



**COLORADO**  
Division of Reclamation,  
Mining and Safety  
Department of Natural Resources

1313 Sherman Street, Room 215  
Denver, CO 80203

March 7, 2016

Alex Schatz  
Brannan Sand & Gravel Company  
2500 East Brannan way  
Denver, CO 80229

**Re: Pit 29, DRMS Permit No. M-1980-183,  
Review of Engineering Certification for the French Drain**

Dear Mr. Schatz:

On February 11, 2016, the Division of Reclamation, Mining and Safety (Division) received the engineering certification for the french drain around a portion of Pit 29. The Division has reviewed the certification and has the following questions and comments:

- 1) Please have the certification letter signed and sealed by a registered professional engineer in the State of Colorado.
- 2) The engineering certification references an as-built survey conducted by Bayer & Associates. The certification states that the drain was installed at the specified elevations. The Division has reviewed the as-built survey conducted by Bayer & Associates, Inc. The as-built survey is dated December 2015; however, the Division's records indicate that the french drain was not completed until mid to late January 2016. By definition, an "as-built" survey cannot be completed until the pipe and other appurtenances are in place. Please clarify how the as-built survey was conducted prior to the completion of the french drain.
- 3) The engineering certification references an as-built survey conducted by Bayer & Associates. The engineering certification states that the drain was installed at the specified elevations, based on the results of the as-built survey. The Division has reviewed the as-built survey conducted by Bayer & Associates, Inc. If the engineering certification uses a survey to demonstrate that the drain was installed at the specified elevations, the survey will need to be signed and sealed by a licensed professional land surveyor in the State of Colorado.
- 4) The Daily Construction Report dated December 7, 2015, states under the, work performed today section of the document, that the french drain was being constructed using ADS N-12 slotted pipe. Figures 10, 11, and 13 of the Daily Construction Report show perforated pipe in the images, but the captions describe the french drain pipe as constructed using slotted ADS N-12 Pipe. The approved specifications for the drain pipe, detailed in Permit Amendment No. 2 specifies that the



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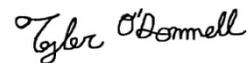
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pipe will be constructed using of ADS N-12 perforated pipe. Please explain this apparent discrepancy.

This concludes the Division's review of engineering certification for the french drain. Please responded to this letter on or before April 8, 2016.

If you need additional information please contact me at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203, by telephone at 303-866-3567, extension 8131, or by email at [Tyler.ODonnell@state.co.us](mailto:Tyler.ODonnell@state.co.us).

Sincerely,



Tyler O'Donnell  
Environmental Protection Specialist

cc: Wally Erickson, DRMS

Tom Hatton  
Applegate Group, Inc.  
1490 West 121st Avenue, Suite 100  
Denver, CO 80234