



DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES

JOE FOSS BUILDING  
523 E CAPITOL AVE  
PIERRE SD 57501-3182  
danr.sd.gov

March 10, 2022

Ronnie Williams, PE  
AE2S  
1560 Concourse Drive  
Rapid City, SD 57703

RE: BH Development Phase 3 and 6A  
P&S No. 22-040

Dear Mr. Williams:

The Department of Agriculture and Natural Resources (DANR) received two copies of the plans and specifications for the BH Development Phase 3 and Phase 6A near Lead, South Dakota on February 10, 2022. The department has reviewed and hereby approves the plans and specifications for this project. The following are conditions of approval:

**Sanitary Sewer**

1. Section 43.21.39 Part 2 2.04 allows for pumps capable of passing a 2-inch sphere to be considered for approval by the engineer. The department's design criteria requires pumps to pass a minimum 3 inch sphere and be preceded by readily accessible bar racks with clear openings not exceeding 2.5 inches unless special devices such as pneumatic ejectors or grinders are installed with the pumps. The specifications and details are not clear as to whether bar racks, pneumatic ejectors, or grinders will be utilized. **Please verify the minimum requirements will be met.**
2. The flow in the sanitary sewer may exceed 15 feet per second in several locations based on the pipe size, slope, and industry accepted Manning's values of 0.009 to 0.013 for smooth PVC pipe. The department's design criteria for sewers requires protection against displacement by erosion and shock and the design be such that turbulence and deterioration of the receiving manhole is prevented when velocity exceeds 15 feet per second. **Please check velocity through the system and implement appropriate protections as required.**

**Tank/Water Main**

1. Sheet C86 shows the water main connecting to a new water storage tank. This approval is not for the new water tank and plans and specifications will need to be submitted to DANR for this new tank.

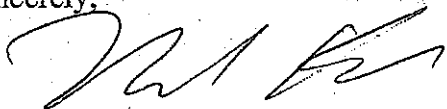
**General**

1. Erosion and sediment control measures shown to be installed during construction are generally not evaluated during the plans and specifications review. The owner/operator is responsible for ensuring that pollution prevention measures are implemented and effective. Therefore, approval of plans and specifications for this project does not include approval of an erosion control plan.
2. In accordance with the Administrative Rules of South Dakota (ARSD) § 74:53:04:08, the DANR shall be notified when works or systems or both constructed in accordance with approved plans and specifications are placed in service.

This review is primarily to determine compliance with the minimum sanitary engineering requirements and does not cover items such as quality of material, structural soundness, or electrical and mechanical design features. Approval of the plans and specifications does not in any way release the applicant from the responsibility that the project will be an operable facility when construction is completed.

If you have any questions, please contact us.

Sincerely,



Neal Konda, P.E.  
Natural Resources Engineer  
Livestock Services Program  
(605) 773-4647



Mark A. McIntire  
Natural Resources Engineer  
Drinking Water Program  
(605) 773-3754

cc: Lawrence County Commissioners