



Merrick & Company provided architectural and engineering design services for this \$72 million, 155,000 sf BSL-3Ag Large Animal Facility, which is one of the initial elements of the \$460 million Ames Modernization Project. The objective of this modernization project is to completely rebuild USDA's research and diagnostic facilities in Ames, Iowa. This state-of-the-art animal health center helps in USDA's efforts to provide first-class animal health services. This facility is highly specialized to allow large animal operations to be conducted under strict protocols for safe containment of zoonotic and non-zoonotic pathogens.

The facility was designed for optimal safety and security and includes redundant systems for maximum reliability, airtight walls, filtered air, liquid waste treatment technology, integration of the facility into a larger campus plan, and specialized carcass disposal systems using equipment specially designed to operate within a contained environment. Merrick's scope also included a deficiency study and recommendations for repair and upgrades to a 7,000 gsf BSL-3Ag Incinerator Necropsy facility. Program requirements for the project included training facilities for groups of up to 30 students who will undergo hands-on training with infected animals within a high containment area. The training includes necropsies, diagnoses, safety protocols, and animal handling techniques.

The center consolidates three units within the two USDA agencies: ARS National Animal Disease Center, APHIS National Veterinary Services Laboratory, and APHIS Center for Veterinary Biologics.

The project was delivered using a fast-track, guaranteed max price construction strategy with the construction contractor on board at the 35% design milestone.

Project Features:

- Two Fully Equipped Necropsy Suites within Containment
- Access Control, Intrusion Detection and Closed-Circuit TV Systems
- Animal Rooms Designed for Maximum Flexibility and Compliance with AAALAC Standards
- Penning Arrangements Designed for Handler Safety and Maximum Floor Area Efficiency
- Conformance with Biosafety Standard Defined by USDA 242.1M and CDC / NIH (BMBL) Guidelines

Containment Features:

- BSL-3Ag Classification
- Containment of Zoonotic / Non-Zoonotic Pathogens
- HEPA Filtration
- Strict Directional Airflow
- Pressure Tight Doors
- Barrier Wall / Floor Construction
- Total Air Separation of Program Areas from Service and "Clean" Areas
- Specialized Carcass Disposal Systems

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