

CITY OF CALISTOGA



February 10, 2012

Mr. Don Luvisi
5102 Lyra Ct
Bakersfield, Ca 93306

Dear Mr. Luvisi:

The City of Calistoga Department of Public Works (CDPW) has reviewed your letter (dated February 3, 2012) regarding drainage concerns related to the proposed Brian Arden winery project. We understand your concerns and have been working closely with the developer's engineers to provide analysis that demonstrates a reduction in peak runoff.

As you may be aware, the developer's engineering consultants have prepared a preliminary drainage study (Delta Consulting & Engineers *Hydrology & Drainage Report*, dated February 1, 2012) that describe how the proposed improvements will work.

Their initial plans and report show similar drainage patterns for the pre and post developed site; generally easterly sheet flow that is routed to the southerly corner of the project site. The report also describes the engineering analysis done to demonstrate how total project peak flow will be less for the post developed condition than their pre-developed condition. The proposed improvements will provide detention/meter box that will attenuate and release storm water runoff below the existing conditions (for the 2, 10, 100 year, 24 hour storm events; depth of 4.5", 6.8" and 10" respectively).

With a reduction in peak discharge and onsite storm water filtering, storm water quality should be improved from this site and not increase TMDL levels from their current conditions. It appears, based on average discharge rates, a full pond will empty in approximately 12-hours which is general good engineering practice.

CDPW believes that the developer's engineer has provided a report that adequately demonstrates a reduction in runoff for the use permit phase. In addition, CDPW will be issuing conditions of approval to ensure these facilities are installed per design, maintained properly, and quantify water quality benefits.

We would encourage you to come by public works to chat further at your convenience.

Sincerely,

Digitally signed by Derek Rayner, PE
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Calistoga, ou=Public Works Dept,
email=drayner@ci.calistoga.ca.us, c=US
Date: 2012.02.10 11:03:23 -08'00'

Derek Rayner, PE
Senior Civil Engineer
LEED Green Associate

cc: Dan Takasugi, Bill McBride, Erik Lundquist, Ken McNab