



May 23, 2016

“Your Path to Home Ownership”

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RE: Written response to Town of New Castle’s various Departments’ comments regarding Lakota Ridge Senior Apartments’ PUD application

Mr. Cain,

The purpose of this letter is to outline a response to the comments regarding the Lakota Ridge Senior Apartments’ PUD application. Below you will find a response to each comment received organized by the various agencies.

Town of New Castle Civil Engineer: SGM Letter by Jeff Simonson, dated March 11, 2016:

Introduction paragraph:

A Traffic Study and Geotechnical Study have been completed and are attached to this letter as part of this response. Our team once again requests that the drainage report/ calculations, water design calculations, sewer design calculations be completed and delivered to the Town of New Castle when the project is ready for a building permit review.

1. The grading and drainage plan will need to assure that not only the finish grade contours are provided for the roadway construction, but also for the whole site.
 - a. **The development will properly design the finish grade contours to assure that the grading and drainage plan requirements are met. This will be submitted at the time of a plan review for permits.**
2. For the lower portion of the roadway (below the double inlet) how is drainage from the roadway to be treated from a water quality standpoint?

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Also, there appears to be a need for either drain inlets or valley pans to mitigate shoulder/ditch erosion into the receiving borrow ditch.

- a. The small portion of the road that is below the double inlet will not be captured or treated for water quality due to site and topography constraints. However, the net runoff from the site will meet all water quality and detention standards. A valley pan will be provided to direct flows into the ditch and mitigate erosion. This will be submitted at the time of a plan review for permits.**
3. The site plan for the bike path crossing at the entrance onto CVBLVD needs to be better defined identifying the cross walk striping as well as the need (or not) for ADA accessible ramps across the driveway.
 - a. All crossing paths will be further defined and all ADA accessible routes will conform to all ADA requirements. This will be submitted at the time of a plan review for permits.**
4. The grading in the roadside swale in the vicinity of the detention facility is excessive (particularly next to CVBLVD). The future of CVBLVD will be the need of an additional travel lane thus construction of facilities that compromise this will need to be avoided. Note that the 10 foot width of the bike path is unnecessary; rather, an 8' wide path is required.
 - a. The bike path will be 8' wide rather than 10' wide. Our development will take this design of the future CVBLVD into consideration to assure coordination. This will be submitted at the time of a plan review for permits.**
5. For the storm drain line from the double inlet to the detention pond, at the change in direction of the alignment, a storm drain manhole is necessary.
 - a. The project will provide a storm drain manhole if it is necessary. This will be submitted at the time of a plan review for permits.**
6. Water and sewer separation (including manholes) needs to be 10'. The current alignments do not provide for such.
 - a. All separation and other design requirements of the Town of New Castle for water and sewer will be met. This will be shown on the plans that will be submitted for permit review**
7. Water service lines off of the main line are identified. Shut off locations, meter locations and line sizes need to be provided. Calculations supporting the service size and meter size need to be submitted for review. Fire service demands need to be identified for the line sizing as well.
 - a. Detailed design of water service infrastructure as well as calculations supporting the design will be provided on the plans for building permit review.**
8. It appears that the location of the sewer service line to building 3 will not work. The finish floor for the lowest level is at an elevation of 71.75 while the finish road grade elevation at the service line location tie to



the proposed sewer main is near elevation 74.

- a. **The sewer service lines that were shown on the Preliminary PUD Plan set were preliminary by nature. The final plans submitted for permit review will be fully designed and functioning.**
9. Profiles of the storm drain, sewer and water lines will need to be provided to determine specific vertical installation requirements. All proposed crossings (or potential conflicts) of all utility crossings will need to be identified.
 - a. **Construction level, detailed plan and profiles will be provided for all utilities at the time of building permit review. They will identify crossings and address potential conflicts.**
10. Identification of transformer locations, junction boxes and service pedestals need to be identified to assure that no conflicts exist with placement of hydrants, valves, snow storage locations, landscaping, etc...
 - a. **This will be submitted at the time of a plan review for permits.**
11. For the water and sewer termination points in CVBLVD, the water and sewer will need to be extended/stubbed to a point that is 5 feet beyond the edge of proposed improvements. In the case of the sewer line, the sewer may need to be extended in such a fashion that it is located 5 feet beyond the west termination of the bike path such that future extension of the sewer line will not require reconstruction of the bike path as well. For the waterline, the water line will need to be stubbed at least 5 feet beyond the eventual edge of asphalt. Through the traffic study, there is likely a need to provide a right hand turn into the property (for eastbound traffic). As such, the waterline will need to be installed to a point that is 5 feet beyond the edge of asphalt necessary to construct the turn lane and transition width to such. In this manner, extension of the waterline, in the future will not require cutting the improvements being constructed with this project.
 - a. **The water and sewer mains along CVBLVD will be realigned and extended to 5 feet beyond the edge of asphalt to eliminate the need for reconstruction of the bike path, driveways, and CVBLVD. This will be shown on the plans submitted for building permit review.**
12. What kind of street lighting is proposed for this project? At a minimum, lighting of the roadway tie to CBBLVD is necessary to promote safety of pedestrians at the trail crossing. Likewise, we would recommend lighting be in place to highlight pedestrian crossings inside the project as well.
 - a. **This will be submitted at the time of a plan review for permits.**
13. Proposed easements will need to be provided with all utilities.
 - a. **The project will provide all required easements. This will be submitted at the time of a plan review for permits.**
14. We will need to see that the Grand River Fire Protection District is in



concurrence with the access planning (for fire apparatus) as well as the fire hydrant placements and disbursement throughout the site. Is there a need for an additional hydrant for building 2 protections?

- a. The Colorado River Fire Rescue Department has confirmed the fire hydrant locations are appropriate. Building 2 has been altered to address the Fire Departments concerns about the portion of the building that was three story. The entire building is not two stories to conform to the requirements of the Fire Department.**
15. Water/storm drain crossings will need to be insulated. Our preference is to insulate the storm drain lines to protect the water lines from freezing as the likelihood for the need to access the water line is higher than that of the storm drain.
 - a. This will be submitted at the time of a plan review for permits.**
16. Given the close proximity of the building corners for Building 2 and Building 4 (Buildings 3 and 5 on the Architects plan) to the west property line, either show how construction will not trespass onto the neighboring property or provide the Town the proof of a temporary construction easement from the school district? On the Architects plan, it appears some improvements cross onto the adjacent property (Sheet A1, Building 5). Provide proof for the permanent easement for these improvements. Assure that the drainage plan (swale proposed) identified can function properly.
 - a. The architectural drawings have been revised to illustrate that no improvements will cross the property line at the corners of buildings 3 and 5. The five foot distance to the property line should provide adequate space for any foundation over excavation. If needed the contractor shall shore and protect the edge of any excavation within ten feet of the property line so that the adjacent site is not impacted.**
 - b. The building footprints shown on the PUD plan show the maximum extent of the building footprint. If necessary to make the interceptor swale work properly the southwest corner of building 5 will be redesigned to provide additional clearance.**
 - c. Design calculations and details of the interceptor swale will be provided at the time of submission for plan review.**
17. Building number labels between the engineers plans and the architects' plans need to be consistent.
 - a. This has been addressed to assure all plans are consistent.**
18. For final plan, a storm water management plan (SWMP) identifying phasing and BMP's will be necessary to assure contractor compliance with such during construction.
 - a. This will be submitted at the time of a plan review for permits.**
19. For final plan, details for construction will be needed including the

applicable details from the Town's Public Works Manual to avoid any confusion as to what is being constructed.

- a. **This will be submitted at the time of a plan review for permits.**
20. A signage and striping plan will be necessary (particularly as it relates to CVBLVD) to accommodate turn lanes into this project.
- a. **This will be submitted at the time of a plan review for permits.**

Colorado River Fire and Rescue: E-mail by Orrin Moon, dated April 21, 2016.

1. Fire truck turnaround at the end of the street and along the east side of the main entrance road shall have "NO PARKING" signs installed.
 - a. **This signage shall be installed.**
2. Buildings shall have separate street addressing.
 - a. **The buildings shall have separate street addressing.**
3. Unknown if the Access Street will have a street name. I would suggest the road be named so the buildings can be addressed off of the street.
 - a. **We will request the Street Name from the Town of New Castle and will address the buildings off this new Street Name.**
4. Use 2012 Fire Code when laying out and planning the solar panels
 - a. **Noted. All panel layouts will conform with the 2012 Fire Code.**
5. Try to locate the fire riser rooms and locations in the same location at each building as much as possible
 - a. **All fire riser rooms will be located in the same location on each building, as much as possible given that buildings have different sizes and orientations. The design team will meet with Colorado River Fire and Rescue during subsequent design phases to gain CRFR's input and approval of all final locations prior to submission of final drawings for plan review.**
6. The disconnects and switches are all to be located in the fire riser room.
 - a. **Electrical system disconnects and switches for both the power being provided by the utility company and power being generated by renewable energy systems on site shall be in or adjacent to the Fire Riser rooms subject to the requirements of the NEC and IFC.**
7. We will plan on having copper phone lines to each building.
 - a. **Noted. Copper phone lines will be installed in each building.**
8. Exterior back balconies are not going to be permitted to have grills, this will be made available at the community building.
 - a. **Noted. CRHDC property management will not allow grills on back balconies and porches. Nor will grills be allowed anywhere that the might be operated beneath an overhanging eave, soffit or balcony. This will be written into our house rules.**
9. The elevator will be large enough to accommodate gurneys, for door locations the side is better.



- a. **Noted. Project will include an elevator large enough to accommodate gurneys and the door location will be on the side.**
- 10. CRHDC will contact the surveyor to identify the existing tree locations to make sure they are not too close the building.
 - a. **Noted. This is currently in process. The design team will meet with CRFR during subsequent design phases to develop a wildland interface fire protection plan. Removal of trees close to new structures, development of a fire break zone around structures and removal of ladder fuels on all trees within a minimum distance of any structure will be undertaken at the direction of CRFR.**
- 11. Relocate two units on the third story of building 3 so that they are easier to access with the fire departments equipment.
 - a. **Noted. These two units have been relocated to the east end of building 6.**
- 12. The fire sprinkler system shall be installed to NFPA 13 R.
 - a. **Noted. The fire sprinkler system shall be installed as per NFPA 13 R.**
- 13. Fire Alarm system shall be installed to NFPA 72.
 - a. **Noted. The Fire Alarm system shall be installed as per NFPA 72.**
- 14. **The design team will meet with CRFR during subsequent design phases to develop an approved addressed monitoring system and knox boxes will be provided in locations to be approved by CRFR. Fire zones and other wildland fire protection plans shall be developed as described in #10 above.**

Town of New Castle Public Works: Memo by John Wenzel, dated March 23, 2016

1. **Sidewalks**

Sidewalks located in the Public Right-of-Way shall be concrete and a minimum of five feet wide. A green belt (4 to 5 feet wide) shall be placed between the edge of sidewalk and back of curb to provide for improved walkability and additional snow storage. Asphalt is an acceptable material for the 10 foot trail that runs parallel to Castle Valley Boulevard.

- a. **The project team will provide a multi-use trail along the north property line in compliance with Town of New Castle standards. Please note that differing departments of the Town are currently requiring differing widths. The project will provide detached sidewalks with a minimum four foot wide planted parkway along portions of the new street that do not provide space for parallel car parking. In areas of parallel car parking the sidewalk shall be attached to the back side of the curb.**

2. **Snow Storage**

We suggest combining/enlarging the parking islands to provide for additional snow storage.

- a. **The suggestion is appreciated and duly noted. CRHDC and the project design team will carefully consider and balance needs for snow storage**



space with the desire to provide an attractive landscape character for the parking areas that may require multiple peninsulas to support a tree canopy.

3. Utility Services:

Fire Hydrant type to be Kennedy. Fire hydrants must be set at proper elevation, with a 3 inch minimum clearance between breakaway flange and finished grade. Mega lug fittings shall be used for fire hydrants and fire hydrant isolation valves.

a. Noted. The project will comply.

Tracer wire shall be placed with water main lines. It's recommended that tracer wire also be placed with water service lines.

a. Noted. The project will comply.

At a minimum, each building should have its own water meter. Water meter touch pads should be placed in a convenient location for ease of use. (Ground level, close proximity to each other)

a. Noted. The project will comply. Each building will have a separate water meter. Locations of water meters shall be coordinated with the Town and CRHDC requirements. Meters will be grouped in close proximity while recognizing that CRHDC also needs to limit the length of lines on the private side of the meter. Thus meters for buildings 1, 2 and 3 may be grouped fairly close together near the north end of the site and meters for buildings 4, 5 and 6 may be grouped fairly close together near the south end of the site.

A man hole shall be placed at the termination point of the sewer main line.

a. Noted. The project will comply.

Detailed utility As-Built plans shall be submitted. As-Built plans shall include the location of water/sewer main lines and the point of connection for all water/sewer service lines.

a. Noted. The project will comply.

Developer shall be responsible for disinfection, testing, sampling, and reporting for all newly placed potable water and sewer lines. A Public Works representative shall be contacted to observe the disinfection, testing, sampling, and reporting process.

a. Noted. The project will comply.

4. Street Lights

Street lights shall be placed at intersections for pedestrian safety.

a. Noted. The project will comply. Street lights shall be placed in accordance with Town requirements.

5. Final Plot

The Final Plot plan shall clearly define boundaries between public and private roads, parking, and sidewalks

- a. **Noted. The Final Plot plan will show and define the subdivision of the existing parcel into to two smaller parcels, one for residential development and the second to be deeded to the Town of New Castle for public right-of-way. All improvements within the right-of-way shall become the property of the town and shall be the town's responsibility to maintain. All improvements within the residential property shall be owned and maintained by CRHDC. The proposed property line location provides a clear separation between systems owned and maintained by the Town and owned and maintained by CRHDC with the exception of the ADA accessible trail near the south end of the property. During subsequent design phases the design team will meet with Town staff to design and detail this system so that the boundary between public and private ownership and responsibility is clear.**

6. Right – of – Way Permit

Work in or directly adjacent to the roadway will require a right-of-way permit. The Developer's contractors can pick up a right-of-way permit from the Town Clerk.

- a. **Noted. The project will comply.**

Colorado Department of Parks and Wildlife: Letter by Brian Gray dated April 21, 2016

1. A buffer of vegetation could be planted at the southern border of the property in order to screen the apartments from the land to the south. The ridge directly to the south of the property does provide habitat for many wildlife species. The vegetative buffer could possibly lessen visual, noise and lighting impacts to the south. Additionally, prohibiting pets from wandering to the south of the property would help lessen impacts to wildlife.

- a. **Noted. The project design team will carefully design the landscape of the southern portion of the site, particularly near building 6, the edge of the coniferous forest and the sharp ridge that falls away to the south to balance the needs and desires for wildlife, the residents of the community (both on the site and within the broader neighborhood and town), the local fire department and the Town of New Castle requirements. If a vegetative buffer can be provided without creating issues, wildfire risk for example, it will be.**

This concludes our response to the official comments received to date from Town of New Castle departments and related jurisdictional entities.

Lakota Ridge Design Review Board

Although the site will not be part of the Lakota Ridge HOA and thus is not subject to the design guidelines and covenants of the neighborhood we have nonetheless met with the Lakota Ridge Design Review Board to get their input on the design of the project. We

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mention this here because the design has been and will continue to be modified to try, as much as possible, to deliver a project that meets the approval of the neighborhood DRB. Following is a list of comments received from board members at the DRB meeting on May 4.

1. **Stucco is not an acceptable material in the Lakota Ridge neighborhood.**
 - a. **This is duly noted. The project is being redesigned to have either no stucco cladding or no stucco cladding visible from Castle Valley Boulevard.**
2. **Stone cladding is preferred at the base of walls.**
 - a. **This is duly noted. Stone cladding is beyond the budget of the project but the design team will look at using other materials in similar way to give buildings a “grounded” appearance with a heavy base material.**
3. **Rooflines should be broken up.**
 - a. **The design of the project has been modified to eliminate long unbroken ridge lines on the roof.**
4. **Dormers should have gable roofs or at a minimum steeper shed roofs.**
 - a. **The design team will explore gable dormers although those add considerable cost to the project and may not be feasible.**
 - b. **Steeper shed dormers will be used if gable dormers cannot be implemented.**
5. **Acceptable colors are earth tones. Beige is not allowed.**
 - a. **The design team has studied the color schemes of many of the houses with the Lakota Ridge neighborhood and will implement a color scheme drawing upon those examples.**

The design drawings submitted for Final PUD approval include many changes in response to the Lakota Ridge Design Review Board comments.

Please feel free to contact myself, Carly Johansson, CRHDC Director of Real Estate Development, at 720-542-6570 if you have any questions or concerns. We thank you and appreciate your time and efforts.

Sincerely,

Carly Johansson, Director of Real Estate Development
CRHDC

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