

July 8, 2020

Ken Leblanc Scenic Wonders, Inc. 7403 Yosemite Park Way Yosemite, CA 95389

Subject: Storm Drain Feasibility Letter

This Storm Drain Feasibility letter was prepared by Ramiro Marquez, Associate Engineer at QK Inc, at the request of Ken Leblanc. The purpose of this letter is to evaluate the feasibility of the proposed storm drain system layout.

Project Description:

This project is a located at 7548 Henness Circle (APN 006-150-003) in Yosemite West. The total area of the site is 6.2 acres. The development of the site is proposed to be constructed in two phases. The first phase will include the construction of a primary residence, a secondary residence, a detached garage structure, and a driveway with parking areas. The second phase will include the construction of 16 apartment-type units, along with additional drive aisles and parking areas.

Existing Storm Drain Conditions:

Currently, the site is undeveloped, and the general natural storm drainage pattern flows from the southern boundary to the northern boundary of the site, and eventually discharges to an existing 30" culvert located approximately at the mid-point of the northern boundary line, which crosses Henness Circle, and continues flowing northward onto the property located northward of the proposed site. The highest elevation located at the southern boundary of the site is approximately 6120 feet and the lowest elevation of the site is 6035 feet located at the northern boundary of the site at the location of the previously mentioned culvert. Runoff from the adjacent properties to the south and east also contribute to the total watershed area to the proposed site.

Proposed Storm Drain System Layout:

The proposed site layout includes a storm drain system with various catch basins and culverts located at various localized low points, which will convey stormwater runoff to basins located at the northern boundary of the site. Proposed grading on-site will utilize swales to divert stormwater run-off to the proposed catch basins. The captured stormwater runoff will be retained on-site, in the proposed basin areas, and metered out to the existing 30" culvert located nearby on Henness Circle.

Letter to Ken Leblanc Page 2 of 2

Conclusion:

In the final storm drain design documents, I recommend a design professional prepare calculations, which should include the design volume needed for the proposed basins for attenuation and treatment of stormwater run-off. Also, the final storm drain design documents should include a method of discharging collected stormwater run-off at a rate not to exceed the equivalent of the existing stormwater peak flowrates. The proposed site plan appears to allow for plenty of stormwater drainage storage area to accommodate the needs of this project.

If you have any questions, I would be happy to discuss any of these comments and recommendations.

Sincerely,

Ramiro Marquez, PE

Associate Engineer

180468/ Improvements /Task 5.2 RM/ GP