



August 6, 2021

Suzanne Herrick
934 South 3500 West
Weber County, UT 84404

Re: Riverbend Subdivision Independent Technical Review

Dear Suzanne:

CRS Engineers has reviewed the proposed Riverbend Cluster Subdivision staffing report prepared on June 15, 2021, for presentation to the Weber County Planning Commission. We present the following comments that should be considered by the Weber County Planning Commission.

Comment 1:

The staffing report appears to inaccurately determine the Flood Zone for the project. The proposed project is located within the 0.2-percent annual chance floodplain (500-year) as depicted on the Preliminary FEMA Flood Insurance Rate Maps (FIRM) issued April 21, 2021 (attached). Although the Preliminary FIRMs are not effective, the Preliminary FIRMs should be used as best available information where they are more restrictive than the effective FIRMs. In this case the Preliminary FIRMs show the 0.2-percent annual chance flood event inundates the proposed development.

CRS proposes that the planning report be corrected to state that the proposed development is within the 500-year floodplain for the Weber River.

Comment 2:

The community definition for floodplain is any land susceptible to being inundated by water from any source. This definition leads me to believe that the community understands not all flooding sources are defined by the FEMA FIRMs and that additional flood potential exists outside the special flood hazard area.

The slough that runs along the west side of the proposed Riverbend Subdivision is a known flooding source that has resulted in flood damage in recent years. The proposed development plans to discharge stormwater from the developed site into the existing slough as the primary outlet source for stormwater. The Weber County Floodplain Administrator, Planning Commission, and County Commission have jurisdiction to manage development within floodplains including the slough throughout the community. It is up to these individuals to fulfill the purpose of County Code Section 22-1-3 which is protection of human life, health, and minimize potential for property damage from flooding. The best time to minimize flood damage is before infrastructure is installed that limits future actions.

CRS recommends the Developer provide an analysis for review by Weber County that demonstrates the slough has sufficient capacity to convey stormwater generated by the development along with all other existing discharge. In accordance with Weber County Design Standards for storm water runoff the Developer is required to provide calculations and design for stormwater runoff for both the 10-year and 100-year storm events. The 100-year is required for the 61-acre development.

Ben Rood, PE CFM
Associate, Water Resources

CRS recommends that a pre- and post-development analysis be performed for the 10-year and 100-year peak discharge to the slough. The Developer should be required to detain peak flows from both the 10-year and 100-year storm event to match the existing condition runoff or 0.1 cfs/acre whichever is less. The Developer should also be required to show that the 10-year and 100-year discharge can be safely conveyed away from existing and proposed homes. The Developer should provide an engineered emergency overflow pathway for flood water to be safely conveyed away from the slough to the Weber River. This emergency overflow pathway would ensure that when the capacity of the proposed detention pond or slough are exceeded that there is a safe way to convey the water to the Weber River without flooding the development or adjoining properties.

Weber County has the stewardship to oversee responsible development as shown in County Code Section 22-5-3

Sec 22-5-3 Standards for Subdivision Proposals

1. All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with sections 22-1-2, 22-1-3 and 22-1-4 of this title.
2. All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet development permit requirements of sections 22-3-3 and 22-4-3 and the provisions of chapter 5 of this title.
3. Base flood elevation data shall be generated for subdivision proposals and other proposed development, including the placement of manufactured home parks and subdivisions, which is greater than 50 lots or five acres, whichever is lesser, if not otherwise provided pursuant to section 22-3-2 or 22-4-2(h) of this title.
4. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
5. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

CRS is willing to provide an independent review of the analysis provided by the Developer. Should the Developer not want to provide the 10-year and 100-year analysis as described herein, you should request to be granted time to hire an engineer to evaluate the potential for increased flood risk that results from the development at your own expense. CRS Engineers is willing to perform the 10-year and 100-year pre- and post-development analysis along with the slough capacity analysis and provide results.

We hope to see the Riverbend Development move forward in a responsible way that manages flood risk for the development as well as surrounding properties.

Sincerely,
CRS Engineers



Ben Rood, PE, CFM
Water Resources Manager

cc
Mike Wilson