



Industry
Federal Government

Location
Dale County, AL

Contract Value
\$9,654,000

Owner
U.S Army

Start Date
May 2022

End Date
April 2023

Square Footage
782,000

Type of Work
Design-Build

PROJECT PROFILE

FORT NOVOSEL UESC

WORK PERFORMED

Fort Novosel is the U.S. Army Aviation Center of Excellence and is home to 25,000 soldiers, family members, and civilian employees. With the mission of developing, coordinating, and deploying aviation operations, training, and doctrine, Fort Novosel conducts 24/7 airfield operations at five separate airfields and aviation maintenance complexes with approximately 600 helicopters that are based there. Their most critical mission is to operate and maintain the helicopters 24/7 so that they are available for training pilots and military services.

Fort Novosel and their utility partner, South Alabama Electric Cooperative, selected Southland to review the design intent of Fort Novosel's buildings and to investigate ways to optimize their design and operational efficiencies.

A preliminary assessment was completed, which outlined a comprehensive set of energy upgrades for this utility energy services contract (UESC) program. Southland then conducted a detailed feasibility study and collaborative workshops with all Fort Novosel and Army Corps of Engineers stakeholders to develop and prioritize the energy conservation measures (ECMs) for the UESC. Out of the numerous identified ECMs, two critical ECMs were selected for implementation as an initial Phase One project:

1. Upgrade to light-emitting diode (LED) lighting in the main cantonment area and airfield hangers.
2. Replace inefficient and inoperable electric IR heating systems in hangers with high-performance natural gas IR heating systems.

PROJECT HIGHLIGHTS

- Retrofit from fluorescent to LED lighting at 50 buildings on the main cantonment area and the upgrade of high bay lighting in six hangers.
- Inefficient and inoperable electric infrared (IR) heating systems in nine hangers replaced with high performance natural gas IR heating systems.
- IR heating is designed to facilitate easier routine maintenance so that helicopters do not need to be moved to access the heaters.
- Significantly reducing the maintenance burden allows limited maintenance resources to focus elsewhere and provides material replacement cost savings.
- Annual utility cost savings of \$381,942.
- Annual operations and maintenance savings of \$156,549.