

November 28th, 2023

City of Lee's Summit, Missouri Attn: Gene Williams 220 SE Green Street Lee's Summit, MO 64063

RE: THE VILLAGE AT DISCOVERY PARK – PUBLIC SANITARY PL2023145

This letter provides responses to comments as provided and dated below. Thank you for your time, all approvals are acknowledged without comment below. Please note the following formatting conventions:

- General statements, descriptions, and quotes from previous communication of changes not in direct response to a comment shall be unformatted.
- Comments as provided or described as well as possible shall be italicized.
- Responses to comments shall be bold.

Thanks,

Z

David Eickman

Engineering Review - Corrections

1. The City has completed its review of the final submittal drawings with the revisions to the pipe slope. All the revisions to the pipe slope appeared acceptable, with the exception of the 0.40% pipe slope (please see the attached excerpt from the plans showing what appears to be surcharging for the 10 year event using a K value of 0.004 after revising the pipe slope downstream of 16-008 to 0.40%).

We are recommending going back to your original 0.67% which appears to eliminate surcharging based on your previous analysis. This will also require a revision to the design waiver in terms of maximum depths, with perhaps an explanation that the 0.40% pipe slope was analyzed to minimize excessive depth, but did not yield satisfactory flow characteristics due to surcharging in the line downstream of 16-008.

Slope of pipe run between structures SAN Z2 and NEW MH 16-008 changed from 0.40% to 0.67%, as suggested and design waiver revised accordingly.