



October 24<sup>th</sup>, 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 – MASS GRADING AND EROSION AND  
SEDIMENT CONTROL  
PL2023146**

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,

A handwritten signature in black ink, appearing to read "David Eickman", written over a horizontal line.

David Eickman

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### Engineering Review - Corrections

1. I took a look at the above-referenced plans this morning, and wondered if you had made inquiry with the DGLS Dam Safety Program to see if the dam you are proposing is subject to their review and approval. According to their website, DGLS Dam Safety Program requires a permit for any dam 35 feet in height or greater, and I believe you are very close to that limit.  
**Per earlier conversations, it was agreed that the dam is below 35 ft in height, which would not require a permit from DGLS Dam Safety Program.**
2. On another note, I think we need to see more detail on the dam construction in terms of clay core, cutoff wall, description of compaction and lifts, and emergency drawdown (i.e., drain) provisions. This application was rushed, and I think you will agree the substantial height of the dam along with the potential for downstream harm would be in the best interests of everyone. I would also recommend a third party inspection by a geotechnical firm to inspect the dam construction.

**Details for third party inspection, detention basin construction, including embankment fill and compaction added to sheets C320-C322 of revised mass grading plans. Since the dam is below 35 ft tall, we believe no details on clay core and cutoff wall are required. Any emergency draw down for the water in the pond will be removed by pumping over the dam for the permanent water and note added to sheets C320-C322.**

3. Page 35 of the "Macro Stormwater Report" (i.e., the stormwater report) revised in June 2023 states the emergency spillway crest is 935.80. The plans show 936.50. This should be reconciled..

**Refer to page 35 of the latest report. Basin parameters and outlet structure configurations match mass grading plans.**

4. The proposed outlet for the detention basin is shown as a 72"x60" RCB. Have you analyzed this discharge line to ensure it is capable of managing all flows (i.e., defined as fully-functioning outlet structure without clogging) up to and including the 100 year event and still be a minimum of 6 inches below the emergency spillway crest? If you have, can you point me to the part of the report where this is shown?

**Correct, primary outlet structure is designed to handle events up to and including 100-yr events. Emergency spillway is not utilized in those events. WSEL @ 100-yr event in fully-developed conditions is 934.78 (pg.45), which is well below emergency spillway elevation of 936.50.**

5. Just to ensure there are no misunderstandings, the emergency spillway is not allowed to be used except when a) the outlet is clogged, or b) if the storm event exceeds the 100 year event.

**Correct, emergency spillway is only utilized should the primary outlet structure be clogged or completely fail. Refer to second paragraph on pg. 46 that addresses this.**

6. The two (2) pictorial sub-basin summaries (i.e., the two (2) sheets in the appendix in green) are illegible within the stormwater report due to pixelation. Please provide clean versions of the sub-basin summaries within the appendix.

**Refer to pg. 71 and pg. 206 of revised report for Pondpack model layouts at higher resolution.**

7. Page 35 of the stormwater report shows the geometry of the outlet structure that does not match what is shown on the plans. For instance, four openings are shown in the report with equal dimensions, but the plans show differing dimensions due to the rectangular nature of the outlet structure. In addition, The "open top outlet structure" is shown as a 10.5' by 10.5' box in the report, but the plans show 9' by 12'. Even though these may equate to the same characteristics, we need a clean report with geometry matching what is shown on the plans

**Refer to page 35 of the latest report. Basin parameters and outlet structure configurations match mass grading plans**

8. As a spot check, we performed our own analysis of the 72" by 60" RCB and it appears to small to manage the 728 cfs design discharge without overtopping the dam and/or utilization of the emergency spillway. It is possible this line needs to be upgraded in terms of size depending on your analysis since utilization of the emergency spillway is not allowed unless the outlet structure is clogged, or if there is a storm event of higher intensity than the 100 year event?

**RCB Capacity check added to the revised report. Refer to pgs. 322-323. We've run a model with 766.66 cfs discharge (100-yr storm event in fully-developed conditions) and the flow is not being restricted by the box, which has the capacity of 802.58 cfs**