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San Mateo Business Park

ALBUQUERQUE, NM

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Background

Existing Conditions

Existing drainage from Basins 1, 2, 3, 4 & 4A follow established routes onto San Mateo Blvd, with partial interception achieved either in a sediment trap at AP-1, located at the Pasadena intersection, or by curb inlets, located on the west side of San Mateo. Other inlets at AP-2 and AP-3 are not open to receive flows at present. Basin 1, located on the east side of I-25, will be diverted north into the North Camino Arroyo by the SHD as early as the year 2000, or as late as 2002 (Information supplied by Gary Shubert - NMSHD ph: 841-2700, Project Control #2683 - Tramway Interchange). The net result will be a reduction of flows collected at AP-1, for a total future flow from Basin 2 of 163.7 cfs.

Developed Conditions

*Denis Valdez 841-2712
Budget*

The proposed commercial site, located on 4 acres adjacent to the east side of San Mateo Blvd. NE, between the unimproved streets of Pasadena Ave. and Venice Ave., will be developed into four office/warehouse buildings and associated parking, with access onto Pasadena or Venice Avenues. Development will require improving one-half of Pasadena Ave. and Venice Ave. with curbs, pavement, water, sanitary sewers and storm sewer (SS) utilities adjacent to the site

Each building site will surface drain to the Pasadena and Venice streets, with flows intercepted by extensions to the San Mateo SS system. Flows entering the San Mateo SS system are routed west through the Citicorp Site for outlet into the AMAFCA channel. Referencing the master drainage report for the Citicorp Site, prepared by Bohannon-Huston, Inc., May 1996, basins draining to the SS system are defined at pick-up points AP-1, AP-2 and AP-3, with 205.4 cfs (Basins 1 & 2), 86.1 cfs (Basin 3) and 126.2 cfs (Basins 4 & 4A) being the respective developed peak flow rates.

As-built plans for the SS system (re: COA Project #546991) shows one-diameter size reduction of some of the SS mains, when compared to information provided in the original Citicorp report. Reanalyzing COA as-built information, it was found that the SS reach picking up Basins 1, 2, 3, 4 & 4A has capacity for accepting the projected developed flows at AP-1, AP-2 & AP-3 (See SS Summary - Existing System).

The developed Basin #2 limits, established by the Citicorp report, indicate that the lots bordering Pasadena Ave. will drain to the street, with all flows ultimately picked up by a SS extension in Pasadena Ave. As part of the Pasadena Ave. improvements for this project, inlets will be constructed at the south curb return to pick up surface discharge from the two developed lots. The sediment trap will remain to temporarily pick up all other flows not



associated with this development, but will be reduced to the north side of the Pasadena R/W to allow construction of one-half of the street, with appropriate relocation of the inlet.

The developed Basin #3 limits are less traditional in that the basin encompasses both sides of Venice Ave. to within 700 feet of San Mateo, where flows are redirected out of the Venice Ave. R/W into an existing arroyo which leads to AP-2, where a 36" stub of the San Mateo SS system picks up 86 cfs. The problem with this proposed routing is that development of lots within this area on the north side of Venice Ave. will have to accept flows from the street and upstream neighboring lots to comply with the flow distribution to AP-2. In order to provide for a continuation of flows within the Venice R/W, the connection point to the San Mateo SS will be extended south to Venice at the San Mateo intersection. This line can then be extended east within the Venice R/W to intercept Basin 3 flows within the street.

The developed Basin #4, encompassing both sides of Beverly Ave, drains to Basin #4A which outlets at the Venice / San Mateo intersection. The routing of the 126 cfs to AP-3 is planned to cross Basin 4A in order to . . "eliminate the need for additional inlets and approximately 500 feet of 24" RCP storm drain within San Mateo south of the proposed site" (Page 9 - Citicorp Report). Based on this criteria, it would be logical to assume that these flows would be picked up at the intersection, thus eliminating the need to extend the SS from AP-3 east within Venice Ave. The only SS in Venice Ave, therefore, will be the extension from AP-2, which will capture flows from Basin 3.

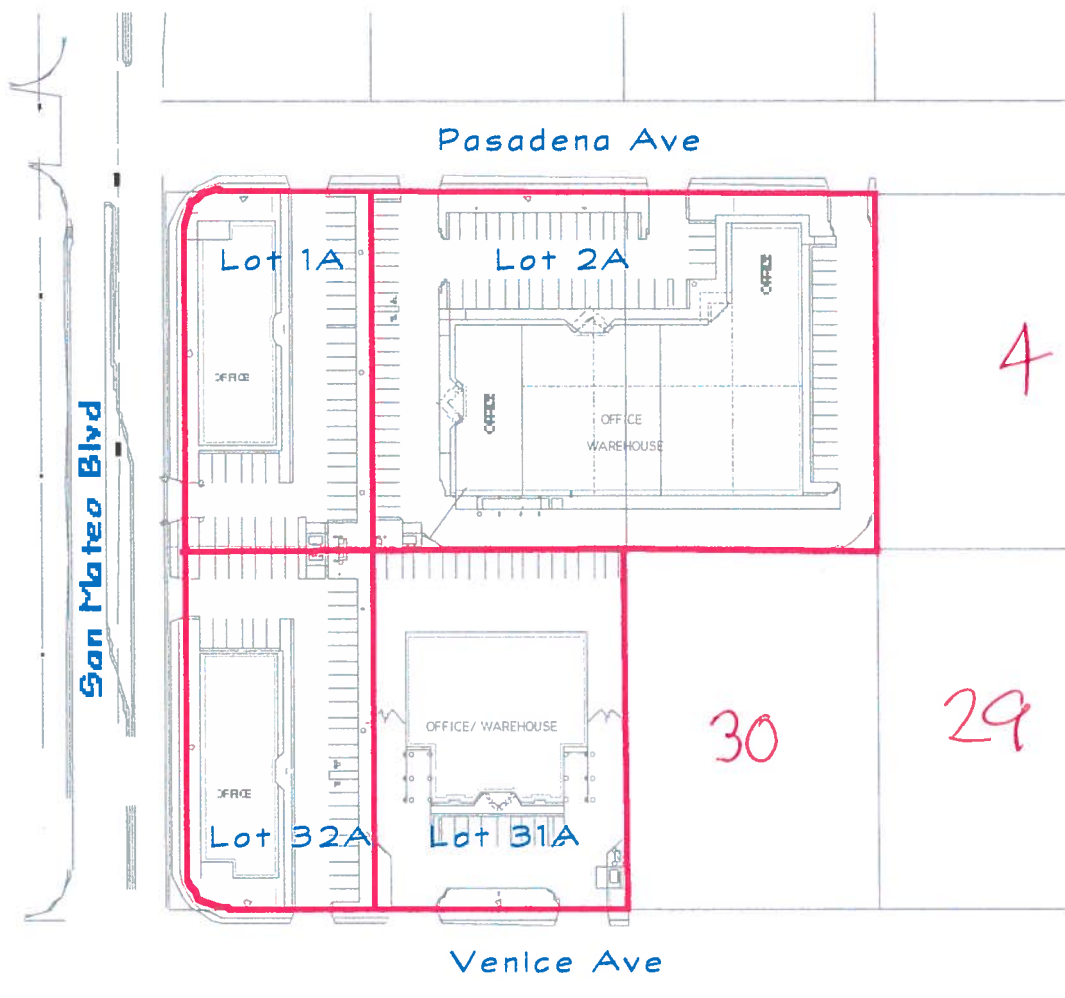


Basin Analysis

Internal Drainage Basins

Referencing the following basin map, it can be seen that the site is divided into four sub-basins, defined as the individual lots. Lots 1A, 2A, & 31A drain to adjoining streets for capture by inlets located at curb returns of either Pasadena or Venice Avenues. Lot 32A drains to an inlet located within the lot near AP-2.

Basin Map



Off-site Drainage Basins

The Citicorp Report's basin line common to Basin 2 & 3 was placed north of the actual lot line dividing the lots between Venice and Pasadena Avenues. Unusual grade breaks for the roofs and parking areas would be required if the basin line is respected with regard to this development. Rather than adapt the final grades to match the basin line, this analysis will use the lot line as the drainage divide. This will provide a slight increase in area draining to Pasadena Ave and slightly less area draining to Venice Ave. Because of the diversion of flows from Basin 1 to AP-1, additional capacity will exist for this area shift to occur. The basin area shift encompasses approximately 0.25 ac, for an estimated flow increase of 1 cfs into Basin 2 and a corresponding decrease of 1 cfs into Basin 3.

Basin 4A will become the drainage path for flows from Basin 4, with collection indicated at the intersection of Venice Ave and San Mateo Blvd. (Citicorp Report). Future development of Basin 4A would logically extend the SS into that basin to pick up runoff before concentration of flows occurs. No further extensions of the SS at AP-3 will be done in conjunction with this development at this time.



Hydraflow Summary Report

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