

Educational Specification for Mansfield Middle School

Project: Partial Roof Replacement, Mansfield Middle School,
205 Spring Hill Road, Storrs, Connecticut 06268

1. RATIONALE:

The long range plan for the district shows Mansfield Middle School calling for a replacement of over 90,000 square feet (SF) of the roofing sections at the school. The last roof replacement project was performed in 1998-1999 where 8,000 SF of existing roof was replaced including 4,000 SF of standing seam metal roof. Prior to that the remaining 90,000 SF of roofing was last replaced in 1987. The existing roofs show significant signs of wear and have been patched many times. Leaks in the existing roofs have become increasingly common each year causing damage to interior finishes. Damaged interior finishes, including flooring have been repaired and replaced regularly. The resulting maintenance cost to repair roof leaks has increased year after year.

Roof replacement is scheduled for the summer of 2021 for 90,000 s.f. of roofing, removing all roofing components, pea stone ballast, membrane, flashings, drains, insulation. Storm drainage & plumbing systems will be analyzed and supplemented and/or replaced if found to be insufficient or non-code complaint. The roof will be designed to support a full PV solar system also scheduled to be installed the summer of 2021, following the roof replacement. The roof will be constructed to accommodate the addition of solar panels.

2. LONG – RANGE PLAN:

The district's school facilities provision calls for a quality and appropriate learning environment for the students & staff and to be more environmentally sustainable. In order to comply with this aspect of the plan, it is required to remove and replace the existing, proposed 90,000 s.f. of older roof at Mansfield Middle School.

3. THE PROJECT:

The project proposes the following components of its roof replacement project:

- Design and prepare the project for bidding in late 2020.
- Bid and award the roof in late 2020/early 2021
- Order and procure all materials in the spring of 2021.

- Remove existing fully adhered single ply membrane over the proposed 90,000 s.f. of roof area including existing cover board, perimeter flashing, termination flashings, drain flashings, insulation along with roof drains as required for a code compliant roof replacement project.
- Install new roofing membrane system with integrated flashings and drains (as required). Area consists of 90,000 s.f. of roofing membrane placed over a new cover board with walkway pads as required on all roofing surfaces.
- Primary and/or Secondary drains for all roof areas may be required with interior piping to the exterior wall, or provisions for overflow spouts to be provided, depending on an analysis if the existing drainage network is code compliant.
- The current school includes grades 5-8 with an enrollment of approximately 552 students and houses various classrooms, Multi-purpose room, gymnasium, auditorium, art rooms, music rooms, special education classes, nurses office, main office, kitchen, server, cafeteria, custodial spaces, storage rooms, boiler room, administration offices.
- The original facility was constructed in 1969 consisting of masonry walls, steel superstructure with steel roof decks. Small additions were added in the 1970s utilizing similar construction and metal roof decks. Additions were also added in the 1999 also utilizing similar construction and metal roof decks.
- No FFE will be included in this project.

4. BUILDING SYSTEMS:

- Security: n/a
- Public Address: n/a
- Technology: n/a
- Phone System: n/a
- Clocks: n/a

5. INTERIOR BUILDING ENVIRONMENT:

- Acoustics: na
- Lighting: n/a
- HVAC: various rooftop equipment may be removed, new curbs installed, and replaced in their current location in order to satisfy roofing warranties.
- Plumbing: new storm piping will be required if drain location are relocated or if additional secondary drainage is required by code.
- Windows & Doors: n/a

6. SITE DEVELOPMENT:

- Site Acquisitions: n/a
- Parking: n/a
- Drives: n/a
- Walkways: n/a
- Outdoor Athletic Fields: n/a
- Landscaping: n/a
- Site Improvements: n/a

7. CONSTRUCTION BONUS REQUESTS:

Mansfield Middle School does not house any special program eligible for a school construction bonus.

- School Readiness: n/a
- Lighthouse School: n/a
- CHOICE: n/a
- Full Day kindergarten: n/a
- Reduced class size: n/a
- Regional Vo-ag Center: n/a
- Inter-District Magnet School: n/a
- Inter-District Cooperative School: n/a
- Regional Special Education Center: n/a

8. COMMUNITY USES:

Mansfield Middle School is designed for community use during school hours, before and after school hours and on some weekends throughout the school year and summer months. The uses included but are not limited to include:

- PTO
- The Recreation Department
- Summer Enrichment Programs
- Neighborhood and town wide public meetings
- Boys & Girl scouts
- Community choral and other performing arts programs

Various and sometimes multiple areas are used for these functions.