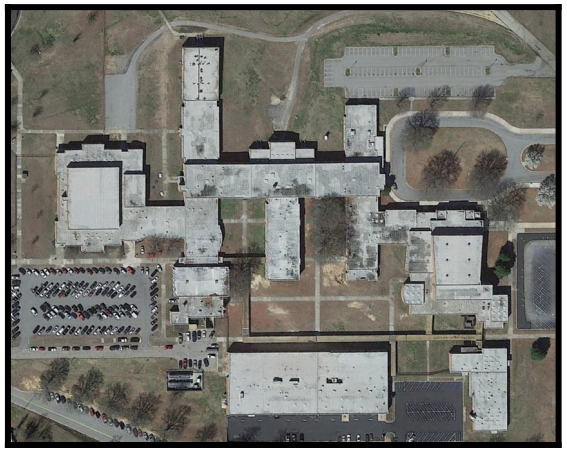
**ROOF CONSULTING SERVICES, INC.**

| Project Name & Location | Roof Issue: | Service Type: | Date: | Estimated Cost (In Thousands): RCS Cost to Client | Potential Cost Savings to Client |
|---|---|---|---|---|---|
| Client: RRMM Architects<br>Owner: Danville Public Schools<br>Project: George Washington High School<br>Address: 701 Broad St, Danville, VA | Coated sprayed polyurethane foam (SPF), ballasted EPDM & coal-tar BUR in Poor to Failed condition with poor drainage and widespread ponding water | Roof evaluation, replacement specs & construction drawings | Eval: 4/1/2019<br>CDs: 3/3/2023<br>Completed: Aug. 2023 | $40,000.00 | TBD |

RCS was contracted by **RRMM Architects** to evaluate the existing roof systems at Danville Public Schools' **George Washington High School** and to develop the roof replacement specifications and construction drawings. On April 1st, 2019, RCS inspectors completed a visual roof inspection and non-destructive infrared moisture survey of approximately 250,948 square feet of roof area.

Most of the campus was covered with a coated SPF roof sprayed over multiple layers of gravel-surfaced built-up roofing (BUR), with smaller ballasted EPDM and coal-tar BUR areas. Every roof area was rated Poor or Failed, and drainage was rated Poor: the flat assemblies held standing water after rainfall, accelerating deterioration of the coating, foam and insulation below.









Pre-installation (2019): chronic ponding on the existing SPF roof.

**Correcting the roof drainage** was the core of the RCS design. The package called for tear-off to the structural decks and a new **fully adhered 60 mil reinforced EPDM** system over flat and **tapered polyisocyanurate** insulation (1/8 inch per foot field slope, 1/4 inch per foot crickets) with a 1/2 inch high-density cover board. Eleven (11) taper plan sheets laid out positive slope to every outlet, supported by drain flow testing, eleven (11) new drain bowls, 200 linear feet of new 4-inch cast iron piping, twenty (20) new wall scuppers, and removal of nine (9) abandoned drains and eleven (11) abandoned scuppers.

RRMM Architects, the Designer of Record, reviewed and sealed the RCS package (issued March 3rd, 2023) for 251,054 square feet of roof area. Installation was completed successfully in August 2023, and the Owner received the specified **20-year no dollar limit manufacturer's total system warranty** and a 2-year contractor's guarantee.



Post-installation (2023): new tapered EPDM roof, shown at the same scale.