

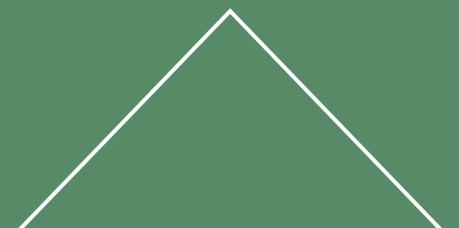


From Blueprint to Barn: Camera Implementation Strategies

35th Annual Swine Conference

August 26, 2025

RaChella Brookhart



CARTHAGE
VETERINARY SERVICE

What It Takes Before the First Camera Goes Up

- **Documenting Your Site Infrastructure**
- **Planning Your Installation Type**
- **Cameras & Locations**
- **Developing Your Site Map**



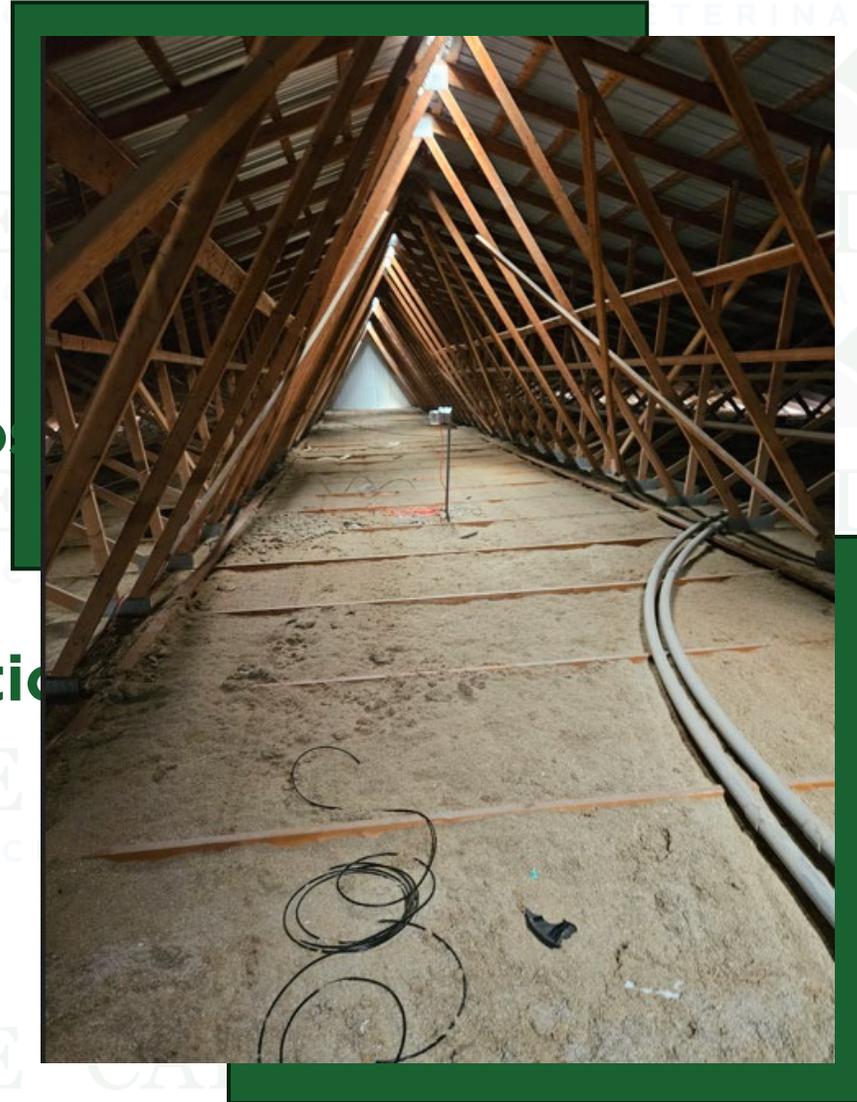
Documenting Your Site Infrastructure

- **IT Network & Infrastructure – Reliability and limitations**
- **Filtration – Impact to installation type**
- **Attic Access – Availability, safety, and usability**
- **Power Locations – Outlets, panels, breaker capacity**

Installation Type

- **Attic Installation**

- Cabling is hidden and not easily exposed
- Ease of access for repairs
- Prevents accidental unplugging
- Not exposed to the harsh barn conditions



Installation Type

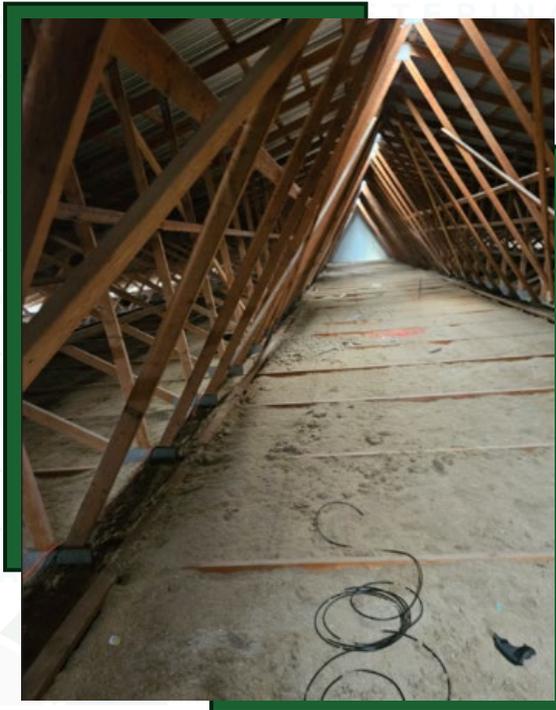
- **In Barn Conduit Installation**

- Needed when filtration prevents breaking the barrier from the attic to the inside of the barn
- Cables are protected in conduit
- More exposure for accidental unplugging or damage if conduit is



Installation Type

- **Hybrid Installation**
 - **Combination of Attic and In Barn Conduit Installation**
 - **Used if we cannot get power ran to an attic**



Camera Locations

- **Inside**

- **Employee / Visitor Entrance**
- **Loadout Chutes**
- **DC Chamber(s)**
- **Mortality Room(s)**
- **Trash Drops**
- **Other areas of your site where there could be areas for biosecurity concerns**

- **Outside**

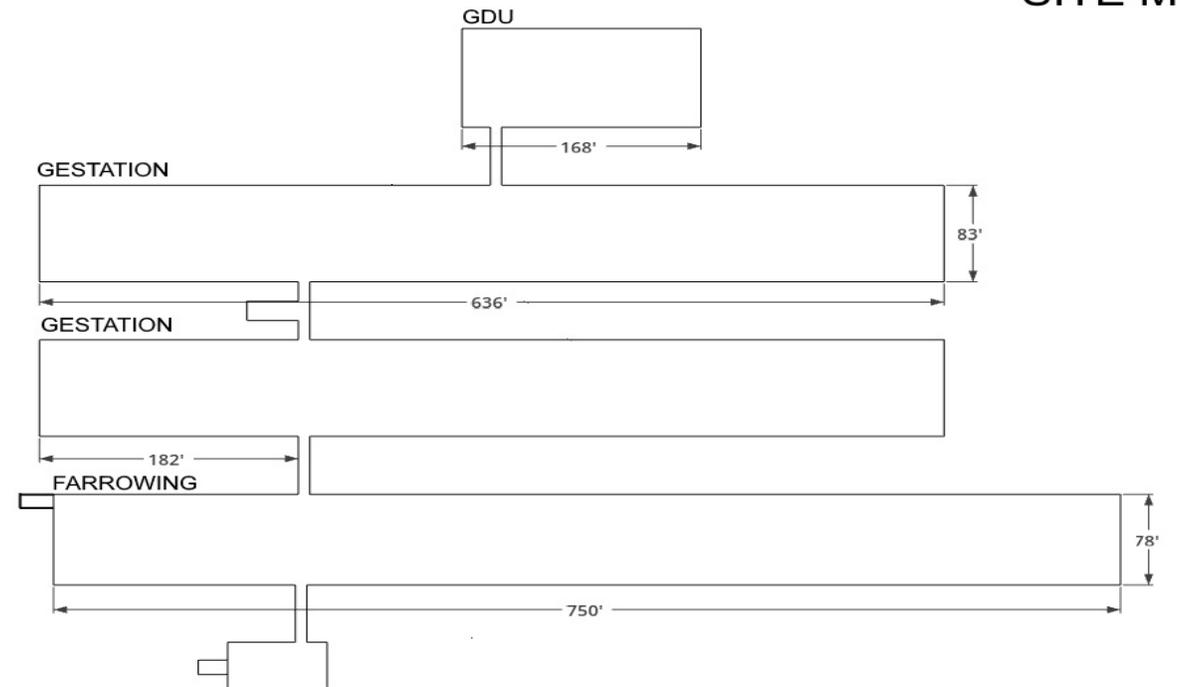
- **Parking Lot**
- **Property Entrance(s)**



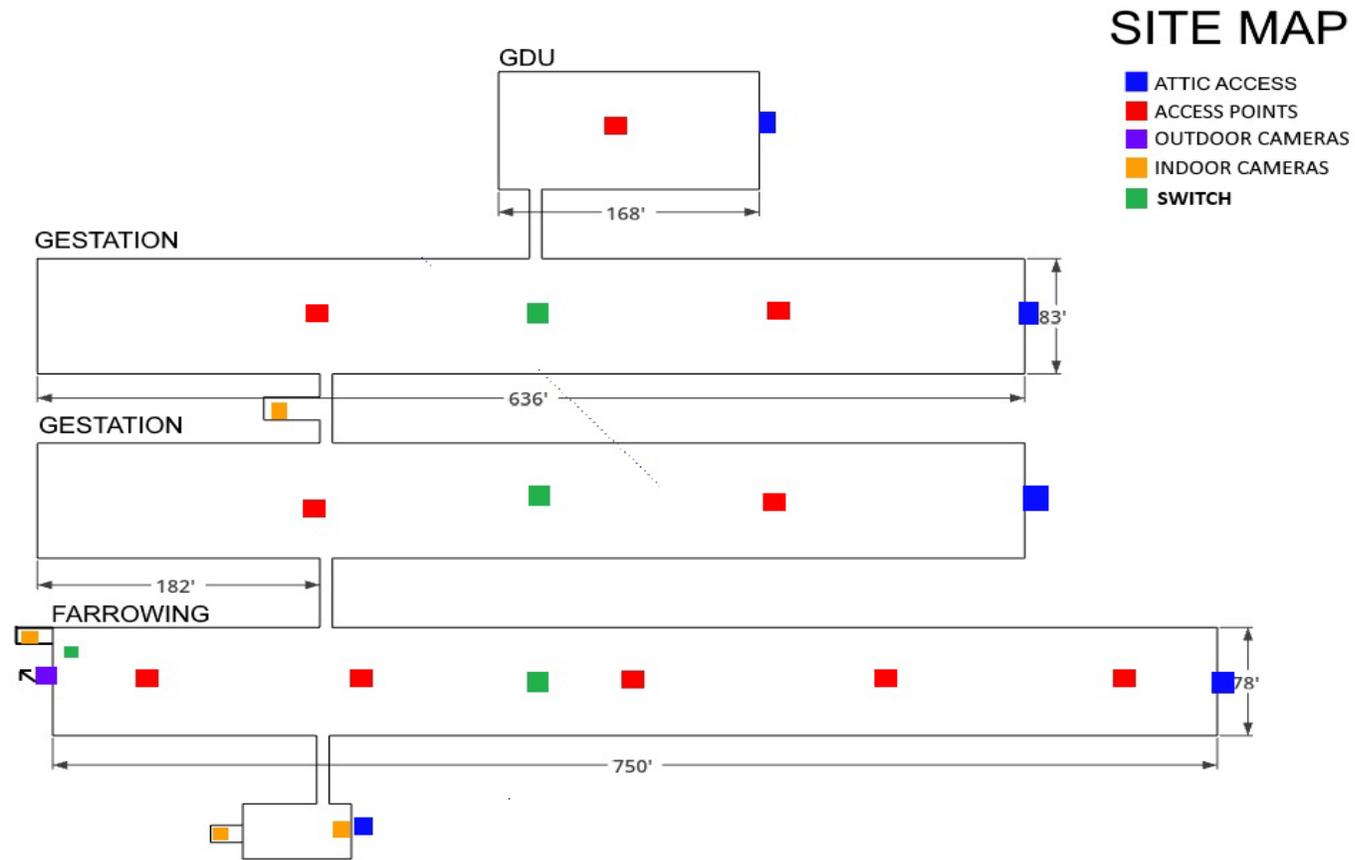
Site Maps



SITE MAP



Site Maps



Choosing The Right Camera & Software

- **Cameras**
 - **Fixed** - Does not move and gives you a single field of view.
 - **Varifocal** - Will allow you to manually adjust the zoom during installation.
 - **PTZ** - Will allow you to move or zoom the view remotely.
- **Licensing & Warranty**
- **Software**
 - **Cloud hosted or Local**
 - **Playback for monitoring & Storage**
 - **AI** - does the software have AI built in to establish your clean/dirty lines.
- **Bandwidth Requirements**
 - **Does your sites current ISP allow for the needed bandwidth for the number of cameras you have selected?**

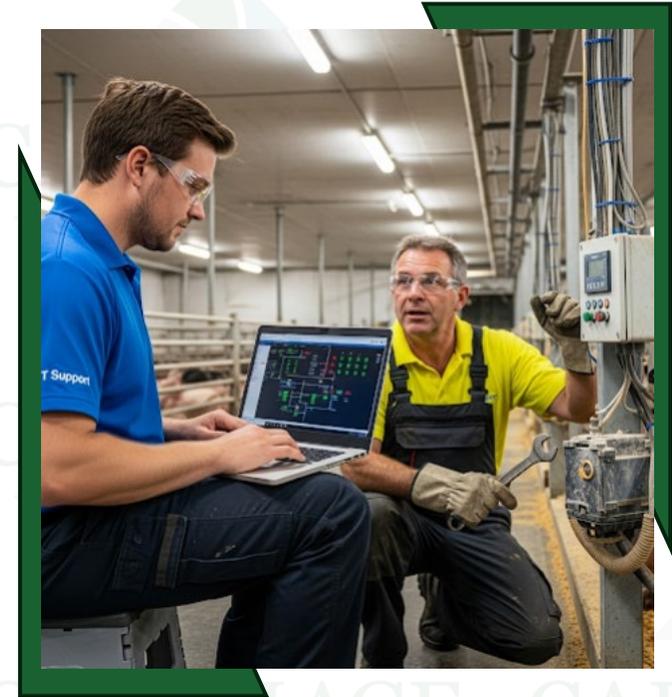
Bringing the Plan to Life

- **Cross Team Engagement**
- **Installation**
- **Camera Maintenance**
- **Repairs and Maintenance**



Cross Team Engagement

- IT ↔ Maintenance Team
- IT ↔ Production Team
- IT ↔ Biosecurity Team
- IT ↔ Installation Team
- IT ↔ IT Operations



Installation

- **Day 1**

- Initial Walk through
- Work with the farm manager to get equipment and tools into the building

- **Day 2**

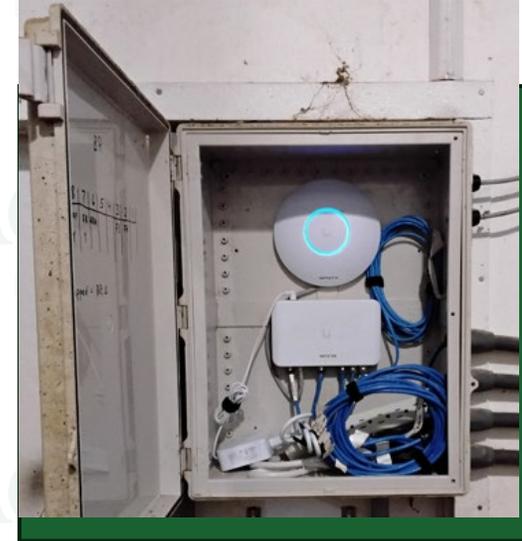
- Mounting hardware, conduit, and pulling cable



Installation

• Final Day Inspection

- If in barn conduit or hybrid installation, ensure that all power outlets are covered
- Make sure all boxes are closed and sealed to prevent exposure to the elements
- Make final adjustments pointing cameras
- Complete post installation map
- Take pictures of your equipment and installation



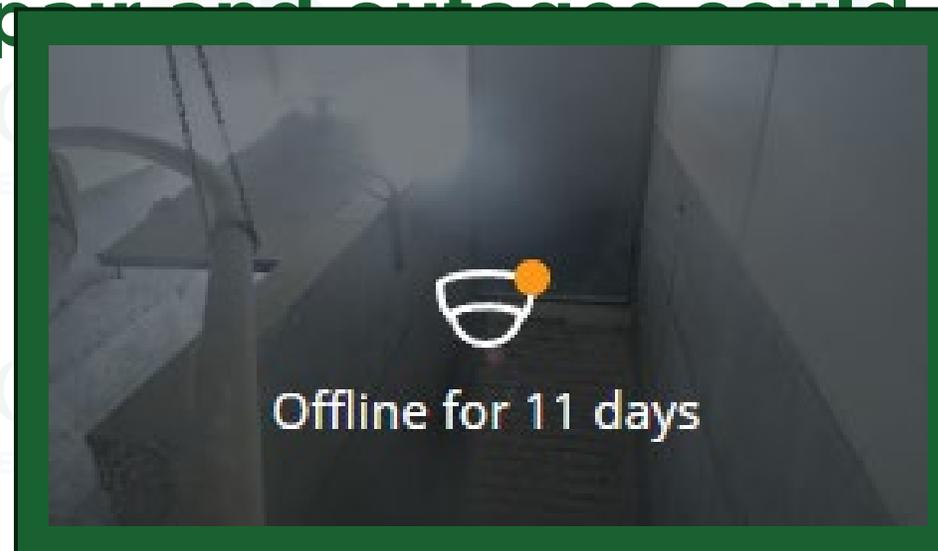
Camera Maintenance

- **Routine Lens Cleaning and Maintenance**
 - To ensure clear visibility for the biosecurity monitoring team

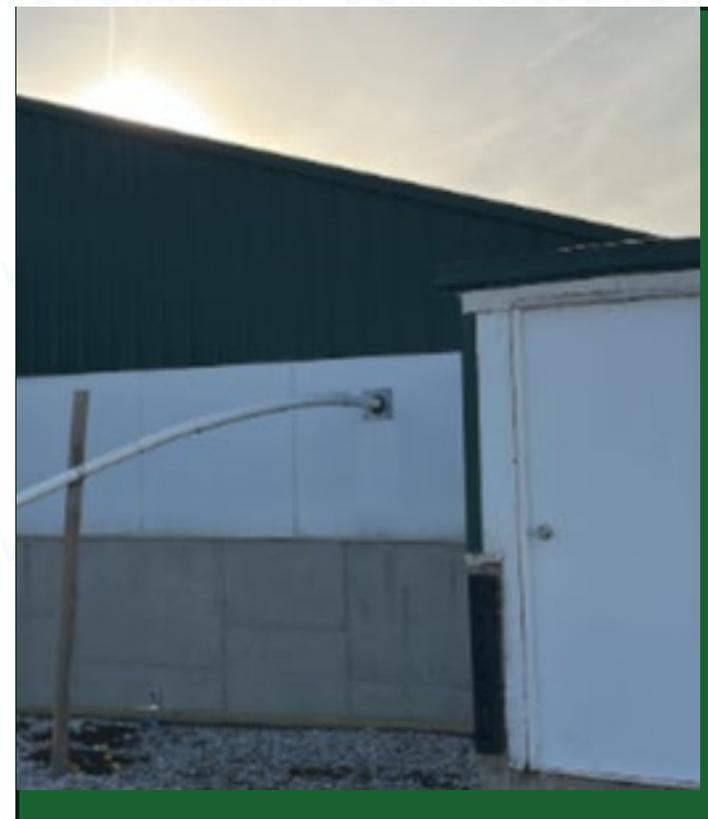


Repairs & Outages

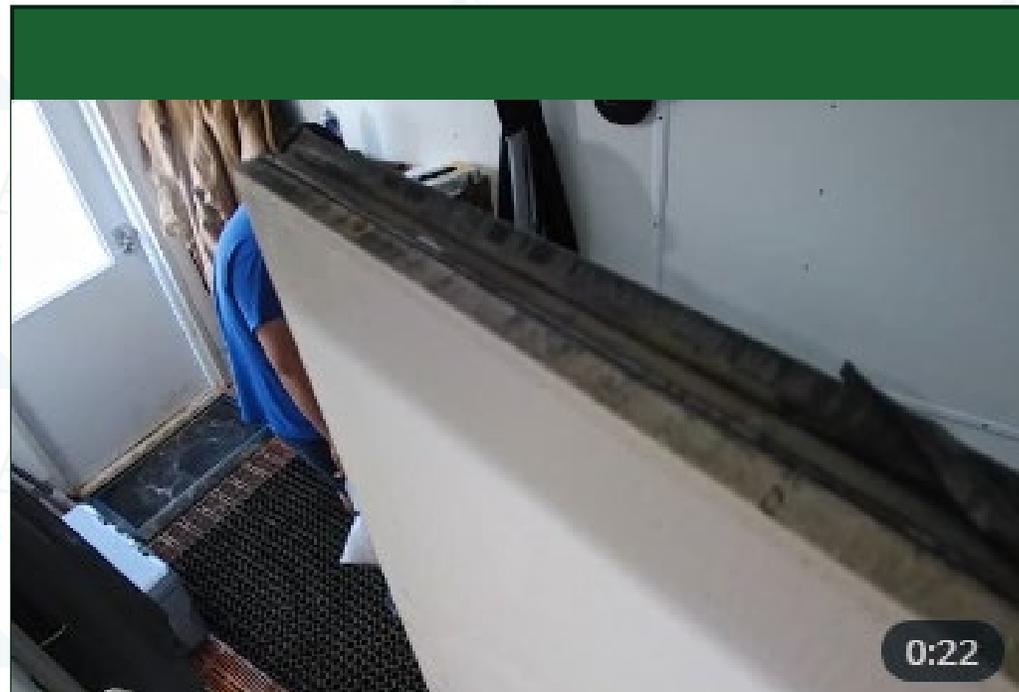
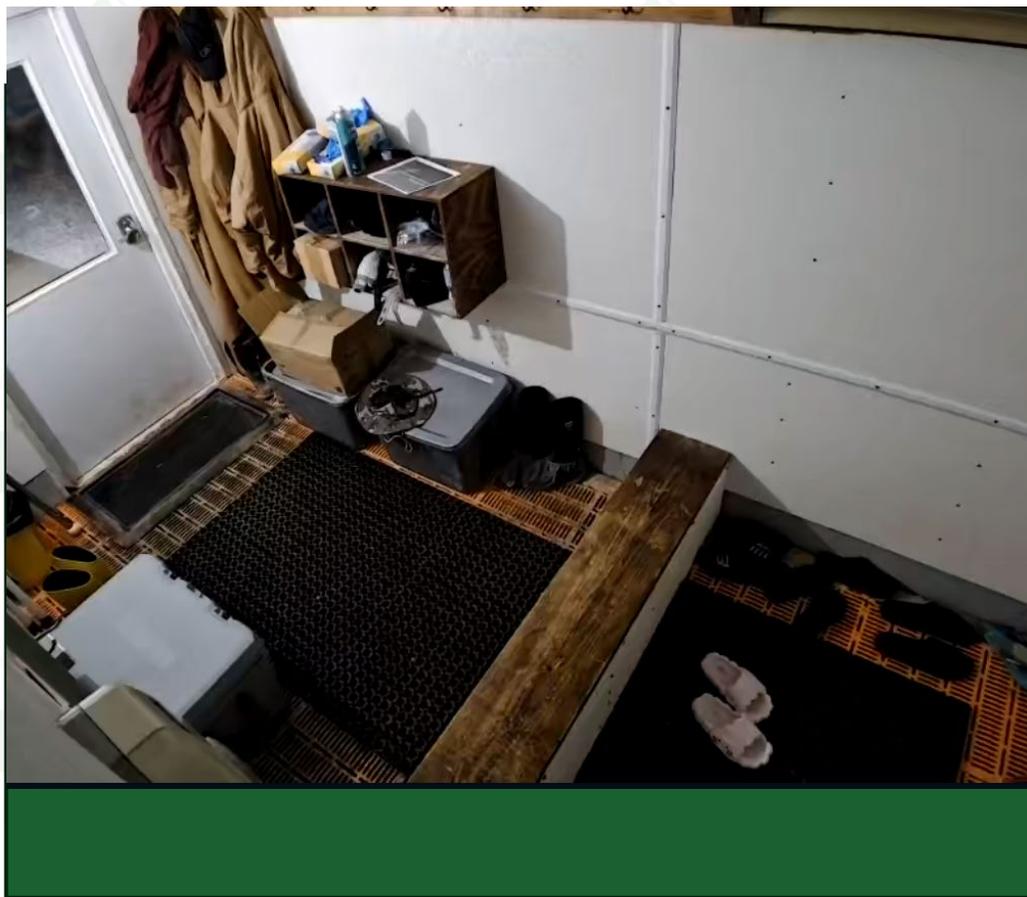
- **Daily monitoring or alerts in place for cameras that have gone offline**
- **Plan documented for replacement of equipment**
- **Common reasons for repairs and outages could include**
 - Network outage
 - Environmental damage
 - Physical damage
 - Unexplained failure



Location Matters



Location Matters

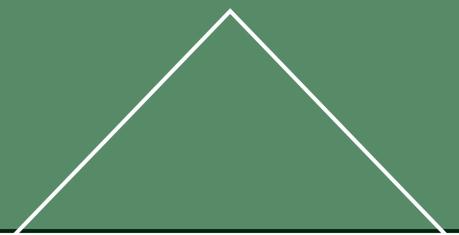


Lighting Matters





Thank You!!



CARTHAGE
VETERINARY SERVICE