



August 31, 2018

To: Mr. Paul Mood, PE
Town Engineer
Town of Paradise Valley
6401 E Lincoln Drive
Paradise Valley, AZ 85253

Re: **7550 N Hummingbird Lane**
Paradise Valley, AZ 85253
LDG Project #1801024

DRAINAGE EXECUTIVE SUMMARY

Dear Mr. Mood:

In accordance with the Town of Paradise Valley Hillside Ordinance, we have prepared this drainage executive summary and preliminary grading and drainage plan related to the construction of a new single-family residence, located at 7550 N. Hummingbird Lane, Paradise Valley, AZ 85253, parcel 169-04-007, also being Lot 38, Mummy Mountain Park, according to the plat of record in the office of the County Recorder of Maricopa County, Arizona, recorded in book 57 of Maps, Page 1, MCR, which is a portion of the SW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 8, Township 2 North, Range 4 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona.

The project site is located on the east side of Mummy Mountain and it is zoned R-43 (Hillside). The property is surrounded by large residential lots and Hummingbird Lane's right-of-way on the easterly side. The construction of new 9,756 s.f. single-family residence and an access driveway to 7550 N Hummingbird Lane is proposed with this project. There is an existing single-family residence that will be demolished and the excessive disturbed area will be restored back to natural conditions. All spilled slopes will be removed from the site.

The finish floor elevation is set at 1472. Grading around the residence provides for positive drainage away from the structures as shown on the Grading and Drainage plan. New 36" storm drain culvert is proposed under the new driveway. Existing driveway will be removed and the area will be restored back to the historic grades and natural mountain conditions. The driveway layout was revised to reduce its slope and the existing flow diversions. At each point of discharge, special rock outlet structures are proposed as energy dissipaters. Rock outlet structures will be installed with harvested from the site large boulders for erosion protection. This will significantly reduce the drainage impact to the downstream properties. On-site storm water retention is provided with this project in accordance with the Town's requirements and standards.

A Drainage Easement and Maintenance Agreement for Drainage Easement Area will be required for this project.

The project site has the potential to collect, convey and discharge runoff safely and effectively. The proposed improvements do not create adverse drainage impact to the neighboring lots and will not result in changes to the existing and historic drainage patterns or magnitudes.

Respectfully Submitted,

A handwritten signature in black ink that reads "Nick Prodanov".

Nick Prodanov, PE, PMP
Principal
Land Development Group, LLC