

PROJECT EXPERIENCE

Stafford Creek
Corrections Center
Grays Harbor County,
Washington

Correctional Facilities



Mechanical engineering services for construction of a new 650,000 s.f. state correctional facility to house 1,936 inmates. This campus-style layout consists of 27 buildings including housing units, health care, dining/kitchen, educational, recreational, and administrative offices. Seven housing unit buildings are medium-security; one building is maximum-security. Work included design of HVAC, plumbing, sprinklers and fire protection. Administration, health care, and maximum-security housing were provided with heating, ventilation and air conditioning. All other buildings were provided with heating and ventilation only. A life-cycle cost analysis was conducted; it was determined that over a 20-year duration, a savings of nearly \$6 million would be realized by replacing a central boiler plant and heating water distribution piping with gas distribution piping to indirect gas-fired air handling units throughout the facility. Project included a campus-wide DDC (Direct Digital Control) building management system to control operation of all mechanical equipment and to provide remotely activated automatic shutoff control of gas and water supply to individual buildings.

PROJECT EXPERIENCE

Correctional Facilities

Lane County Adult Corrections Facility Eugene, Oregon



Mechanical engineering services for new three-story, fully equipped county jail constructed in Eugene, Oregon. Facility includes holding cells, recreation, laundry, cafeteria, and kitchens. Responsibilities included design of plumbing system and selection of plumbing fixtures.

Oregon State Corrections Institute Prigg Cottage – Heating System Conversion Salem, Oregon

Mechanical engineering services to convert the heating system from a steam system to an hydronic heating system with solar, geothermal storage and heat recovery systems. Original steam system included 2.5 miles of aboveground piping distribution supplying steam from a boiler plant located at another nearby state corrections facility. Project included a passive solar heating feature.