

II-B. Topography

The Tentative Development Plan (TDP) avoids extensive disturbance of washes and the major slopes found along their banks. Minor disturbance is proposed for roadway and utility crossings. Nearly 70% of the project area will remain as natural open space. The most significant slopes will largely remain within the undisturbed areas, with development clustered in areas of smoother topography. The proposed regional basin described below will require encroachment into a small hillside in the northern portion of the property that is minimally visible from nearby offsite areas.

II-C. Hydrology

The site layout will impact hydrologic characteristics such as impervious cover and floodplain encroachment. As a result of the increased impervious cover, detention basins will be constructed to detain the increased flows, and will feature outlet structures (weirs, culverts or catch basins) to discharge the basins as a metered flow rate no greater than existing conditions peak stormwater runoff rate except for the Lomas de Oro Wash, which will have its flows reduced as described below. Detention basins will be spread throughout the development so as to minimize their visual impact. Some of the more significant potential basin locations have been depicted on the Tentative Development Plan. Where roadway crossings are proposed, culverts or bridges will be employed to convey stormwater past the crossings.

The project will address not only onsite flows that will be produced by the increase in impervious surfaces, but also the flows entering the site from the north. The project will be designed to avoid negatively impacting upstream and downstream properties by including offsite drainage improvements necessary to control the existing flooding problems experienced by residents downstream of the project along the Canyon Shadows Wash. The project will also provide better management of local tributaries to the Lomas de Oro Wash, as described below. Maintenance of all drainage improvements proposed as part of this development will be the responsibility of the HOA.

In the eastern portion of the property where the Canyon Shadows Wash flows, offsite improvements will include a drainage channel that will connect to the existing channel located approximately 300 feet southeast of the project. This proposed channel will allow the developer to process a CLOMR and LOMR with FEMA to officially remove those three residences from the FEMA flood hazard zone.

In the western portion of the project where the Lomas de Oro Wash flows, several drainage improvements are proposed to improve the downstream flooding conditions that currently impact residential parcels south of the subject property. Most importantly, a large, regional basin will be installed in the northern portion of the property. The basin will be designed to reduce the 100-year peak flow by 10%, per request by the Town Engineer, and will be dedicated to the Town. The basin will have a maximum ponding depth of approximately five feet, which the Town Engineer has authorized in this case. In addition, the basin's size will require relief from the Code limitations on maximum cut depth. An in-line detention basin north of the proposed roadway crossing will also provide flow reduction. No FEMA applications will be filed for the Lomas de Oro Wash. However, local regulated floodplains that currently impact the

areas west of the Lomas de Oro will be detained within the development, and routed to the Lomas de Oro in a way that contributes to the overall reduction in peak flows leaving the project.

II-D. Vegetation

Vegetation within the three primary wash corridors onsite, as well as much of the vegetation in the northern and eastern portions of the site, will be preserved in its natural condition. Where development is proposed, native plants will be inventoried, and viable specimens will be transplanted per the Town's native plant preservation ordinance.

II-E. Wildlife

With the exception of required flood control protection, and road and utility crossings, the Environmentally Sensitive Lands Critical Resource Areas will remain undisturbed. The project will not restrict wildlife movement through the site. Additionally, no direct access to the washes will be allowed from individual back yards.

II-F. Buffer Plan

A minimum 150-foot wide open space buffer is proposed along the southern and eastern boundaries of the property where the project is adjacent to larger lot residential. The eastern side of the property is constrained by topography and wash area. The majority of the lots on the east side of the project will be located in excess of 600 feet from the adjacent neighborhood. From the site boundary one lot will be located approximately 40 feet from the Lambert Lane right-of-way and two lots will be located approximately 40 feet from the La Cholla Blvd. right-of-way. Landscape buffer yards will be installed per Town requirements. The purpose of these buffers is to provide a reasonable level of visual screening and setback between the development and adjacent neighbors. Supplemental landscaping and structural screening will be installed beyond the open space buffers as needed.