# Walter Reed National Military Medical Center

## SEA Energy Consultant

## About the Facility:

Naval Support Activity (NSA) Bethesda, MD, is a 243-acre Naval Medical Center Complex Base and host to more than 40 tenant commands and activities, including the largest medical complex in the Department of Defense, the Walter Reed National Military Medical Center. The state-of-the-art medical center provides care to the entire military family, with special expertise in the care of the critically wounded service members.

SEA completed an ASHRAE Level II energy assessment for approximately 6 million square feet of the Walter Reed National Military Medical Center. Included in the assessment was the 515,000 sq. ft. America Building - Outpatient Facility. This structure houses facilities for radiation oncology treatment, the Cancer Centers of Excellence, and the Military Advanced Training Center, including orthopaedics and rehabilitation, prosthetics, physical and occupational therapy, teh CAREN laboratory, the Gait Laboratory, and the Fire Arms Training System; a rehabilitation swimming pool; behavioral health for adults, adolescents and children; and other outpatient clinics such as dermatology, audiology, speech, allergy/immunology, ENT, endocrinology, internal medicine, neurology, satelite laboratory/phlebotomy, satellite pharmacy and satellite radiology.

## Scope of Work

SEA's energy team developed facility assessments of existing conditions while investigating all of the building systems, equipment and envelope. Data Analytics of the Building Automation Systems and meter recording occured as well as IR scanning and reporting. SEA worked with the client to develop criteria for project bundling of energy conservation measures (ECMs). The maximum Return on Investments, life cycle costing and total project costs were included in the calculators. Some of the major recommendations, included:

- Electrical System and Lighting Improvements
- WAter Conservatoin/Upgrades
- Energy Management Controls System
- Retro-Commissioning
- Exhaust Air OPtimization and Energy REcover (ERX)
- Solar domestic hot water heating system to supplement existing DHW systems
- Demand Control/Ventilation

## SEA discovered 62 ECMs with an average 8-year simple payback and combined annual cost savings of $3.2 million.

**515k**
Square Feet

**3.2M**
Annual Cost Savings

**62**
ECMs Discovered

SAIN ENGINEERING ASSOCIATES, INC