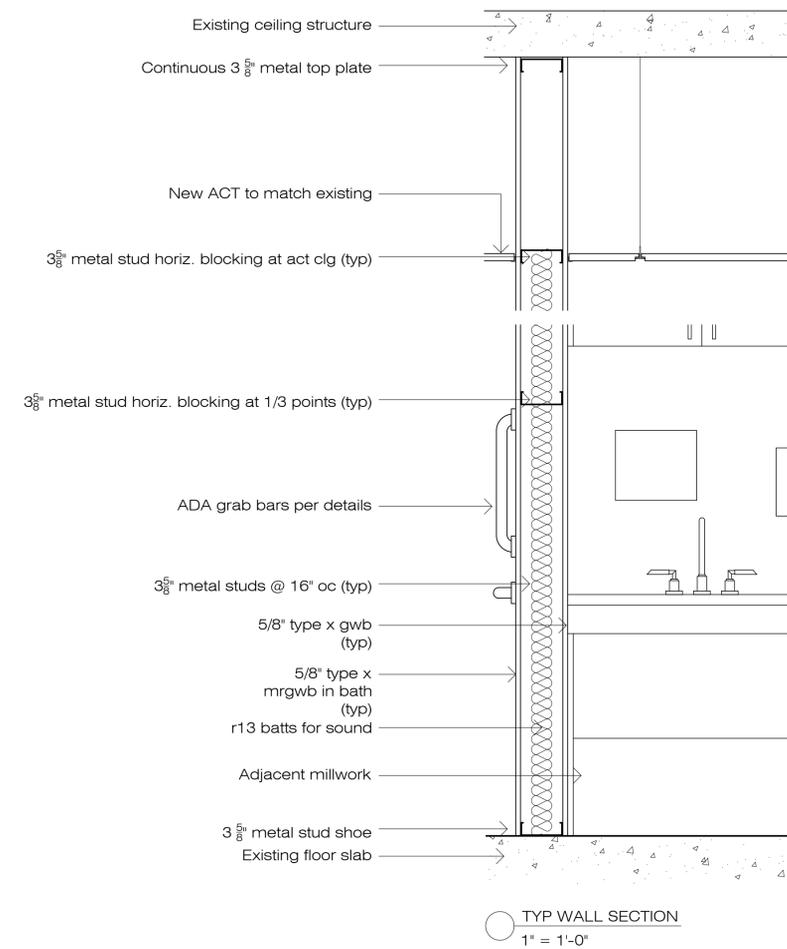
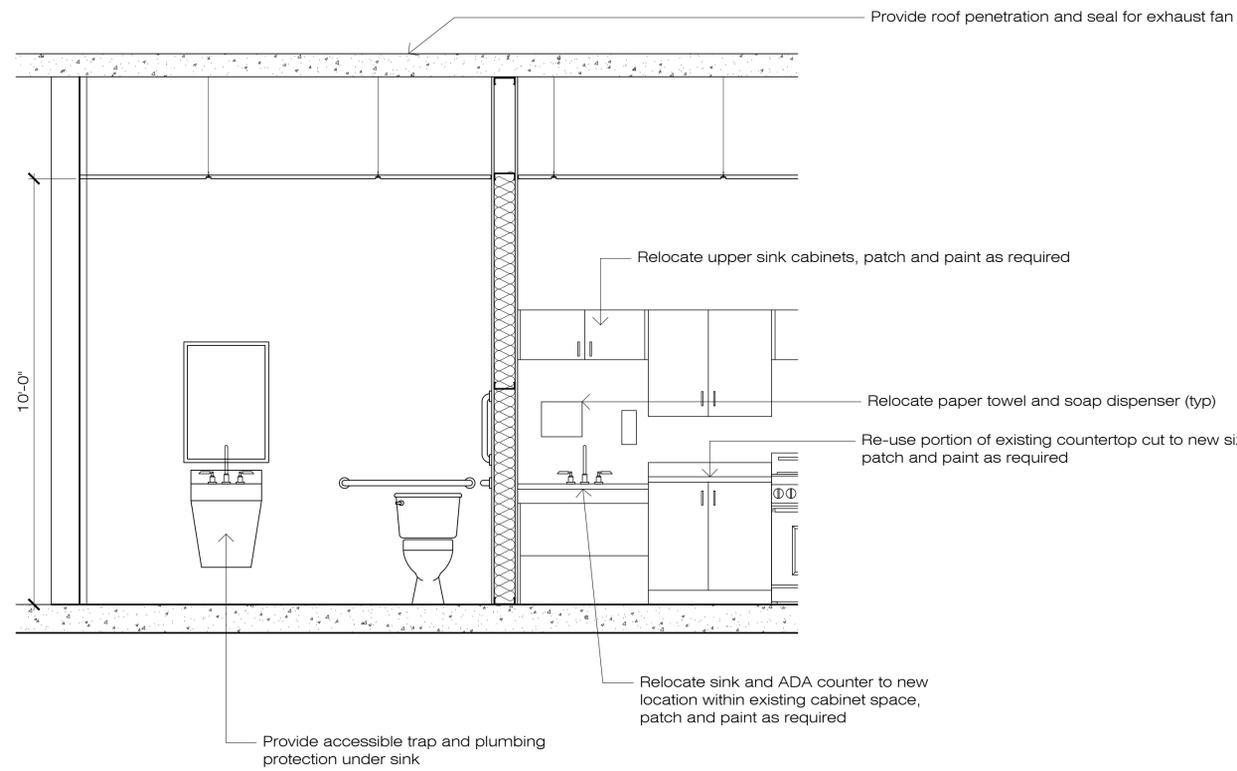
ADA BATHROOM  
 PLANS

DATE: 072318  
 SCALE: as noted  
 DRAWN BY: MFC

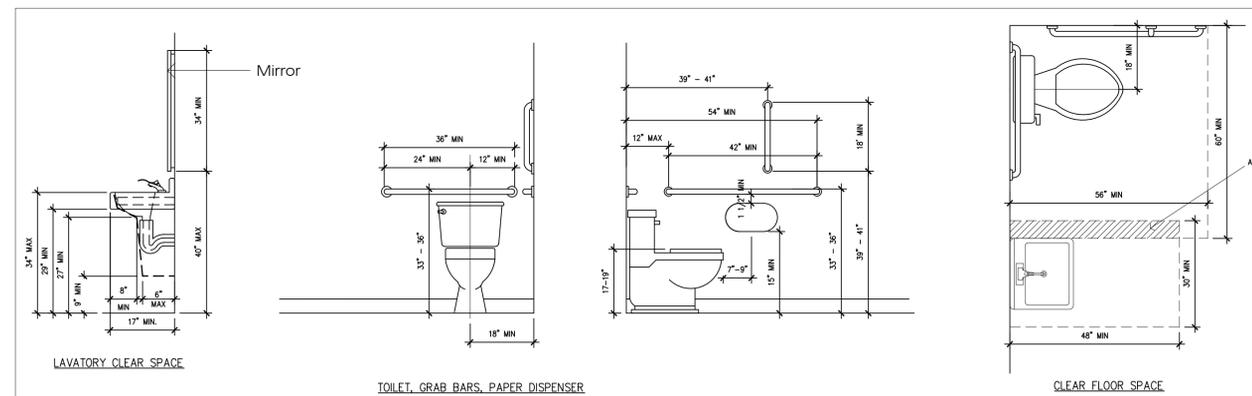
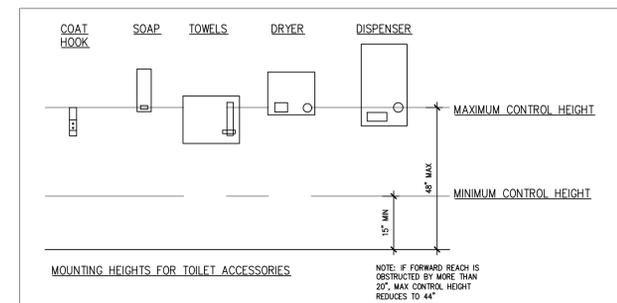
This document is an instrument owned by Michael F. Cusato, AIA Architect. Any reproduction or use without permission is strictly prohibited under The Architectural Works Copyright Protection Act of 1990.

DATE / REVISION:  
 Revision

DWG NO:  
**A1**



- A** Floor mounted water closet:  
American Standard Aftwall 1.28-1.6 gpf ADA Retrofit Everclean Universal Flushometer toilet model # 2294.011EC.020 with Sloan Royal G2 8111-1.28BN exposed sensor flushometer
- B** Single accessible lavatory, provide continuous 2x8 blocking  
American Standard Wheelchair users wall mounted sink # 9141.011.01 with Delta 501 single handle faucet
- C** Accessible 18"x36" tilt mirror
- D** Boardwalk Jumbo twin toilet paper dispenser (smoke) #BWKJT210SBBW
- E** Georgia Pacific Mark 2 crank roll paper towel dispenser and trash container #GPC56201
- F** SSS 800 ML soap dispenser #sss44110
- G** Wall mounted call for aid





**GENERAL NOTES:**

- A. For purposes of clarity and legibility, Drawings are essentially diagrammatic, and although sizes and locations of equipment are drawn to scale wherever possible, Contractor shall make use of all data in all of the Contract Documents and shall verify this information at building site. Do not scale Drawings.
- B. Drawings are intended to show only the general arrangement of equipment. It shall be the work of this Section to make the installation in such a manner as to conform to structure, avoid obstructions, preserve headroom, and keep openings and passageways clear, without further instructions or cost to the Owner.
- C. The word "provide" as used in this Specification and on the drawings shall mean to "furnish, install and connect." When other than this is the case, it shall be so stated.
- D. All materials furnished, and all work installed, shall comply with all rules and regulations of the 2012 International Building Code, 2012 International Mechanical Code, 2012 International Plumbing Code, 2016 National Fire Protection Association, Underwriters' Laboratories, 2016 National Electrical Code; with all requirements of local Utility Companies, Fire Department, and all other agencies and bodies having jurisdiction. The editions of the above publications to be used shall be as listed in the State Building Code and related supplements and appendices.
- E. Contractor shall give all necessary notices, obtain all permits, and pay all local, municipal, state, and/or federal fees, and other costs in connection with his work; file all necessary plans, prepare all documents, and obtain all necessary approvals of all governmental departments and public utilities having jurisdiction; obtain all required permits; obtain all required Certificates of Inspection for his work, and deliver same to the Architect prior to final acceptance of the Work.
- F. Examine drawings, specifications and site, and from these investigations be responsible for the nature and location of work, general conditions, particularly those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads, etc.
- G. Before any material is ordered, Contractor shall submit information sufficient to show full compliance with contract requirements on items proposed to be furnished.
- H. The contractor is solely responsible for superintending the work; confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating the Contractor's work with the work of other trades; performing his work in a safe and satisfactory manner; and the safety or adequacy of any equipment, building component, scaffolding, forms or other work aids.
- I. The Contractor shall examine all Drawings relating to the work of other trades and become fully informed as to the extent and character of work required in its relation to all work in the project.
- J. The Contractor shall remove all rubbish and waste materials from the site and building which have accumulated by his work or by his employees, and shall, upon the completion of the work, clean all mechanical equipment, materials, and fixtures to the satisfaction of the Architect.
- K. The Contractor shall turn over all systems thoroughly cleaned and in good working order.

appropriate Utility Company.

**1.06 COORDINATION**

- A. The Contractor shall examine all Drawings relating to the work of other trades and become fully informed as to the extent and character of work required in its relation to all work in the project.

**1.07 ELECTRICAL DRAWINGS**

- A. Electrical system layouts indicated are generally diagrammatic, and location of outlets and equipment are approximate. Exact routing of raceways, cables and wiring, and locations of outlets and equipment shall be governed by structural conditions and work of other trades. This shall not be construed to permit redesigning of electrical work.
- B. These Specifications are intended to supplement the drawings, the two being considered cooperative, and, therefore, it will not be within the province of this Specification to mention any of the work which the plans are competent to explain.
- C. Any items not mentioned in these Specifications or not indicated on the plans, but which are necessary for successful and efficient operation of the work, shall be held to be implied and shall be furnished and installed as part of the Contract.

**1.08 DESCRIPTION OF WORK**

- A. Furnish all labor, materials, equipment, tools and services which are required to completely install and place into operation the various electrical systems, and all electrical fixtures and equipment, all as shown on the drawings and in these Specifications.
- B. Examine the site work, structural, architectural, plumbing, heating, ventilating and air conditioning plans and be familiar with all conditions that will affect the electrical work. Coordinate all phases of the electrical installation with other trades.

**2. PRODUCTS**

**2.01 ACCEPTABLE MANUFACTURERS**

- A. Manufacturers for electrical equipment including but not limited to service entrance equipment, panelboards, circuit breakers, and disconnect switches: Cutler Hammer, Square 'D', General Electric, Westinghouse. Equipment numbers shown are based on Square 'D'.

**2.04 CONDUIT MATERIALS:**

- A. Rigid galvanized steel conduit: ANSI C80.1 Fittings & Conduit Bodies: ANSI/NEMA FB 1; Material to match conduit. Manufacturer: Allied Tube & Conduit.

**2.05 WIRE AND CABLE - GENERAL**

- A. All conductors shall be copper, all wire and/or cable #8 AWG and larger shall be stranded, and all

and raceway shall be dry and clean before wires are pulled. Care shall be exercised in pulling to avoid damage.

- B. Branch circuit work originating from panelboards shall be arranged to balance the loads on the phases of the panelboard feeders.
- C. Wire and cable for feeders, sub-feeders, control and branch circuit wiring shall be color coded according to NEC.
- D. The switch legs for local wall switches shall have a distinctive color, such as yellow, orange or brown.
- E. Splices shall be made in accessible junction boxes, only.

**3.06 SUPPORTS FOR EQUIPMENT**

- A. All conduits, lighting fixtures, cabinets, terminal boxes, panels, starters and all apparatus shown on the drawings shall be mounted securely to the structure. All necessary structural pieces (steel members), mounting devices shall be furnished and installed by the electrical Contractor.

**3.07 DIRECTORIES AND LABELS**

- A. At each panel provide a typed directory card accurately indicating each circuit.

**3.08 FIXTURE SUPPORT**

- A. Where outlet box or fitting will provide adequate support, a fixture may be attached and supported as required.
- B. Inspection: Fixtures shall be so installed that the connections between the fixture conductors and the circuit conductors can be inspected without requiring the disconnection of any part of the wiring.

**3.9 TESTS**

- A. The Contractor shall test all work and equipment as directed by the Architect, and as required by authorities having jurisdiction, furnishing all equipment, necessary personnel and the electrical power.

**3.10 COMPLETION OF WORK**

- A. The Contractor shall, periodically and upon request, remove all rubbish and waste materials from the site and building which have accumulated by his work or by his employees, and shall, upon the completion of the work, clean all electrical materials and fixtures to the satisfaction of the Architect.
- B. The Contractor shall turn over all systems thoroughly cleaned, in good working order, and in every respect to the entire satisfaction of the Owner, Architect and Engineer.

**ELECTRICAL SYMBOL LIST**

- S SINGLE POLE SWITCH
- S<sub>3</sub> THREE-WAY SWITCH
- S<sub>4</sub> FOUR-WAY SWITCH
- S<sub>M</sub> SWITCH WITH MOTION SENSOR
- Ⓜ HEAT DETECTOR
- Ⓢ SMOKE DETECTOR
- Ⓞ SINGLE RECEPTACLE
- Ⓞ<sup>•</sup> SPECIAL RECEPTACLE
- Ⓞ<sup>•</sup> SWITCHED RECEPTACLE
- Ⓞ<sup>•</sup> GROUND FAULT RECEPTACLE
- Ⓞ<sup>•</sup> DUPLEX RECEPTACLE
- Ⓞ<sup>•</sup> DUPLEX RECEPTACLE AT COUNTER HEIGHT
- HOME RUN TO PANEL
- 2' X 4' FLOURESCENT
- 2' X 2' FLOURESCENT
- ⊕ SURFACE INCANDESCENT
- ⓔ EXISTING TO REMAIN
- ⓔ<sup>•</sup> EXISTING TO BE REMOVED
- ⓔ<sup>•</sup> EXISTING TO BE REMOVED AND RELOCATED
- ⓔ<sup>•</sup> EXISTING AT NEW LOCATION

cusatoARCHITECTURE  
architecture - planning - interiors

41 otter trail westport ct 06880  
www.cusatoARCHITECTURE.COM  
203.395.4663

PROJECT TITLE:  
BEDFORD MIDDLE SCH.  
WESTPORT, CT

ADA BATHROOM  
ELECTRICAL PLAN

Scott G. Squires, P.E.  
446 Erwin Street • Trumbull, CT 06611  
Tel (203) 375-2240 • Cell (203) 727-8095

**SECTION 16100  
ELECTRICAL - MATERIALS & METHODS**

**1. GENERAL**

**1.01 GENERAL REQUIREMENTS**

- A. Refer to General Notes for General Requirements for this part of the work.

**1.02 WORK INCLUDED**

- A. Provide materials, labor, equipment and services necessary to furnish, deliver and install all electrical work as shown on the drawings, as specified, and as required by job conditions, including but not limited to the following:
  - 1. Provide circuit breakers, disconnect switches, etc.
  - 2. Wiring of new branch circuits which feed electrical loads in the toilet room.
  - 3. Wiring devices such as switches, receptacles, etc.
  - 4. Grounding and bonding all electrical equipment and systems.
  - 5. Connection to all electrically operated equipment and systems furnished by others including but not limited to HVAC and plumbing equipment.

**1.03 RELATED WORK BY OTHERS**

- A. Finish painting of all items specified under this Section unless otherwise noted.

**1.04 SHOP DRAWINGS**

- A. Submit for review shop drawings drawn to scale of all systems to be installed. It is the intent of these Specifications that submittals shall be reviewed prior to ordering or installing equipment.
- B. Shop drawings shall be submitted for the following equipment:
  - 1. Wiring devices.

**1.05 REGULATIONS**

- A. The installation shall conform to the requirements of:
  - 1. National Electrical Code
  - 2. Standards of the National Electrical Manufacturers Association (NEMA).
  - 3. Life Safety Code.
  - 4. National Building Code and Amendments.
  - 5. Local authorities having jurisdiction.
  - 6. Local Building Codes or Requirements.
- B. All work performed under this Contract shall be in full compliance with all requirements of the

**2.08 RECEPTACLES**

- A. All receptacles shall be color selected by architect plastic equal to Leviton commercial grade.
- B. Receptacles for general use (120-volt) throughout the building shall be 20 ampere duplex grounding type, Leviton or approved equal.
- C. GFI receptacles as required by NEC, shall be Leviton catalog #6598 with wall plate. It is permissible to use circuit breaker with ground fault protection for branch circuits, serving bathrooms, kitchens and outdoor circuits.

**2.09 SWITCHES**

- A. All switches shall be color selected by architect plastic equal to Leviton commercial grade.
- B. Switches for general use (120-volt) throughout the building shall be 20 ampere duplex grounding type, Leviton or approved equal.
- C. Switch with occupancy sensor shall be Decora by Leviton with passive infrared sensor.
- D. Timeclocks shall be Intermatic electromechanical 24 hour, single pole.

**3. EXECUTION**

**3.01 INSTALLATION OF CONDUITS**

- A. The run and arrangement of all conduits shall be approximately as shown on the drawings and as directed during installation. All risers shall be erected plum and true, and shall be parallel with walls and other lines, and shall be neatly spaced. The electrical Contractor shall, at all times, work in conjunction with the heating, ventilating, air conditioning and plumbing Contractors and with the Contractor for general construction, and all other Contractors in order to avoid interferences of conduit and unnecessary cutting of floors and walls.

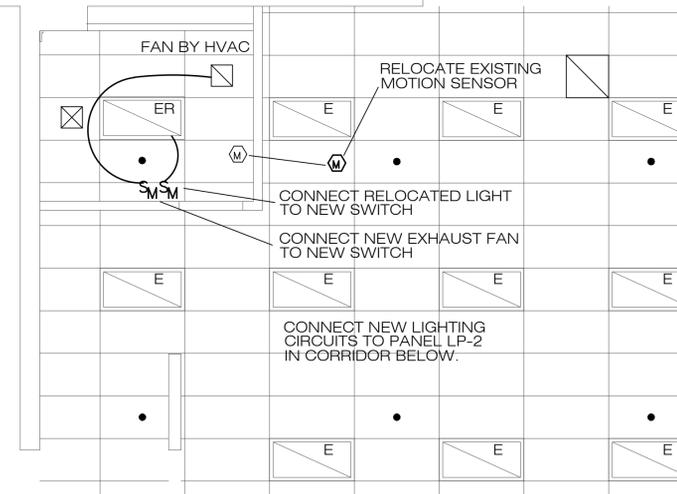
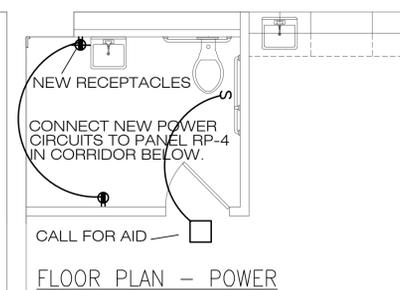
**3.02 OUTLET BOXES**

- A. Furnish and install an outlet box at every outlet called for on Contract Drawings, or required by installation details and Codes.
- B. Outlet box "knockouts" shall be opened only as actually required for the insertion of conduit, and any outlet boxes with surplus openings shall be promptly replaced by this Section.

**3.04 WIRE AND CABLE INSTALLATION**

- A. Wire and cable shall not be drawn into conduit and raceways until all work of a nature which may cause injury is complete, or until permission is given by the construction superintendent. The inside of conduit

END OF SECTION 16100



FLOOR PLAN - LIGHTING

DATE: 071918

SCALE: as noted

DRAWN BY: SGS

This document is an instrument owned by Michael F. Cusato, AIA Architect. Any reproduction or use without permission is strictly prohibited under The Architectural Works Copyright Protection Act of 1990.

DATE / REVISION:

Revision

DWG NO:  
**E-1**

**GENERAL NOTES:**

- A. For purposes of clarity and legibility, Drawings are essentially diagrammatic, and although sizes and locations of equipment are drawn to scale wherever possible, Contractor shall make use of all data in all of the Contract Documents and shall verify this information at building site. Do not scale Drawings.
- B. Drawings are intended to show only the general arrangement of equipment. It shall be the work of this Section to make the installation in such a manner as to conform to structure, avoid obstructions, preserve headroom, and keep openings and passageways clear, without further instructions or cost to the Owner.
- C. The word "provide" as used in this Specification and on the drawings shall mean to "furnish, install and connect." When other than this is the case, it shall be so stated.
- D. All materials furnished, and all work installed, shall comply with all rules and regulations of the 2012 International Building Code, 2012 International Mechanical Code, 2012 International Plumbing Code, 2016 National Fire Protection Association, Underwriters' Laboratories, 2016 National Electrical Code; with all requirements of local Utility Companies, Fire Department, and all other agencies and bodies having jurisdiction. The editions of the above publications to be used shall be as listed in the State Building Code and related supplements and appendices.
- E. Contractor shall give all necessary notices, obtain all permits, and pay all local, municipal, state, and/or federal fees, and other costs in connection with his work; file all necessary plans, prepare all documents, and obtain all necessary approvals of all governmental departments and public utilities having jurisdiction; obtain all required permits; obtain all required Certificates of Inspection for his work, and deliver same to the Architect prior to final acceptance of the Work.
- F. Examine drawings, specifications and site, and from these investigations be responsible for the nature and location of work, general conditions, particularly those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads, etc.
- G. Before any material is ordered, Contractor shall submit information sufficient to show full compliance with contract requirements on items proposed to be furnished.
- H. The contractor is solely responsible for superintending the work; confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating the Contractor's work with the work of other trades; performing his work in a safe and satisfactory manner, and the safety or adequacy of any equipment, building component, scaffolding, forms or other work aids.
- I. The Contractor shall examine all Drawings relating to the work of other trades and become fully informed as to the extent and character of work required in its relation to all work in the project.
- J. The Contractor shall remove all rubbish and waste materials from the site and building which have accumulated by his work or by his employees, and shall, upon the completion of the work, clean all mechanical equipment, materials, and fixtures to the satisfaction of the Architect.
- K. The Contractor shall turn over all systems thoroughly cleaned and in good working order.

**SECTION 15500**

**FORCED AIR HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS**

**PART 1 - GENERAL**

**1.1 GENERAL REQUIREMENTS**

- A. Refer to General Notes for General Requirements for this part of the Work.

**1.2 WORK INCLUDED**

- A. Provide materials, labor, equipment and services necessary to furnish, deliver and install all heating, ventilating and air conditioning work as shown on the drawings, as specified, and as required by job conditions, including but not limited to the following:
  1. Heating, ventilating, and air conditioning equipment.
  2. Provide all control components and control wiring for all systems and equipment provided.
  3. All HVAC ductwork, ductwork insulation, diffusers, grilles, registers, louvers, control dampers, and other air devices.
  4. Exhaust ductwork and exhaust fans.
  5. Hangers and supports for piping, ductwork, and equipment.
  6. All other items not listed above or called for in the plumbing or electrical sections as necessary for a complete and functioning heating, ventilating and air-conditioning system.
  7. Clean-up.

**1.3 RELATED WORK BY OTHER SECTIONS**

- A. Related work by others: All power wiring.

**1.4 TERMINOLOGY**

- A. The word "Provide" as used in this Specification and on the drawings shall mean "furnish and install." When other than this is the case, it shall be so stated.

**1.5 SHOP DRAWINGS**

- A. Shop drawings shall be submitted for all major equipment described under "Work Included."

**1.6 REGULATIONS**

- A. The system installation shall conform to the following rules and regulations: State of Connecticut Building Code, and local Rules and Regulations.

**1.7 BALANCING**

- A. The balancing, testing, and adjustments of the complete mechanical systems shall be the direct responsibility of the mechanical contractor
- B. Comply with all the requirements of the Connecticut State Energy Conservation Code.

**PART 2. PRODUCTS**

**2.1 HVAC EQUIPMENT**

- A. For type, size, ratings, and electrical characteristics of all HVAC equipment see schedule on Drawings. Substitutions, if any, shall be agreed to in writing by the Owner or the Owner's representative.
- B. Install units and accessory items in strict accordance with the manufacturer's published instructions.

**2.2 SHEET METAL**

- A. Unless otherwise called for on the drawings and specifications sheet metal ducts and supports shall be fabricated of hot dipped galvanized steel.
- B. Materials:
  1. General: Non-combustible or conforming to requirements for Class 1 air duct materials or UL 181.
  2. Steel Ducts: ASTM A525, ASTM 527 galvanized steel sheet, lock-forming quality having zinc coating of 1.25 ounce per square foot for each side in conformance with ASTM A90.

**2.3 INSULATION MATERIALS**

- A. All insulation shall have composite (insulation jacket and adhesive used to adhere the jacket to the insulation) Fire and Smoke Hazard ratings as tested under procedure ASTM E-84, NFPA 255, and UL 723.
- B. Exterior duct insulation shall consist of a flexible glass fiber blanket, with a factory-applied foil-scrim-kraft facing consisting of aluminum foil reinforced with fiber glass yarn mesh and laminated to 40 lb. chemically treated, fire resistant kraft. Insulation shall be Johns-Manville Microlite Type FSK, or approved equal.

**2.4 CONTROLS**

- A. The switch serving EF-1 shall have occupancy sensor.

**PART 3. EXECUTION**

**3.1 SHEET METAL WORK**

- A. Sheet metal work shall include: Ducts, casings, pans, duct connections, dampers, fire dampers, and any other sheet metal work necessary to complete the HVAC systems. Work shall also include hangers, brackets, and supports for all sheet metal work.
- B. Furnish and install, where required, transitions, crossovers, offsets, changes in duct shape as is necessary to avoid interfering with light fixtures, conduits and pipes of other trades and building structure to avoid restricting air flow in ducts. Adjust ductwork layout shown on Drawings as required for coordination with other building trades and field conditions.

- C. If junctions of dissimilar metals occur, use a suitable dielectric gasket or line with a layer of approved fireproof tape before jointing.
- D. Unless otherwise called for on the drawings or specified herein, sheet metal gauges, construction and supports shall be in accordance with the latest standards issued by the Sheet Metal and Air Conditioning Contractors National Association, Inc., (SMACNA).

AIR SYSTEM	MATERIAL
General Exhaust	Steel

**3.2 INSULATION INSTALLATION**

- A. All insulation shall be installed in a workmanlike manner by skilled workmen regularly engaged in this type of work. Insulation products shall be as manufactured by Johns-Manville, Owens/Coming, or CertainTeed subject to approval prior to installation.

AIR SYSTEM	MATERIAL
Low Pressure exhaust	1" external insulation for all ducts

**3.3 EXHAUST FANS**

- A. Install units and accessory items in strict accordance with the manufacturer's published instructions.
- B. Provide fire resistant flexible duct collars at inlet and outlet connections to fans.

**3.4 CONTROLS**

- A. Control components and wiring shall be supplied and installed by the Mechanical Contractor.
- B. Furnish complete controls to provide the following modes of operation:
  1. Exhaust fans EF-1 shall be controlled by a wall switch with occupancy sensor.

**3.5 COMPLETION OF WORK**

- A. The Contractor shall remove all rubbish and waste materials from the site and building which have accumulated by his work or by his employees, and shall, upon the completion of the work, clean all mechanical equipment, materials, and fixtures to the satisfaction of the Architect.
- B. The Contractor shall turn over all systems thoroughly cleaned and in good working order.

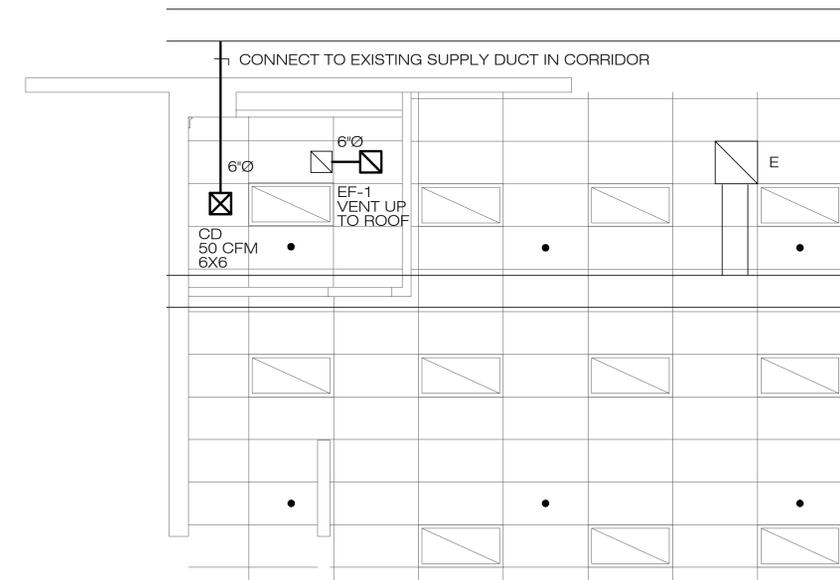
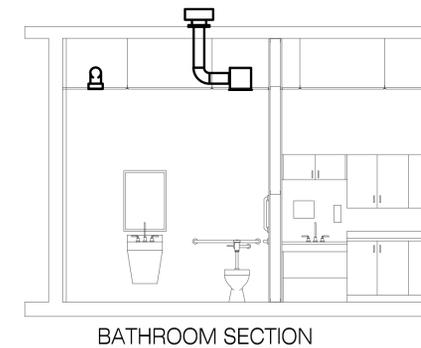
END OF SECTION 15500

**MECHANICAL SYMBOL LIST**

- Ⓢ THERMOSTAT
- BALANCING DAMPER
- CFM CUBIC FEET PER MINUTE
- FD/AD FIRE DAMPER WITH ACCESS DOOR
- ☒ SUPPLY DUCT RISER
- ☒ RETURN DUCT RISER
- ☒ SUPPLY DUCT DN.
- ☒ RETURN DUCT DN.
- CD CEILING DIFFUSER
- EF EXHAUST FAN
- E EXISTING

SYMBOL	TYPE	MATERIAL	INTEGRAL DAMPER	FINISH	MOUNTING ARR	FUNCTION	MANUFACTURER & MODEL #	REMARKS
CD	CEILING DIFF.	STEEL	YES	WHITE	CEILING	SUPPLY	METALAIRE - 5500	DIRECTIONAL CEILING DIFFUSER

MARK	SERVING	LOCATION	TYPE	CFM	ESP	H.P.(WATTS)	VOLT/PH	MANUFACTURER - MODEL	WEIGHT	REMARKS
EF-1	TOILET RM	CEILING	CEILING	100	0.25	(23)	120/1	GREENHECK - SP-A125	17	RFC-7 ROOF CAP



cusatoARCHITECTURE  
architecture - planning - interiors  
41 0ster trail westport ct 06880  
www.cusatoARCHITECTURE.COM  
203.395.4663

PROJECT TITLE:  
BEDFORD MIDDLE SCH.  
WESTPORT, CT

ADA BATHROOM  
HVAC PLAN

Scott G. Squires, P.E.  
446 Erwin Street • Trumbull, CT 06611  
Tel (203) 375-2240 • Cell (203) 727-8095

DATE: 071918  
SCALE: as noted  
DRAWN BY: SGS

This document is an instrument owned by Michael F. Cusato, AIA Architect. Any reproduction or use without permission is strictly prohibited under The Architectural Works Copyright Protection Act of 1990.

DATE / REVISION:  
Revision

DWG NO:  
**M-1**

**GENERAL NOTES:**

- A. For purposes of clarity and legibility, Drawings are essentially diagrammatic, and although sizes and locations of equipment are drawn to scale wherever possible, Contractor shall make use of all data in all of the Contract Documents and shall verify this information at building site. Do not scale Drawings.
- B. Drawings are intended to show only the general arrangement of equipment. It shall be the work of this Section to make the installation in such a manner as to conform to structure, avoid obstructions, preserve headroom, and keep openings and passageways clear, without further instructions or cost to the Owner.
- C. The word "provide" as used in this Specification and on the drawings shall mean to "furnish, install and connect." When other than this is the case, it shall be so stated.
- D. All materials furnished, and all work installed, shall comply with all rules and regulations of the 2012 International Building Code, 2012 International Mechanical Code, 2012 International Plumbing Code, 2016 National Fire Protection Association, Underwriters' Laboratories, 2016 National Electrical Code; with all requirements of local Utility Companies, Fire Department, and all other agencies and bodies having jurisdiction. The editions of the above publications to be used shall be as listed in the State Building Code and related supplements and appendices.
- E. Contractor shall give all necessary notices, obtain all permits, and pay all local, municipal, state, and/or federal fees, and other costs in connection with his work; file all necessary plans, prepare all documents, and obtain all necessary approvals of all governmental departments and public utilities having jurisdiction; obtain all required permits; obtain all required Certificates of Inspection for his work, and deliver same to the Architect prior to final acceptance of the Work.
- F. Examine drawings, specifications and site, and from these investigations be responsible for the nature and location of work, general conditions, particularly those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads, etc.
- G. Before any material is ordered, Contractor shall submit information sufficient to show full compliance with contract requirements on items proposed to be furnished.
- H. The contractor is solely responsible for superintending the work; confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating the Contractor's work with the work of other trades; performing his work in a safe and satisfactory manner; and the safety or adequacy of any equipment, building component, scaffolding, forms or other work aids.
- I. The Contractor shall examine all Drawings relating to the work of other trades and become fully informed as to the extent and character of work required in its relation to all work in the project.
- J. The Contractor shall remove all rubbish and waste materials from the site and building which have accumulated by his work or by his employees, and shall, upon the completion of the work, clean all mechanical equipment, materials, and fixtures to the satisfaction of the Architect.
- K. The Contractor shall turn over all systems thoroughly cleaned and in good working order.

- 1. Sprinkler heads, valves and pipe.

**1.6 STANDARDS, CODES AND REGULATIONS**

- A. The applicable current standards for the fire protection systems shall be the National Fire Protection Associations (NFPA), NFPA-13, NFPA-20, NFPA-22 and all other applicable state and local codes and ordinances.

**PART 2 - PRODUCTS**

**2.1 SELECTION OF MATERIALS AND EQUIPMENT**

- A. All materials and equipment furnished under this Section shall be new and approved by Underwriters' Laboratories, Inc. (UL), Factory Mutual (F/M), and American Water Works Association (AWWA) where applicable.

**2.2 SPRINKLER HEADS**

- A. Concealed pendant sprinkler heads shall be Viking Model Mirage concealed pendant type, 1/2 inch orifice, 1/2 inch pipe thread, rated 155 degrees F, chrome finish. Sprinklers shall be tested and listed by UL and/or FM.

**2.3 AUTOMATIC SPRINKLER SYSTEM PIPING**

- A. Pipe shall be new, designed for 175 PSI working pressure, conforming to ASTM specifications, manufactured in the United States, and have the manufacturer's name or brand, along with the applicable ASTM standard, marked on each length of pipe.
- B. Acceptable pipe: Steel, Schedule 40, black, and in accordance with specifications ASTM A120 or A53, OR, Pipe shall be steel, Schedule 10, black, and in accordance with specification ASTM A135.

**2.4 PIPE HANGERS AND SUPPORTS**

- A. The load bearing surface of the pipe hanger must be at least 1/2" wide or support the pipe in two places. Branch lines shall be braced at a distance of six inches or less from the tee or elbow drop to the sprinkler head according to manufacturers instructions.

**PART 3 EXECUTION**

**3.1 AUTOMATIC SPRINKLER SYSTEM PIPING**

- A. The contractor shall visit the site as necessary to measure and record field conditions and shall install the complete system in accordance with NFPA requirements.

**3.2 AUTOMATIC SPRINKLER SYSTEM INSTALLATION**

- A. The interior surfaces of all piping and equipment shall be clean and free of all dirt, loose scale, rust, and other foreign material before installation.

**3.3 PIPE SUPPORTS**

- A. All piping shall be supported by means of hangers tested and listed as approved by UL and/or FM. Sizing, spacing, and installation shall be in accordance with National Fire Protection Association standard No. 13, "Sprinkler Systems", except as otherwise shown on Drawings or specified herein.

**3.4 FLUSHING**

- A. Before permanently filling the site water system with water and before connections are made to the automatic sprinkler risers, all parts of the system shall be thoroughly flushed until water runs clear.

**3.6 TESTS AND INSPECTION**

- A. The Fire Protection Contractor shall conduct and bear the costs of all necessary tests of the fire protection work, furnishing all labor, power and equipment. All piping shall be tested with water, the tests witnessed by representatives of the Owner.
- B. The fire protection piping shall be tested under a hydrostatic pressure of not less than 200 lbs. psig, for a duration of not less than 2 hours.

END OF SECTION

**FIRE PROTECTION SYMBOL LIST**

- NEW FIRE PROTECTION PIPING
- EXISTING FIRE PROTECTION PIPING
- CONCEALED PENDANT SPRINKLER HEAD
- E EXISTING
- ER EXISTING TO BE RELOCATED
- N NEW

**SECTION 15330**

**FIRE PROTECTION**

**PART 1 GENERAL**

**1.1 GENERAL REQUIREMENTS**

- A. Refer to Section 15050 for General Requirements for this part of the Work.

**1.2 SCOPE OF WORK**

- A. Provide materials, labor, equipment and services necessary to furnish, deliver and install all work of this Section as specified and as required by job conditions, including but not limited to the following:
  - 1. Furnish and install sprinkler system to sprinkle the building as shown except in accordance with NFPA 13. System to include all pipe, hangers, sprinkler heads, valves, controls, drains, alarms.
  - 2. Do the testing of all piping work and necessary cleaning of the fire protection work.
  - 3. Miscellaneous items as hereinafter specified.

**1.3 RELATED WORK BY OTHER SECTIONS**

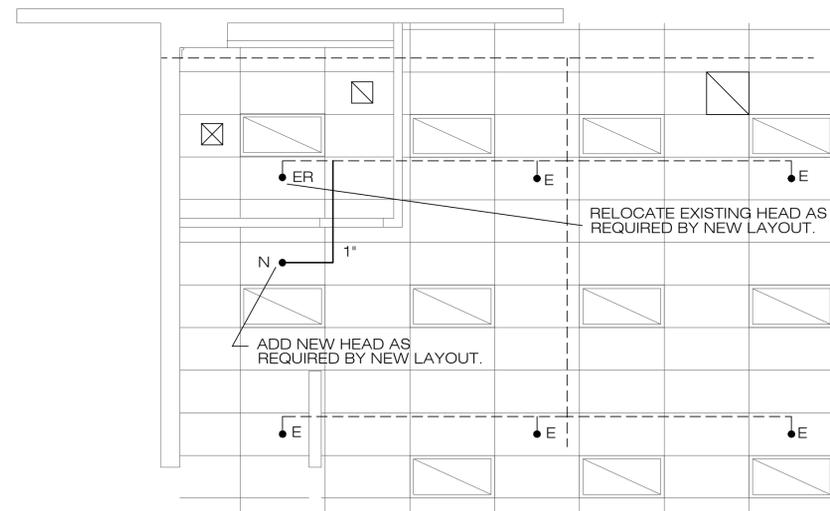
- A. Related work to be performed by others. Cutting and patching.

**1.4 TERMINOLOGY**

- A. The word "Provide" as used in this Specification and on the drawings shall mean "furnish and install". When other than this is the case, it shall be so stated.

**1.5 DRAWINGS**

- A. The contractor shall install the entire sprinkler system in accordance with NFPA requirements. Review proposed piping and equipment locations with the Architect for approval prior to installation.
- B. Shop drawings shall be submitted on the following items. It is the intent of these Specifications that submittals shall be reviewed prior to installation of equipment.



FLOOR PLAN - FIRE PROTECTION

cusatoARCHITECTURE  
 architecture - planning - interiors  
 41 otter trail westport ct 06880  
 www.cusatoARCHITECTURE.COM  
 203.395.4663

PROJECT TITLE:  
 BEDFORD MIDDLE SCH.  
 WESTPORT, CT

ADA BATHROOM  
 FIRE PROTECTION PLAN

Scott G. Squires, P.E.  
 446 Erwin Street • Trumbull, CT 06611  
 Tel (203) 375-2240 • Cell (203) 727-8095

DATE: 071918  
 SCALE: as noted  
 DRAWN BY: SGS

This document is an instrument owned by Michael F. Cusato, AIA Architect. Any reproduction or use without permission is strictly prohibited under The Architectural Works Copyright Protection Act of 1990.

DATE / REVISION:  
 Revision

DWG NO:  
**F-1**