

**EDUCATIONAL SPECIFICATIONS  
for Granby Memorial Middle School  
LOW-SLOPE ROOF REPLACEMENT  
Roof Sections R1, R2, R3 & R8**

**Project Rationale**

The roof area indicated for replacement via this project is 28 years old and has met its life expectancy. It is original to the building construction, completed in 1992. The roof area included in this project (Sections R1, R2, R3, & R8 as indicated on the attached Roof Key Plan) comprises 14,243 square feet. The roof has exceeded its original warranty. Water intrusion in the spaces beneath these roofs can be attributed to leaks in the associated roof and/or associated flashing. Maintenance and repairs have occurred to prevent further leakage, but extensive damage could be caused if the roof is not replaced and new flashings installed.

**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 Program Priorities advisory Committee for the Town of Granby, calls for the provision of a safe and appropriate learning environment. In order to comply with this aspect of the plan, it is necessary to replace this portion of the Granby Memorial Middle School roof. We have developed a multi-phase, multi-school schedule for enacting the elements of the Large Capital Improvements plan, upon which a town referendum has authorized, in part, replacement of a portion of the existing middle school roof, which provides us with current detailed information to guide us in implementing our long-range plan. The Granby Board of Education plans to utilize the Granby Memorial Middle School site for the foreseeable future.

**The Project**

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

- Architectural drawings and bid specifications
- Test for any hazardous roofing and flashing materials
- Remove all roofing materials down to the deck and dispose of hazardous materials, if present, in an appropriate manner
- Inspect roof deck and replace problem areas as appropriate
- Install new roofing system and flashings at adjacent vertical walls

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- Install new insulation as required to meet current State of Connecticut building code for above-deck roof insulation
- Install new metal cap coping at parapet walls
- Provide positive drainage (min. 1/4" per 1'-0" slope) to existing roof drain locations; provide tapered insulation crickets at low points and at existing roof top equipment as required
- Replace flashings at existing rooftop equipment, roof curbs, access hatch, and other miscellaneous roof penetrations
- Replace roof access ladders
- New roof walkway pads from adjacent roof hatch to roof top equipment and to and from roof access ladders
- New through-wall roof scuppers in lieu of secondary roof drains to notify of roof drain failure

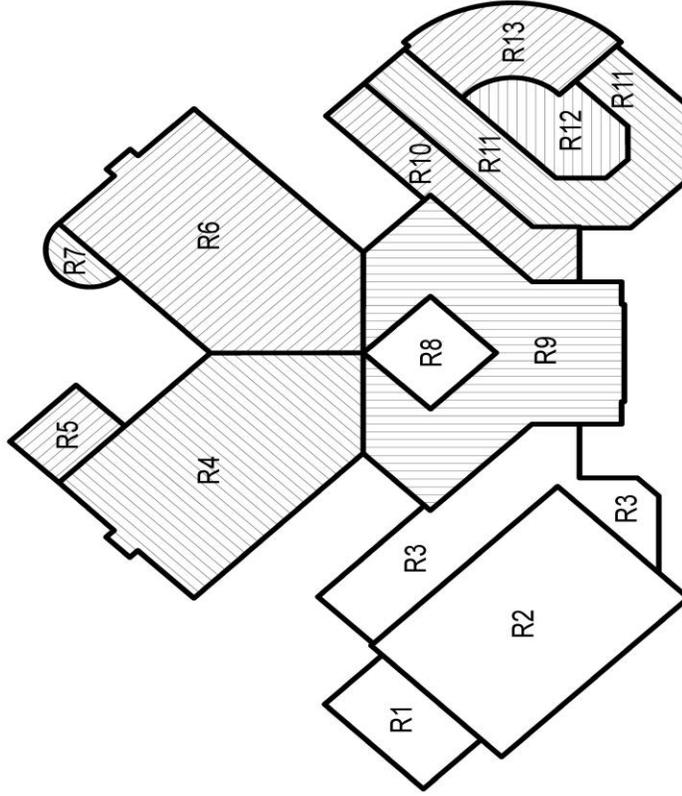
Current Space: The space underneath the roof to be replaced includes areas such as the Gymnasium, adjacent Auxiliary Gymnasium (Fitness Room) and supporting locker rooms, storage, corridor & Gym lobby, toilet rooms, as well as a staircase and adjacent corridors.

**Building Systems**

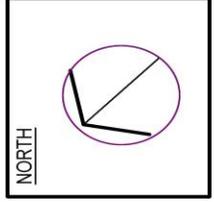
The existing building construction is steel-frame with metal decking. The metal deck at the Gymnasium and Auxiliary Gymnasium is an acoustic metal deck and is exposed to the spaces below. The top chord of the roof joists are sloped, as is the corresponding metal deck, providing and/or exceeding the required roof pitch. The lockers rooms, toilet rooms and corridors have a level roof structure (no slope) and will require tapered insulation to achieve the required roof pitch. Acoustical ceiling tiles may be replaced in areas as needed.

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

ROOF AREA DESIGNATION	SQ. FT.	PITCH	EXISTING ROOF ON EXISTING BUILDING	NEW ROOF ON EXISTING BUILDING	NEW ROOF ON NEW ADDITION	TYPE OF ROOFING	ORIGINAL CONSTRUCTION DATE	DATE OF LAST REPAIR/REPLACEMENT	PROGRAMMATIC AREA BELOW ROOF
R1	1,665	1/4":1'-0"		X		Single Ply Membrane (EPDM)	1992		Auxiliary Gym
R2	7,095	1/4":1'-0"		X		Single Ply Membrane (EPDM)	1992		Gymnasium
R3	4,203	1/4":1'-0"		X		Single Ply Membrane (EPDM)	1992		Locker Rooms, Entry
R4	7,698	5 1/4":3'-0"	X			Standing Seam Metal Roof	1992	2019	Classrooms
R5	937	5 1/4":3'-0"	X			Standing Seam Metal Roof	1992	2019	Science Room
R6	7,680	5 1/4":3'-0"	X			Standing Seam Metal Roof	1992	2019	Classrooms
R7	438	5 1/4":3'-0"	X			Standing Seam Metal Roof	1992	2019	ART Room
R8	1,280	1/4":3'-0"		X		Single Ply Membrane (EPDM)	1992		Open Stair & Toilet Rooms
R9	7,878	5 1/4":3'-0"	X			Standing Seam Metal Roof	1992	2019	Offices, Media Center
R10	2,356	1/4":3'-0"	X			Single Ply Membrane (EPDM)	1992	2019	Kitchen, Entry
R11	4,254	5 1/4":3'-0"	X			Standing Seam Metal Roof	1992	2019	Kitchen, Music Rooms
R12	1,809	1/4":3'-0"	X			Single Ply Membrane (EPDM)	1992	2019	Cafeteria, Music Rooms
R13	2,279	5 1/4":3'-0"	X			Standing Seam Metal Roof	1992	2019	Cafeteria
TOTAL	49,572								



 ALL HATCHED AREAS SHOWN ARE "NOT IN CONTRACT"  
 CLEAR AREAS SHOWN ARE IN SCOPE OF WORK



1  
**RKP-1**  
**ROOF KEY PLAN**  
 SCALE: 1" = 50'



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**GRANBY MEMORIAL MIDDLE SCHOOL**  
**LOW-SLOPE ROOF REPLACEMENT**  
 Granby Public Schools  
 15-B North Granby Road  
 Granby, CT 06035  
**ROOF KEY PLAN**

DATE: 2-11-2020  
 SCALE: AS SHOWN  
 JOB #: 20010  
 DWG # **RKP-1**  
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