

OHCHS ROOF PROJECT

Replacement of Roof and HVAC Units

Roof

- Installed during the 1998 high school renovation
- 180,000 sq ft of roofing
- Roof membrane was guaranteed for 15 years.
- Since 2008 the district has spent \$54,345 on roof repairs.
- Since 2008 the district has spent \$29,654 on roof inspection





Heating, Ventilation, Air Conditioning (HVAC)

- There are nine HVAC units that provide HVAC services to the entire building.
- These are the largest such units on any high school in Maine
- Two of the nine units are leaking air conditioning coolant requiring an annual recharge at \$1,000-\$1,500 per unit. These units are not able to use the more environmentally favorable 410A coolant.
- Today's more efficient HVAC units could result in annual savings of \$40,000/yr
- The gym, weight training and fitness areas are not currently air conditioned.
- Budget annually \$49,258 for a service/maintenance agreement on HVAC units.
- Units have a twenty year expected life.



Roof Replacement

- Job Scope: remove and dispose of existing PVC membrane, inspect and replace insulation as needed, install new cover board and adhere new EPDM membrane. 15 year standard guarantee on roof membrane and 1 year guarantee on installation is standard.
- Two estimates* for roof replacement have been provided:
 - Independent Roof Services - \$1,250,000
 - G&E Roofing - \$1,179,000
- The project would have to be phased over several years given the size and scope of the project.

HVAC Replacement

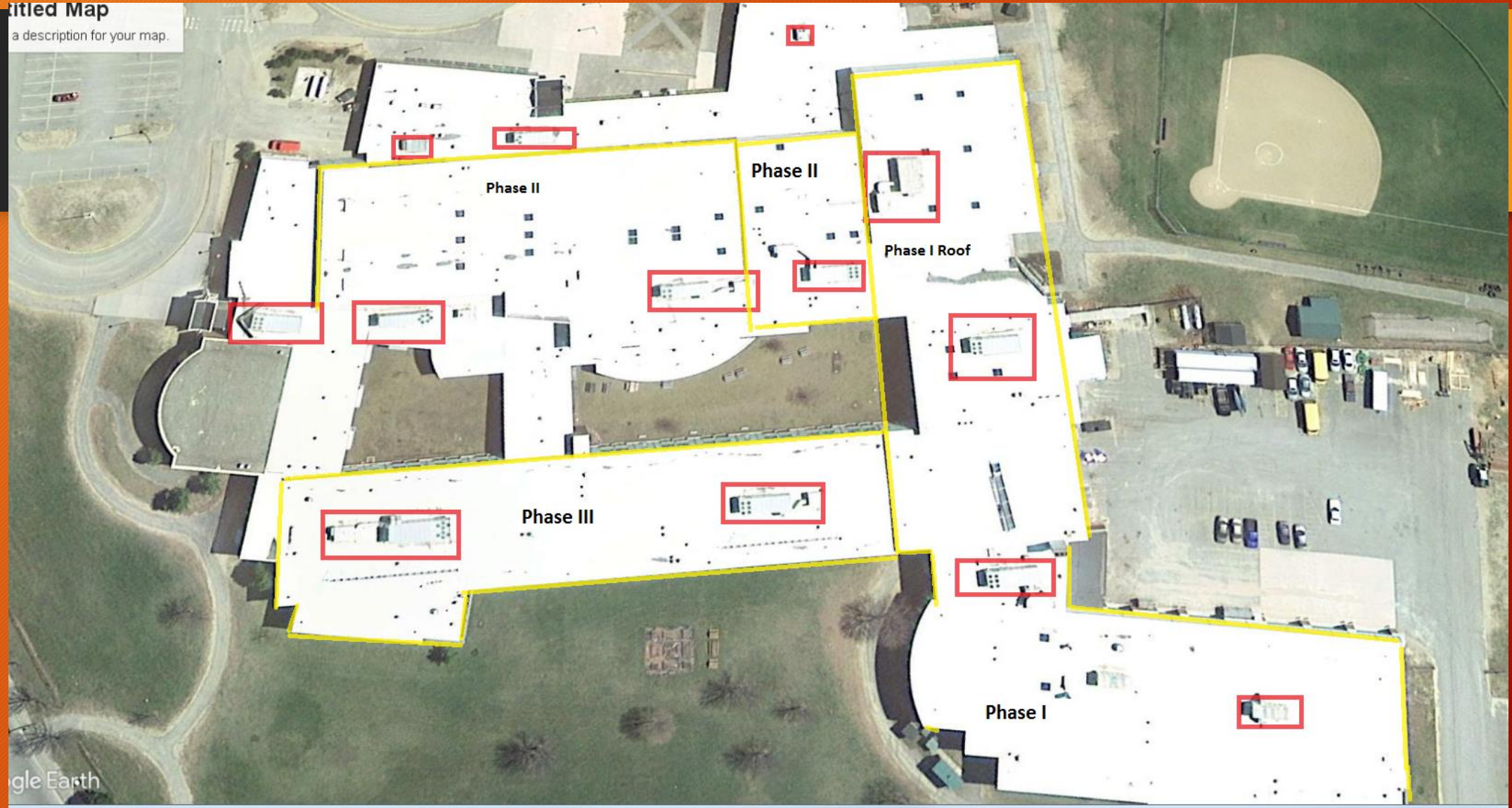
- The nine existing units would be replaced with more efficient units that use compliant 410A coolant.
- Each unit is estimated to cost about \$200,000 - \$400,000 a piece.
- HVAC unit replacement would be phased over several years in conjunction with roof replacement.
- New units would come with enhanced controls to enable better balancing of the system.
- Will fit on existing roof curbs.
- New HVAC units would save an estimate \$40,000 a year in energy costs.

Options

- Replace the roof over a 4 year period. Leave existing HVAC units as is.
 - Roof - \$1,300,000
- Replace the roof and the HVAC units:
 - Roof - \$1,300,000
 - HVAC - \$3,269,000
- Replace the roof and HVAC Units in Phases
 - Phase 1 - Roof 1,300,000 + \$738,000 (3 units)
 - Phase 2 - \$999,000 (3 units)
 - Phase 3 - \$666,000 (2 units)
 - Phase 4 - \$866,000 (3 units)
- Phased approach would result in higher prices in phases 2 - 4 (\$160,000)

Untitled Map

a description for your map.



Funding Options

- Bond
- Lease Purchase
- Performance Contracting (Phase 5) that combines HVAC/Roof
- Offset any of the three options with funds from:
 - Efficiency Maine Rebates
 - State Revolving Renovation Grants
 - Federal School Renovation Grants