EDUCATIONAL SPECIFICATIONS For Granby Memorial High School LOW-SLOPE ROOF REPLACEMENT Entire Roof

Project Rationale

The roof areas encompass the entire building. All areas are at least 20 years old. The roof areas included in this project comprise approximately 87,000 square feet. The roof has exceeded the warranty. Water has infiltrated beneath the roof membrane through failure of the roof membrane and flashing. Roof leaks are contributing to water ingress into the interior spaces of the buildings. Maintenance and repairs have been done in an effort to prevent further water ingress, but extensive damage could be reasonably expected if the roof, insulation, and flashings are not replaced.

Long-Range Plan

The long-range plan for Large Capital Improvements, as established by the Board of Education of the Granby Public Schools, and provided to the Capital Priorities Advisory Committee for the Town of Granby, calls for the provision of a safe and appropriate learning environment. Maintaining an acceptable learning environment requires replacement of the roof to prevent further water ingress.

Granby Public Schools has developed and adopted a multiple-phase schedule for enacting the various elements of the Large Capital Improvement Plan, which incorporates work at each of our schools. The Granby Memorial High School will remain as the Town's high school for the foreseeable future.

The Project

The Granby Board of Education proposes the following components of this roof replacement project:

- Architectural drawings and specifications
- Test for any hazardous roofing and flashing materials
- Removal of all roofing materials down to the deck. Disposal of all refuse materials, disposal of any hazardous materials in an appropriate manner.
- Inspection of roof deck and replacement of any deteriorated areas as needed.
- Installation of new insulations, roof membrane, and flashings to effect a complete, code compliant roof installation.
- Install new metal cap coping at parapet walls.
- Provide positive drainage (minimum ¼" per 1'-0" slope) to existing roof drain locations and to new roof drain locations as required. Provide tapered insulation crickets at low points and at existing roof-top equipment as required.

Granby Memorial High School Roof Replacement Educational Specification

- Replace flashings at existing roof-top equipment, roof curbs, access hatches, and other roof penetrations.
- Replace roof access ladders as needed to attain compliance with OSHA and other applicable standards and regulations.
- Provide and install new roof walkway pads from roof hatches to adjacent roof top equipment as well as to and from roof access ladders.
- Provide and install new through-wall roof scuppers in lieu of secondary roof drains to notify of roof drain failure, where existing secondary roof drains are not acceptable.

Current Space – The spaces beneath the replacement roof comprise the entirety of the programmatic spaces of the Granby Memorial High School.

Building Systems

The existing building construction is steel framed with metal decking for the majority of the building. The oldest section of the building appears to be a masonry bearing wall with steel trusses and metal roof deck.

The roof trusses have a sloped top chord, providing a sloped roof deck, which is augmented by tapered insulation as needed.

Some acoustical tiles have been damaged from water ingress. These will be replaced as appropriate.

The proposed roofing system is a single ply membrane, white, 90-mil EPDM roof with a 30 year warranty.

