

Buffalo Ridge Landfill Scale House

📍 KEENESBURG, CO | WASTE MANAGEMENT OF COLORADO, INC.

Buffalo Ridge Landfill's existing scale house had a single scale deck that was used for inbound/outbound traffic and required drivers to exit their vehicles to complete their transactions. In addition, the existing scale house facility layout presented limited options for expansion. This busy landfill needed a more efficient system to manage scale transactions for the approximately 400,000 tons of waste received annually.

Key Components:

- Civil Engineering, Design and Permitting
- Regulatory Evaluation
- Capacity and Future Use Evaluation
- Construction Management Services
- Construction Quality Assurance (CQA) Services

To better serve Weld County, Colorado, Sanborn Head was tasked with providing design (including civil and electrical components, and coordinating the services of structural and septic designers), permitting, and construction phase engineering and project management services for a new scale house facility at the Buffalo Ridge Landfill.

The project presented several challenges that included designing a stormwater management system to handle all post-development runoff for the new scale house facility (including current and future conditions) and the existing scale house facility, coordination between multiple contractors and suppliers, and constructing the foundations to integrate future expansion to the facility with little to no interruption to daily scale operations. Other challenges included weather-related delays due to construction during winter months.

Communication and proper coordination between our client, contractors, and county regulators was critical to the project's successful completion.

The new scale house facility was completed in 2019 with one inbound scale and one outbound scale; however, it was designed and permitted to accommodate three inbound scales and two outbound scales, which allows our client to expand the facility and install future scales as needed and without the need for additional future permitting. The future scales are designed to be attended remotely through the use of pneumatic ticket delivery system, similar to a bank drive-up window, allowing all five scales to be managed within the single modular scale house, eliminating the need for additional attendant structures, improving safety, and reducing the number of staff required.



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