CITY OF ALBUQUERQUE

Planning Department David Campbell, Director



Mayor Timothy M. Keller

January 22, 2019

Martin Garcia, P.E. Anchor Engineering LLC 1035 S. Bosque Loop Bosque Farms, NM, 87123

RE: Vista Oriente Self Storage 2301 Vista Oriente St NW Grading and Drainage Plan Engineer's Stamp Date: 01/15/19 Hydrology File: H10D032

Dear Mr. Garcia:

PO Box 1293 Based upon the information provided in your resubmittal received 01/15/2019, the Grading and Drainage Plan is approved for Building Permit.

Albuquerque Please attach a copy of this approved plan in the construction sets for Building Permit processing. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

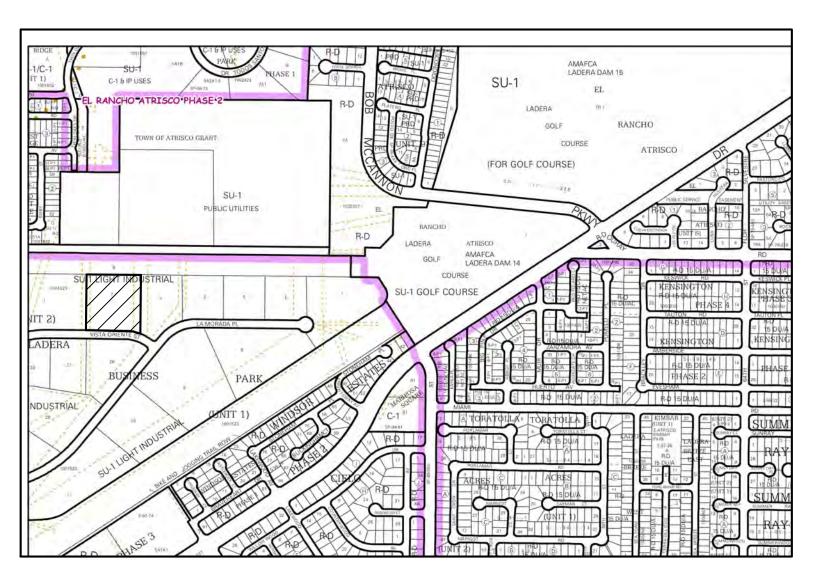
NM 87103 As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Curtis Cherne, PE, <u>ccherne@cabq.gov</u>, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3995 or <u>rbrissette@cabq.gov</u>.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM Senior Engineer, Hydrology Planning Department



Drainage Narrative

THE PURPOSE OF THIS GRADING AND DRAINAGE PLAN FOR 2301 VISTA ORIENTE STREET N.W. IS TO ACCOMMODATE A NEW SELF STORAGE FACILITY AND PROVIDE FOR POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES AS DEMONSTRATED HEREON.

CURRENTLY THE SITE IS AN UNIMPROVED LOT BOUNDED TO THE WEST AND EAST BY UNIMPROVED LOTS, TO THE NORTH BY THE LADERA DIVERSION CHANNEL AND TO THE SOUTH BY VISTA ORIENTE STREET, AND CURRENTLY SLOPES FROM THE WEST TO THE EAST AT A SLOPE OF 2.2% ACCEPTING THE OFFSITE FLOWS FROM THE WEST AND DISCHARGING TO THE VACANT LOT TO THE EAST. THE PROPOSED GRADING AND DRAINAGE PLAN WOULD ACCOMMODATE ALL OF THE RUN-OFF FROM THE PROPOSED CONSTRUCTION TO DRAIN TO THE SOUTHEAST TO A POND WITH A STORM DRAIN INLET THAT WILL CONNECT TO THE EXISTING 18" CMP STUB AS SHOWN. THE SITE HAS FREE DISCHARGE INTO THE STORM DRAIN

THE SITE IS OUTSIDE OF THE FLOOD PLAIN AS DESIGNATED AS ZONE"X" PER FEMA FLOOD PLAIN PANEL 35001C0326J, DATED NOVEMBER 4, 2016.

Drainage Calculations

VISTA ORIENTE SELF STORAGE				
Hydrology Calculations				
DPM - Section 22.2		1		
Volume 2, January 1993				
Precipitation Zone	1			
100 Year Storm Depth, P (360)	2.2			
Treatment Area	A	В	С	D
Excess Precipitation Factors	0.44	0.67	0.99	1.97
Peak Discharge Factors	1.29	2.03	2.87	4.37
Land Treatment Area	Acres	Existing		Proposed
Type "D" (Roof)		0		1.23
Type "C" (Unpaved Roadway)		0		1.89
Type "B" (Irrigated Lawns)		0		0.44
Type "A" (Undeveloped)		3.56		0.00
Total (Acres)		3.56		3.56
Excess Precipitation(in)		0.44		1.29
Volume (100), cf		5686.03		16658.07
Volume (10),cf		3809.64		11160.91
Q (100), cfs		4.59		11.69
Q (10), cfs		3.08		7.83

Pond Calculations STORM WATER POND IMPERVIOUS AREA — 1.23 x 43560 = 53,578.80 SF PONDING REQUIRED — 53,578.80 x $\frac{.34}{12}$ = 898.08 CF PONDING PROVIDED: A58 = 872.23 SF A58.9 = 1292.56 SF VOL 58 & 58.9: 872.23 + 1292.56 = $\frac{2164.79}{2}$ x 0.9 = $\frac{952.61 \text{ CF}}{2}$

FEMA Map



