



May 20, 2021

Alison Perry
Perry Land Company,
Vailland.com
perry@vailland.com

Re: **Belden Place PUD**
Engineering/Town Comments
1251 E. Main St.
Minturn, Colorado

Dear Alison,

We understand the Town has requested an alternate plan regarding drainage at the Belden Place PUD.

Currently, we propose collecting drainage at the northeast corner of our site and directing it through a storm-pipe across Highway 24 and the "Bone Yard" to a discharge point at the Eagle River. From a drainage perspective, we believe this is the best plan when all things are considered. The natural grade directs drainage to this location. The installation of Highway 24 has blocked natural drainage patterns. Otherwise, these sites would drain naturally, overland, and discharge close to the proposed location at the river.

Alternate drainage schemes have been considered during the process of developing PUD plans for this project. While there is room on-site for detention and treatment of stormwater from the proposed development, and even retention for some portions, the real problem is stormwater generated from offsite.

The adjacent Forest Service property, to the east, and the forest above it, is a large drainage basin. Runoff from this basin currently goes through our site, to our westerly lot line, and discharges to the neighboring driveway. Without a Highway 24 crossing along our frontage, this condition cannot be mitigated completely. Technically we can meet the drainage code with detention at the Christiansan's pond and allowing offsite drainage to run through the site. However, complete retention to include offsite flows cannot be accomplished and would be unreasonable.

The town Master Drainage Plan discusses the installation of an interception channel at the base of the mountain and routing drainage through town. This would help with the above-mentioned condition, but again does not mitigate it completely. Without extreme and costly site modification, it is impossible to drain the entire site, and incoming offsite flows, to the interception channel described in the Master Plan.

Approximately half of the site can reasonably drain to the southwest corner and to what would be the interception channel. We have done all we can with the proposed grading and drainage plan to direct drainage to this location. Without the Highway 24 crossing, drainage from this area will have to be treated and stored in a manner to be determined. We believe there are options for this using the proposed sediment pond for detention. There is additional room in the park, on the surface and below grade, to mitigate this runoff as necessary.

In conclusion, we can treat and store stormwater from the proposed site and meet the drainage code criteria. Offsite flows can be routed through our site and discharge as they do currently at historic rate(s). We can make everything work better than it does currently. However, the best management practice would include a Highway 24 crossing somewhere along our frontage.

We look forward to working with interested parties to determine the ultimate solution as soon as possible.

Sincerely,

David J Anderson, P.E.
Timberline Engineering, LLC