

ENGINEERING • SURVEYING • RESOURCES & ENVIRONMENTAL SERVICES

RESOURCE CONCEPTS, INC.

May 3, 2007

Mr. G. Blake Smith
VIRGINIA HIGHLANDS, LLC
7690 Town Square Way
Reno, Nevada 89523

Re: Response to Storey County Questions & Concerns Letter, Dated April 23, 2007
Item No. 1 – Storm Drainage
Cordevista Development

Dear Mr. Smith:

Per your request, Resource Concepts, Inc. (RCI) is offering the following responses to Items 1 and 4 of the above-referenced letter from Mr. Larry Prater of the Storey County Planning Commission. In addition, I am available and willing to attend the public hearing tomorrow to discuss these same issues, as needed.

It is important to note that the responses contained herein are based on the information made available to RCI to date. Additional investigation, coordination and design will be necessary to qualify each response and help ensure their validity.

Item No. 1 (Drainage)

The proposed Cordevista development, along with the possible coordination from the County and downstream landowners has the ability to mitigate flooding through Lockwood. Based on the latest analysis RCI performed, as well as U.S.G.S. gage station information recorded on Long Valley Creek, approximately 16,536 cubic feet per second (cfs) currently impacts the Lockwood community as a result of a storm event having a 100-year recurrence interval. The proposed development is estimated to increase that amount by 1,313 cfs, which will be detained on the project site. In an effort to ensure post-development flows do not exceed pre-development flows, a 506-acre-foot detention basin is estimated to be required.

You have directed RCI to ensure the Cordevista development provides sufficient detention of storm water run-off to eliminate flooding within the Lockwood community. In describing how this can be accomplished, it is important to first explain our understanding of the existing conditions that impact the Lockwood community.

The Long Valley Creek, just upstream of the Lagomarsino Volunteer Fire Department, has a bank full capacity of approximately 8,494 cfs. At this capacity and without any other downstream obstructions,

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Canyon Road and the community of Lockwood will not flood. It is our understanding that the downstream culverts and development have restricted the flow capacity of the creek to approximately 3,000 to 4,000 cfs. As such, approximately 14,849 cfs would need to be detained. Per our discussions, you expressed a willingness to not only provide detention basins, but also remove the existing culverts and replace them with a structure that accommodates the bank full capacity and therefore mitigate the flooding in Lockwood.

It is important to note that our prior analysis did not include a portion of the watershed below your project site. It is believed that the east side of the Waste Management property and the west side of the aggregate pit each have current on-site storage to assist in the mitigation of downstream flooding. At the time of our analysis, our scope was to determine peak flows impacting your site, as well as determine on-site storage capacities necessary to reduce the peak flow of the contributing watershed. While not yet analyzed, RCI believes this area will experience its peak in advance of the overall peak of the watershed. This is based on the overall topography of the area, as well as the Time of Concentration. As a result, RCI feels the 14,849 cfs to be detained is valid.

While actual detention basin quantities and configuration will be defined during the Land Planning/Planned Unit Development (P.U.D.) stage of the permitting and design process, it is anticipated that a series of on-site detention basins will be constructed along each tributary, as well as along the Long Valley Creek. Although feasible at this stage, in the event that the Cordevista drainage system, combined with the downstream culvert replacement and associated improvements, is not sufficient, additional off-site storage will be necessary. RCI would then recommend coordination between you, Storey County staff and the downstream landowner(s) to discuss additional storage capacity just upstream of Lockwood. RCI feels these discussions are relevant due to your willingness to detain drainage amounts far in excess of what your development will generate, increase the downstream capacity to its unrestricted ability by replacing the culverts and widening the creek, as well as the overall benefit to the community.

The proposed Cordevista development comprises an area of approximately 8,600 acres. The watershed contributing to Lockwood is well over 48,064 acres. As a result, your development comprises less than 18% of the watershed. Your proposed mitigation substantially exceeds your proportionate contribution.

Based on the above information, RCI believes the following approaches will mitigate flooding in the Lockwood community:

- Construct a series of detention and retention basins within the proposed Cordevista development, along each tributary, and along the Long Valley Creek. As discussed, these on-site basins will be well in excess of the projects proportionate share.
- Remove the existing Long Valley Creek culverts, downstream of the Lagomarsino Volunteer Fire Department, and replace them with either a bridge to span the creek or a box culvert. Either solution must allow the creek the ability to transport flows at its upstream capacity, estimated to be 8,494 cfs.
- Widen the Long Valley Creek downstream of the existing dual CMP culverts to allow the creek the ability to transport flows at its upstream capacity, estimated to be 8,494 cfs.

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Currently, the creek narrows prior to discharging to the Truckee River. This will reduce the amount of required storage from approximately 14, 849 cfs to 9,355 cfs.

- While again feasible to mitigate flooding in Lockwood, if all of the above is not sufficient, RCI recommends the construction of detention basins immediately upstream of the Lockwood community. These basins would complement the ones proposed for the Cordevista development site by allowing the reduction in flow and treatment of run-off generated within the contributing watershed, below the elevation of the Cordevista development. This would involve coordination between you, Storey County staff and the downstream landowner(s).

While further investigation and analyses are required as part of the P.U.D. process, RCI at this time believes implementing the above measures will mitigate flooding within the Lockwood community caused by flows generated within the Lagomarsino canyon and its contributing watershed.

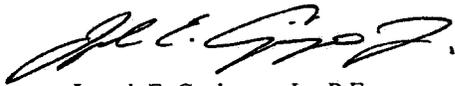
Item No. 4 (Sanitary Sewer System)

The proposed Cordevista development will be equipped with a County approved means of collecting and treating sanitary sewer flows. While a solution has not yet been decided upon, several options are available and have been discussed. RCI believes that the most cost-effective and efficient solution will be a local treatment facility. The location and size of such a facility is dependent on a future soils investigation to be performed by a licensed geotechnical engineer, as well as an acceptable site within the Land Plan. This is anticipated to be completed at the P.U.D. stage of this process.

RCI believes there is an opportunity here for the developer and the County to work together to not only decide on a system that serves the proposed development, but also to reduce the number of existing Individual Sewage Disposal Systems (ISDS) within the Lockwood community.

If you have any questions, please contact me at your convenience.

Sincerely,



Joseph E. Cacioppo, Jr., P.E.
Vice-President

JEC:sta