

CONSULTING ENGINEERS

Mechanical  
Electrical  
Plumbing  
Lighting  
Technology

**Summary of DMPS Garton Elementary HVAC Upgrade:**

The primary purpose of the project is to improve indoor air quality with better ventilation and humidity control.

**Selective Replacement of Classroom ERV Heat Pumps**

A select number of the existing Venmar heat pump units will be replaced with new appropriately sized Airedale heat pump ERVs. The existing air intake wall openings, existing supply air ductwork and piping connections will be utilized.

**Gas Fired DX Cooled Roof Top Units (RTUs) for Gymnasium and Cafeteria**

The existing gym horizontal water source heat pumps and ERV will be removed and replaced with a new 12.5 ton gas fired dx roof top unit to condition and ventilate the space. The existing cafeteria vertical water source heat pumps and ERV will be removed and replaced with a 10 ton gas fired dx roof top unit to condition and ventilate the space.

**Gas Service**

A new gas service will be brought to the building coordinated with Mid-American Energy Company.

**Ducted Side Stream & Packaged Dehumidification Units**




Ducted side stream dehumidifiers with direct outside air connection will be added to the water source heat pumps serving the corridors. A portable dehumidifier will be installed at the tunnel level mechanical room to improve moisture control.

**25% Propylene Glycol**

The existing geothermal field will be flushed and filled with a 25% concentration propylene glycol. A glycol feed system will be installed to the existing geothermal loop.

**Summary of DMPS Garton Elementary Flooring Upgrade:**

In conjunction with the HVAC upgrades at Garton, flooring upgrades will be included with this same bid package in order for the flooring subcontractor to work in concert with the HVAC contractor. Classroom carpet will be replaced and corridors will be ground and polished concrete.

- 24,638 SF  EXISTING CARPET REPLACED W/ NEW CARPET
- 506 SF  EXISTING WALK-OFF CARPET REPLACED W/ NEW WALK-OFF CARPET
- 11,744 SF  EXISTING VCT REPLACED W/ NEW GROUND & POLISHED CONCRETE
- 36,888 SF TOTAL FLOOR REPLACEMENT AREA

FOR GENERAL AREAS ONLY  
NOT FOR BIDDING OR CONSTRUCTION



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FIRST FLOOR

SCALE: 1/32" = 1'-0"

GARTON ELEMENTARY SCHOOL

FLOOR FINISH REPLACEMENT

GARTON, HANAWALT, CALLANAN,  
WEEKS, NORTH AND EAST

PROPOSED  
FLOOR AREAS

PRINT DATE:  
DECEMBER 4TH, 2020

DES MOINES PUBLIC SCHOOLS

