

MEMO TO

Larry Prater, Storey County Planning Commissioner

**FROM** 

Blake Smith

**DATE** 

May 3, 2007

RE

Answers to your April 23, 2007, memo regarding Cordevista

CC

Douglas Walling, Virgil Bucchianeri, Lydia Hammack, Peter Maholland, Austin Osborne, Bret Tyler, Planning Commissioners; Dean Haymore,

Storey County Planning Director; and Pat Whitten, Storey County

Manager

Attached please find the answers to the questions and concerns outlined in your memo under cover of April 23, 2007.

To: Mr. Blake Smith

**Date:** 4/23/07

From: Larry Prater, Storey Co. Planning Commission

Re: Cordevista Development

Copies: Dean Haymore, Storey Co. Planning Dept.

Planning Commissioners

Dear Mr. Smith:

The following are questions and concerns that I would like you or your consultants to address at the next public hearing in Rainbow Bend on May 3<sup>rd</sup>.

- 1. The *Drainage* section of the Conservation Plan of the project scope states that proposed retention and detention of storm water on the project site will "stop all flooding in Lockwood." Historically, flooding of the Long Valley Creek through Lockwood has occurred after two or more days of continuous rain has saturated the soils in the upstream drainage basins. In this condition all contributing runoff basins are proportionate stormwater contributors based upon their contributory areas. Your preliminary studies address the Lousetown Creek, Long Valley Creek and Cordevista basins, but do not address other significant basins north of the Lousetown and Cordevista basins. If these other basins are taken into affect, Cordevista appears to contribute only about a quarter of the stormwater flow through Lockwood. While detention of stormwater on your project site will help to alleviate the severity of future flooding through Lockwood, the statement that it will stop all flooding seems far from accurate. Please clarify.
- 2. The project scope states "the 8600 acre project will be a low intensity development that will range between 1.0 an 2.0 dwellings per gross acre." Based on an assumption of 2.5 occupants per dwelling, the community could ultimately have a population of 43,000, or more than ten times the county's current population. Further, based on your use of the gross acreage for the development density, the acquisition of additional undevelopable acreage could result in more population and increased density in the developable areas. For us to have an accurate view of the scope and density of the project we need to know the proposed maximum number of dwellings on the developable acreage only.
- 3. Your reluctance to disclose your source of water for the project is understandable. However, without that information we are forced to speculate on its source and delivery. You have repeatedly stated that absolutely no Storey County ground water will be used, leaving the Truckee River at Lockwood as the closest source. Based on Truckee Meadows average summer water usage of 800 gallons per day (gpd) per connection and peak usage of 1600 gpd per connection, and a community buildout with 13,000 connections (8,600 acres with 1.5 units per acre) you will need a delivery and

treatment system for 1200 gpd per connection, or about 16 million gallons per day. An efficient delivery system from Lockwood to Cordevista, 4-plus miles away and 1000 feet higher, would require a 24-inch diameter pipeline and multiple pump stations. Assuming Truckee River water as the source, a \$60 million dollar treatment plant would be required. Assuming groundwater from some more distant source, treatment would not be required but piping and pumping would probably offset the treatment costs. Pumping costs alone from Lockwood to the site could range from \$2,500 per day in the winter to \$10,000 per day at summer peaks. Granted, these are all "back –of –the –envelope" calculations, but they have been corroborated by an engineer with the Truckee Meadows Water Authority. My question is: based on the obviously substantial first and continuing costs of delivering potable water to the project, how can your proposed development compete with other developments in the area?

- 4. Where will the development's sewage treatment effluent be discharged?
- 5. You have pledged that there will be no future access roads to Cordevista through Lockwood or Virginia City Highlands. However, once the development is completed, you are gone, and the majority of the county's population is there, it seems inevitable that the Cordevista residents will demand more direct and quicker access to Reno, Sparks and Virginia City. How can you guarantee that the roads will not be built?
- 6. You have argued that the primary justification for the development of Cordevista is to provide a residential balance to the rapid commercial/industrial growth of the Tahoe Reno Industrial Park (TRI), and that good planning practices require such a balance. But the question arises, good for whom? The commercial and industrial enterprises choosing to headquarter in TRI are not demanding that Storey County provide housing for their employees. They recognize that the Truckee Meadows has a large existing employee base and that there is plenty of room for residential growth in nearby Fernley and Silver Springs. It seems that the only beneficiary of the Cordevista development is you, the developer. Please clarify.
- 7. In addition to the above, sound planning practices discourage spot zoning. The Cordevista site's existing zoning, Special Industrial, is compatible with TRI's industrial zoning on the north, south and east. The Forestry zoning to the west is buffered by a major drainage, Long Valley Creek, and permits only very low residential density, i.e., one unit per forty acres. In my opinion, permitting a 13,000 unit or larger residential development at that location would constitute a classic case of spot zoning. Please comment.



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



May 3, 2007

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

Re: Master Plan Amendment and Zone Change Water Supply Considerations

## Dear Blake:

In response to your questions and the issues raised by Larry Prater of the Storey County Planning Commission, I wanted to address some of the water considerations that will be important for both Storey County as well as for your subdivision development process. I apologize for not being able to attend the meeting personally, but did want to provide this information for you to share with Storey County staff, the Planning Commissioners, and the public.

Water supply for your proposed development as well as other developments, both approved and potential in Storey County, has raised a number of concerns. Historic problems with water supply were the reason that the Virginia City pipeline was built well over 100 years ago. The overall water resources approach for the Cordevista project will be to focus on careful allocation, monitoring, use and conservation of water resources. Planning elements in the water supply and water distribution master plan would include a major emphasis on water conservation. Such elements as an inverted water rate structure where basic water needs are provided at reasonable rates, but substantial increases in cost are applied to discretionary and outside uses will be an important element in keeping per-capita use rates low. We will not be in position to provide for the kinds of uses that one might see in the Truckee Meadows where average summer usages of 800 gallons per day and peak summer usages of 1,600 gallons per day per connection have been reported. In Cordevista, I would estimate that projected water uses would be closer to 250 – 300 gallons per day per connection with peak usages only a moderate amount larger because outside uses will be limited and major common areas and other irrigation facilities will be served primarily by treated effluent as part of the resource conservation plan.

Lower per-capita uses result in major savings in supply, transmission, storage, and operational costs for the water utility. A fully metered system utilizing a progressive water rate structure, CC&Rs, design guidelines, and other water conservation measures will ensure that the resources

Mr. G. Blake Smith May 3, 2007 Page 2

required for this development will be carefully allocated and managed. This will result in less expense for development, but more importantly in the long run, much more reasonable costs for system operation. Although the infrastructure cost in development will be significant, the operational expenses because the gallons used per connection will be low, should result in affordable water rates for basic home needs, even with the cost of pumping and possibly treatment of the source water.

A number of water supply alternatives are being explored for service to meet the demands of Cordevista. You have offered not to utilize the ground water aquifer in the immediate area of Cordevista because of its limited extent, low production capability, and the potential aggravation of already identified issues in Virginia City Highlands. In addition to Cordevista, there are significant other private lands within Storey County which do not or may not have sufficient water for their development. Our recommendation for the Cordevista project is that, in conjunction with Storey County, you take the lead in working to develop a county-wide plan to meet both current and future water needs for Storey County. An overall water plan which delineates how developments can fit together will avoid unnecessary duplication of facilities will be in the best long-term interests of Storey County. Having a group of water systems which are literally islands unto themselves is not good long-term planning and wastes a significant amount of financial resources that could be utilized to reinforce and extend the water supplies for the overall benefit of Storey County. It also facilitates the County planning process with regard to water improvements and future water needs.

While water is a major concern for the future development of the project, we need to remember that we are at the initial master plan stage.

We look forward to assisting you and Storey County in not only solving the water supply requirements of Cordevista, but of providing something which can represent a backbone to benefit existing water users and property owners in the County.

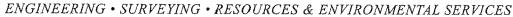
I again apologize for not being able to attend the meeting personally. Joe Cacioppo from our office will be in attendance and I'm sure would be happy to try to answer questions at the meeting.

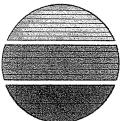
Sincerely,

Bruce R. Scott, P.E.

BRS:sta

cc: Joe Cacioppo, Jr., Resource Concepts, Inc. Mark Amodei, Esquire





# RESOURCE CONCEPTS, II

May 2, 2007

Hand Delivered

Commissioner Larry Prater Storey County Planning Commission 110 Toll Road - Gold Hill divide Post. Office Box 526 Virginia City, Nevada 89440

Dear Commissioner Prater:

In response to your memo to Blake Smith, dated 4-23-07, the following is to notify you that Resource Concepts, Inc. (RCI) has been retained by Virginia Highlands LLC to prepare an estray horse management plan supporting the submitted application for the proposed Cordevista Project. As directed by our client, RCI has been authorized to work with County staff, the Nevada Department of Agriculture, and interested area residents to develop a workable and realistic plan to accommodate the current horse use that occurs in the general area of this PUD. Upon County approval of the requested Master Plan amendment, and the land planning and PUD process begins, RCI will initiate contact and coordination with each of the government agencies and citizens groups.

Established in 1978, and specializing in the ecology, management and administration of arid land and resources located in Nevada and the Great Basin, RCI is uniquely positioned and qualified, in terms of experience and expertise, to successfully address the natural resource issues in a sustainable and practical manner. This expertise and experience extents to the management of freeroaming horses in developing rural environment and the development and application of appropriate mitigation. RCI is very familiar with the state statutes, county ordinances and agency programs that govern the management of the Virginia Range estray horse herd.

Thank you for your consideration of this notification. We look forward to the opportunity of working with you, your staff and residents of Storey County in this interesting project. Please feel free to contact me if you have questions concerning this notification or initiation of this project.

Sincerely.

John L. McLain

Principal Resource Specialist

JLM:im

cc: G. Blake Smith, Virginia Highlands LLC

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May 3, 2007

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Dear Mr. Prater,

The following are responses to your questions that you asked in a letter on April 23, 2007 and asked that we would address them at the hearing at Rainbow Bend.

### Answer to 2

Your comment was, "For us to have an accurate view of the scope and density of the project we need to know the proposed maximum number of dwellings on the developable acreage only." We gave projected numbers on the gross acreage because that is our best estimate to this point. We are not at a stage in the project where we could give the number of dwellings on the developable acreage only. As we continue planning and follow Storey County's application process, the issue of density within specific areas of the project will be resolved but at this level of the entitlement process, the 1 to 2 units per gross is a number that we will not exceed.

The master plan amendment and zone change that was recently approved for Painted Rock was not required to provide the information that you have requested from Cordevista. It is our hope that we would be held to the same standard.

There are no plans to add acreage. In conjunction with future phases of the approval process the development agreement/PUD will contain conditions of approval that will define a maximum number of units on a specific number of acres. At this stage we do not have that information.

#### Answer to 5

The most effective tool that jurisdictions have to ensure long-term action, which extends beyond ownership, is Conditions of Approval. Cordevista is requesting that one of the conditions of approval state that no roads will be constructed to the south linking Cordevista with Virginia City and/or Virginia City Highlands. These conditions will also contain the language that the only way in which the described road would be built is at the request of Virginia City and Virginia City Highland residents, and never at the request of Cordevista residents.

# Answer to 6

Your comment was, "You have argued that the primary justification for the development of Cordevista is to provide a residential balance to the rapid commercial/industrial growth of the Tahoe Reno Industrial Park (TRI), and that good planning practices require such a balance. But the question arises, good for whom?"

Sound planning principles prescribe balance within a master plan. Perhaps the best way to answer your question is by considering the converse: imbalance is bad for whom? As we have seen in other places

there are ramifications of bad planning. Jobs/housing imbalance leads to long commutes, which in turn results in employer's inability to attract employees(please see attached letters from just a few of TRI's current tenants). If the problem becomes severe enough it could jeopardize the success of TRI. If TRI fails, the county will lose significant tax revenue and not be able to sustain the current level of services for its residents without raising taxes; and higher taxes produce unhappy residents.

Granted, this is a hypothetical series of consequences applied to Storey County. Yet that same scenario has occurred and continues to occur in many cities and counties around the country. The reality is that TRI businesses are or may be suffering because of the lack of housing. We have communicated with many business owners who have expressed this reality.

The answer to your question is that balance is good for Storey County and the entire region. Sound planning principles entail planning for the future not only the present. The future growth of Storey County includes not only the TRI expansion, but other natural and foreseen growth. A sound plan for Storey County should provide the ability to balance its industry while doing its best to provide needed housing and amenities.

In addition, traffic on I-80 is a growing regional concern. It is common to encounter gridlock near Sparks during the morning and evening commutes. As TRI continues to expand traffic will become the most sensitive regional issue.

#### Answer to 7

Definition of spot zoning: <a href="http://real-estate-law.freeadvice.com/zoning/spot\_zoning.htm">http://real-estate-law.freeadvice.com/zoning/spot\_zoning.htm</a>

"Spot zoning occurs when a small area of land or section in an existing neighborhood is singled out and placed in a different zone from that of neighboring property. For example, a park or school might be allowed in a strictly residential area if it serves a useful purpose to the neighborhood residents.

In some areas of the country the courts have found spot zoning illegal on the ground that it is incompatible with the existing land use-zoning plan or in an overall zoning scheme for the community."

Cordevista is not spot zoning. It is not an arbitrary zone change completely surrounded by an incompatible zone classification without due cause or justification. As you have identified Cordevista is surrounded on 3 sides by TRI and by Forestry and low density residential on the other. As presently constituted the addition of Cordevista will complement adjacent uses and provide the necessary mix of uses that are vital for the long-term success of the TRI and other nearby communities within Storey County.