

MEMORANDUM

To: Gregg Greer, Chairman, Powder Mountain Water & Sewer District

From: John Reeve, PE, District Engineer

RE: Summit at Powder Mountain PRUD Proposed Well and Reservoir

Date: July 11, 2013

Reference #: 4971-07

On July 10th, Gregg Greer, Earl Chamber, and I, visited the Hidden Lake site for the Summit at Powder Mountain's (SPM) proposed new well and reservoir. We reviewed the project's site and construction plans prepared by Bowen & Collins prior to our site analysis. Following our site visit and plan review, we recommend to the District our approval for construction of the new well and reservoir.

Our review of the geotechnical report prepared by Raba Kistner Infrastructure indicates that the Hidden Lake site (east edge of the parking lot) is a better location than the Earl Peak site. Soil conditions at Hidden Lake are better suited for construction as well as safety purposes for the new well and reservoir.

Our review included analysis of the proposed placement of the well and reservoir in connection with yearly snow removal requirements from the adjacent parking lot. We determined very minimal conflicts exist that would impede snow removal activities.

The proposed connection of the existing 80,000-gallon reservoir to the new 415,000-gallon reservoir is still under consideration and; at this point, is not approved for construction. Possible options for connection include:

- modifying the existing pump station
- designing an electronically-controlled pipeline between the reservoirs.

Approval of the new well and reservoir project is still conditional upon developing a minimum 130 gallon of water supply. (As per the requirements of Utah's Division of Drinking Water.)

We have tried to address all items of concern. Further concerns that may need to be addressed during additional reviews and during construction of improvements include but are not limited to:

- The new well does not produce the required 130 gallon water supply
- Design plans for the well head and how it integrates with site must be reviewed and approved
- Plans for the possible connection of the existing and new reservoirs must be reviewed and approved as well.