

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

December 5, 2024

James E. Lopez, P.E.
Wilson & Company
4401 Masthead St. NE
Albuquerque, NM 87113

**RE: PC Bruancini Meridian BP
541 Airport Dr NW
Permanent C.O. – Accepted
Engineer's Certification Date: 11/19/24
Engineer's Stamp Date: 9/09/22
Hydrology File: K10D023K**

Dear Mr. Lopez:

PO Box 1293

Based on the Certification received 11/20/2024 and the site visit on 12/04/2024, this letter serves as a "green tag" from Hydrology Section for a Permanent Certificate of Occupancy to be issued by the Building and Safety Division.

Albuquerque

If you have any questions, please contact me at 505-924-3314 or amontoya@cabq.gov.

NM 87103

Sincerely,

www.cabq.gov

Anthony Montoya, Jr., P.E.
Senior Engineer, Hydrology
Planning Department, Development Review Services



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (DTIS)

Project Title: _____ Hydrology File # _____

Legal Description: _____

City Address, UPC, OR Parcel: _____

Applicant/Agent: _____ Contact: _____

Address: _____ Phone: _____

Email: _____

Applicant/Owner: _____ Contact: _____

Address: _____ Phone: _____

Email: _____

TYPE OF DEVELOPMENT: Plat (# of lots) _____ Single Family Home
All other Developments

RE-SUBMITTAL: YES NO

DEPARTMENT: TRANSPORTATION HYDROLOGY/DRAINAGE

Check all that apply under Both the Type of Submittal and the Type of Approval Sought:

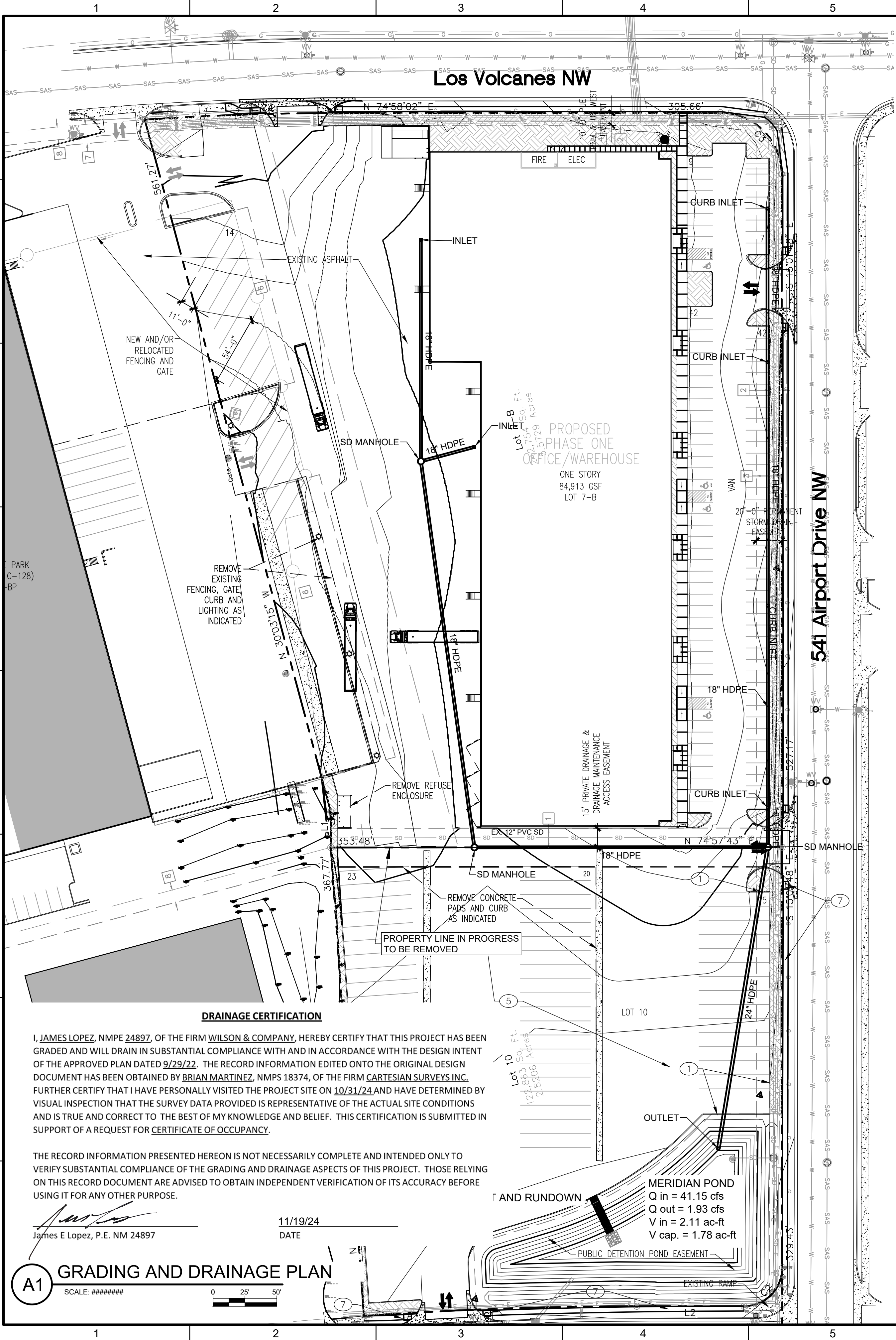
TYPE OF SUBMITTAL:

Engineering / Architect Certification
Conceptual Grading & Drainage Plan
Grading & Drainage Plan, and/or Drainage Report
Drainage Report (Work Order)
Drainage Master Plan
Conditional Letter of Map Revision (CLOMR)
Letter of Map Revision (LOMR)
Floodplain Development Permit
Traffic Circulation Layout (TCL) – Administrative
Traffic Circulation Layout (TCL) – DFT Approval
Traffic Impact Study (TIS)
Street Light Layout
OTHER (SPECIFY) _____

TYPE OF APPROVAL SOUGHT:

Pad Certification
Building Permit
Grading Permit
Paving Permit
SO-19 Permit
Foundation Permit
Certificate of Occupancy - Temp Perm
Preliminary / Final Plat
Site Plan for Building Permit - DFT
Work Order (DRC)
Release of Financial Guarantee (ROFG)
CLOMR / LOMR
Conceptual TCL - DFT
OTHER (SPECIFY) _____

DATE SUBMITTED: _____



Drainage Narrative

Introduction

The project site is located at 541 Airport Dr. NW. The site is bounded by Airport Drive NW to the east, Los Volcanes Road NW to the north, Gallatin Place NW to the west, and Meridian Pl. NW to the south. The existing site and proposed improvements are generally contained within Lots 7-B and 10 of Tract M as identified in the Conceptual Master Grading and Drainage Plan prepared for Lots 1-23 of the Meridian Business Park by Easterling & Associates, Inc. in August 1996. The site is not located within a designated FEMA flood plain map, see firm map 35001C0328J.

Existing Conditions

The existing site topography in Lot 7-B generally drains from northwest to southeast in the conceptual plans prepared by Easterling and was confirmed on a site visit. A berm has been constructed on the eastern edge of the lot that appears to block water from exiting the site in this direction, and instead forces water to flow south into Lot 10 and inevitably into the existing public drainage pond on the southern edge of the lot. The Easterling plans suggested that there be an inlet to receive flow on the southeastern corner of this lot, though no such drainage infrastructure was observed on the site. The site includes a portion of Lot 7-A that is currently developed and includes parking and an access road to the trailer parking in Lot 10. Flow in this segment tends to drain southwest and is seemingly directed toward the existing drainage pond that has been constructed for the development in Lot 7-A west of the site.

Lot 10 drains from north to south (and into the proposed rectangular drainage pond) in the Easterling plan, and this was observed to be generally true by a preliminary site visit. A large majority of Lot 10 consists of compacted dirt and gravel. The remainder is undisturbed aside from a large drainage pond. Currently, the pond discharges to the east toward an existing storm drain system adjacent to Airport Dr. NW via a standpipe with circular 3 in. diameter inlet orifices set at varying elevations and a 5" diameter plate orifice on the outlet pipe. The downstream connection point is an existing storm drain line adjacent to Airport Dr. NW. Some sediment and debris have accrued on the bottom of the pond and the lowermost tiers of orifices on the standpipe have been blocked. According to the Easterling plan, the pond has a design capacity of 1.0404 ac-ft, though topography data of the area shows the current capacity to be 0.8563 ac-ft. There is also an existing offsite basin identified in the Easterling Plan as Basin E1 that drains to the pond via 2 combination inlets in the flowlines of Meridian Pl. Data for this basin was pulled from the Easterling Plan and utilized in the design considerations for the pond.

In its current condition, the on-site basin contributing flow to the pond is delivering up to 17.3 cfs for the 100-year 24-hour event to the pond. This corresponds to a volume of 0.5205 ac-ft prior to development.

Interim Conditions (Phase 1)

The proposed site will maintain the general flow from northwest to southeast toward the detention pond in Lot 10. The boundaries of construction in phase 1 are primarily limited to the undeveloped area that comprises Lot 7-B. The existing developed area on the western side of Lot 7-B will be improved in Phase 2. A 73,969 square-foot tenant space is to be constructed, with paved parking, sidewalk, and desert-landscaped median features constructed on the eastern and northern faces of the spaces. On the western face of the building, an asphalt swale will be constructed with slopes less than or equal to 2% up to 50 feet away from the edge of the truck bay. Area inlets and pipe connections will be installed in the swale to collect and distribute flows to the existing detention pond in Lot 10. The parking lot on the eastern face of the building will be super-elevated to drain east toward a series of inlets along the eastern curb line. These inlets and the corresponding pipe connections will send the flows south toward the detention pond. The pipe networks on the western and eastern faces of the building will meet at a junction in Lot 10 north of the pond before discharging to the pond via an opening mitered to slope. Most of the vacant lot will become paved and impervious. As mentioned before, the area west of the fence line is not to be disturbed during construction of Phase 1 to maintain the access road.

The existing detention pond in Lot 10 will need to be improved such that it can accommodate the increase in flow from both Phase 1 and 2 during Phase 1. This includes laying the pipe that discharges flow from Phase 1 through Lot 10 prior to Phase 2.

The discharge from the site will increase to 25.4 cfs after development, which corresponds to a difference of 8.1 cfs. The discharge from the site corresponds to a volume of 1.1333 ac-ft for the 100-year 24-hour event after the construction of Phase 1, with a difference in volume of 0.6128 ac-ft between existing and interim conditions. This volume is already higher than the current capacity of the pond in both the conceptual Easterling staging, as well as the staging developed from current topography. The pond will be regraded with 3:1 side slope to maximize the capacity of the pond without expanding the footprint beyond the boundary of the public detention pond easement. The base pond elevation will also be dropped, and the standpipe reconstructed to accommodate the updated allowable discharge for the site. In the drainage master plan, the pond shows a maximum allowable discharge of 1.47 cfs to the storm drain, while Lot 8 (Lot 7B in current platting) was intended to discharge 0.47 cfs to the storm drain further upstream. The owners of the site are in the process of getting Lots 7B and Lots 10 replatted into one parcel. This will correspond to a maximum allowable discharge of 1.94 cfs from the pond for the combined lots. A sidewalk culvert will be constructed on the southern face of the pond to serve as an emergency spillway that drains to Meridian Pl. A berm will be constructed to approximately 1 foot above the back of sidewalk elevation to accommodate the spillway and maintain freeboard. Approximately 0.25 ac-ft of runoff needs to be retained to meet MS4 requirements, and the pond will retain approximately 0.41 ac-ft.

The edge of the pond will also have a berm constructed to 1 ft above the invert of the emergency spillway in order to increase freeboard.

Final Conditions (Phase 2)

The proposed site will maintain the general flow from northeast to southwest toward the detention pond in Lot 10. A large portion of Lot 10, minus the ponding area and landscaping, will be paved and the grading and drainage scheme developed in Phase 1 will be maintained to deliver flows to the existing detention pond. Curb-cuts and a concrete rundown will be installed on the perimeter of the pond to deliver overland flows from the area in Phase 2 and reduce erosion of the pond side slopes. In the previously developed area on the western edge of Lot 7-B, work will be done to expand the northernmost column of parking, including the removal of some previous landscaping. The western edge of Lot 7-B currently drains to the off-site detention pond on the southeast corner of Lot 7-A, and it is recommended that this grading be maintained if repaving occurs.

The improvements in Lot 10 will increase the discharge from the site to 28.4 cfs. This corresponds to a total volume of 1.4298 ac-ft for the 100-year 24-hour event, with a difference in volume of 0.2957 ac-ft between interim and final conditions, and a difference in discharge of 3 cfs between interim and final conditions.

Conclusion

In summary, inlets and storm drain will be installed to capture on-site flows from Phase 1 and deliver the water to the detention pond in Lot 10. The pond will be regraded to accommodate the increase in discharge from Phase 1 and Phase 2 at this time, and the pipe network constructed in Phase 1 will be taken to the pond at this time. The area in Phase 2 will be paved and a concrete rundown and curb cut constructed at the pond to receive the overland flow from the site. A series of sidewalk culverts will also be constructed at this time to serve as an emergency spillway for the pond. The standpipe outlet structure will be reconstructed to retain the MS4 volume for the site and limit the discharge from the site to 1.94 cfs per the drainage master plan and proposed parceling. Lots 7B and 10 will be replatted as one parcel in order to permit Lot 7B to discharge through Meridian Pond.

Meridian Pond - Proposed Staging

Stage	Area	Storage	Cumulative Storage	Cumulative Storage
Elev. (ft)	ft ²	ft ³	ft ³	Ac-ft
5099	5730	0.000	0	
5100	7112	6420.939	6421	
5101	8576	7843.891	14265	
5102	10110	9343.263	23608	
5103	11712	10911.349	34519	
5104	13383	12647.585	47067	
5105	15121	14251.868	61319	
5106	16928	16024.379	77343	1.7756

MS4 Calculations

Basin	Area	Volume	Volume
	ft ²	ft ³	Ac-ft
101	310698.37	10874.44	0.25
		Total	0.25

Existing Conditions (Pre PH1)

Basin	Total Area (sq ft)	Total Area (Ac)	A		B		C		D		Peak Discharge, Q	Excess Precip. (Weighted)	Volume		Volume	
			%	Ac	%	Ac	%	Ac	%	Ac			(6 _{hr} , acre-ft)	(24 _{hr} , acre-ft)	(10 _{day} , acre-ft)	
101	310698	7.133	0	0	71.1	5.07	23.8	1.70	5.1	0.36	17.3	0.86	0.5108	0.5205	0.5632	
*E1	226512	5.200	0	0	9	0.47	9	0.47	82	4.26	19.9	1.99	0.8615	0.9752	1.4762	

* Basin E1 from the Easterling Report Dated 08/96

Interim Conditions (Post PH1 / Pre PH2)

Basin	Total	Total	A		B		C		D		Peak	Excess Precip.	Volume	Volume	Volume
	Area (sq ft)	Area	%	Ac	%	Ac	%	Ac	%	Ac	Discharge, Q	(Weighted)	(6hr, acre-ft)	(24hr, acre-ft)	(10day, acre-ft)
101	310698	7.133	0	0.00	10.8	0.77	28.3	2.02	60.9	4.34	25.4	1.71	1.0175	1.1333	1.6437
E1	226512	5.200	0	0	9	0.47	9	0.47	82	4.26	19.9	1.99	0.8615	0.9752	1.4762

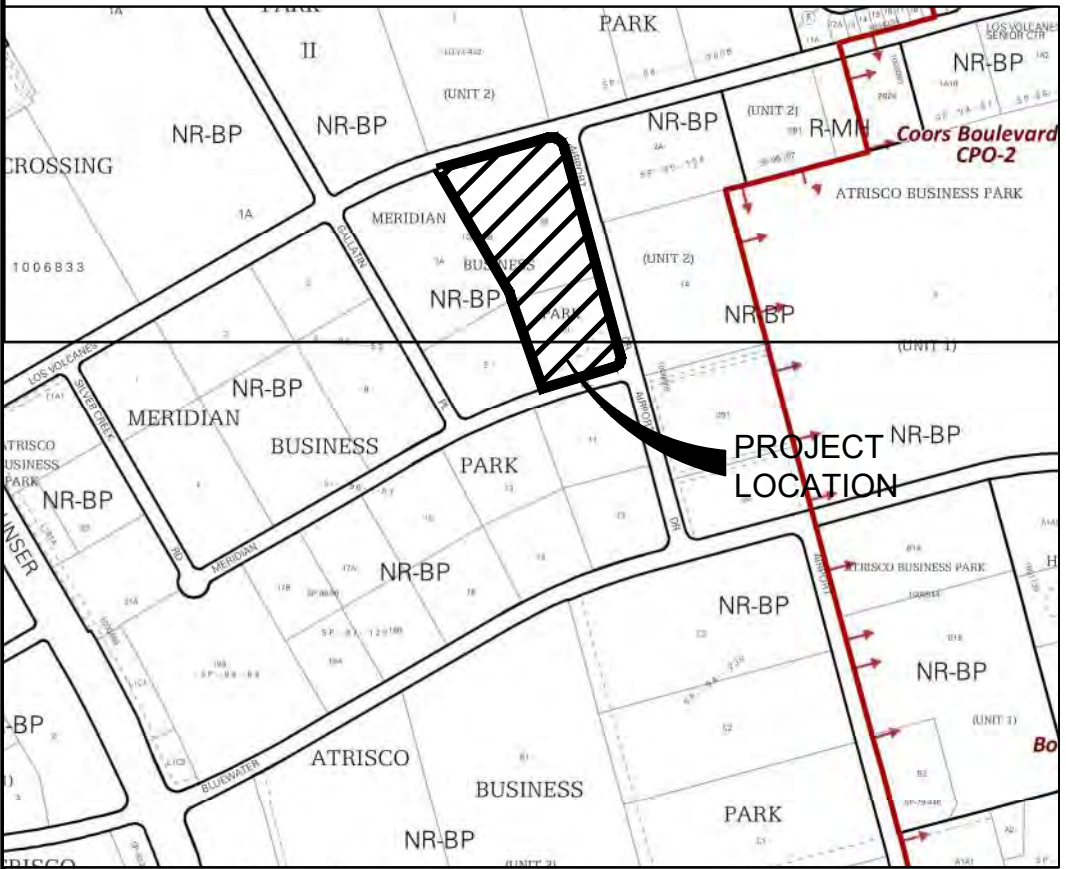
* Basin E1 from the Easterling Report Dated 08/96

Final Conditions (Post PH2)

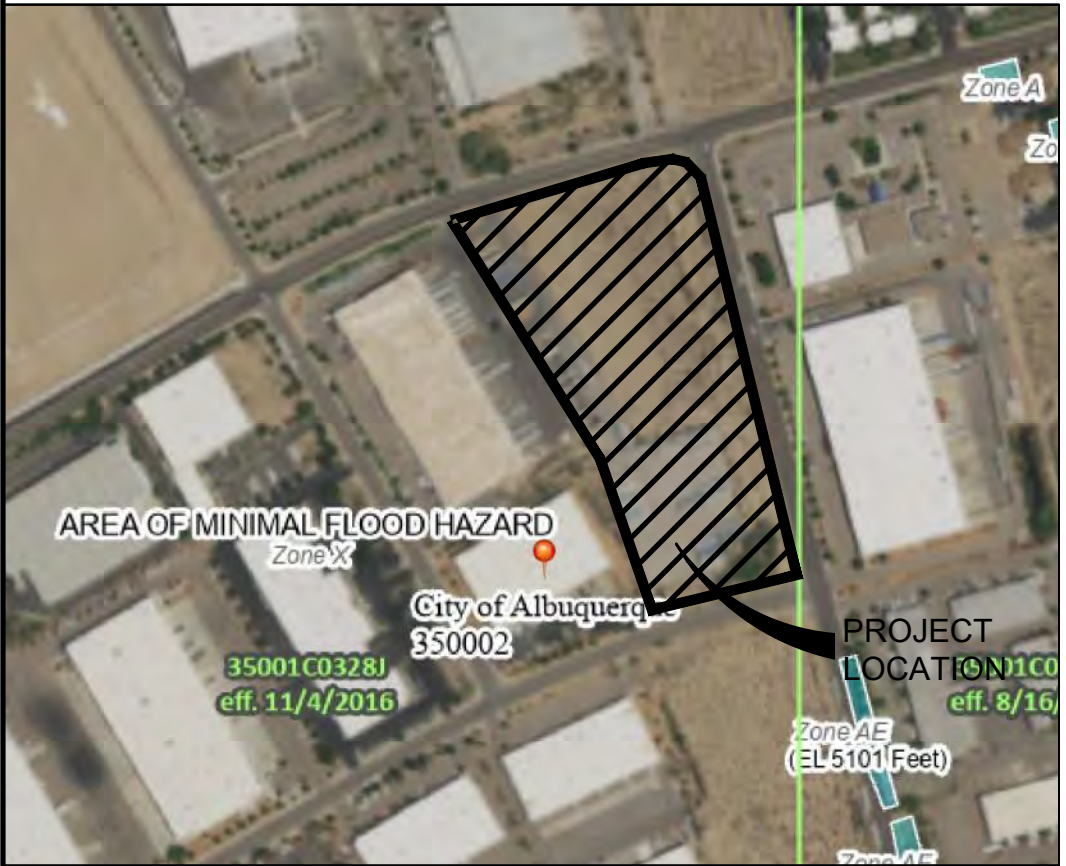
Basin	Total Area (sq ft)	Total Area	A		B		C		D		Peak Discharge, Q	Excess Precip. (Weighted)	Volume		
			%	Ac	%	Ac	%	Ac	%	Ac			(6hr., acre-ft)	(24hr., acre-ft)	(10day, acre-ft)
101	310698	7.133	0	0.00	3.2	0.23	6%	0.41	91%	6.48	28.4	2.11	1.2569	1.4298	2.1916
E1	226512	5.200	0	0	9	0.47	9	0.47	82	4.26	19.9	1.99	0.8615	0.9752	1.4762

* Basin E1 from the Easterling Report Dated 08/96

MAPS



LOCATION MAP
ZONE ATLAS MAPS J-10-Z & K-10-Z



FLOOD INSURANCE MAP
REFERENCE: PANEL NO. 35001C0328J



SOILS MAP
REFERENCE: NRCS SOILS DATA

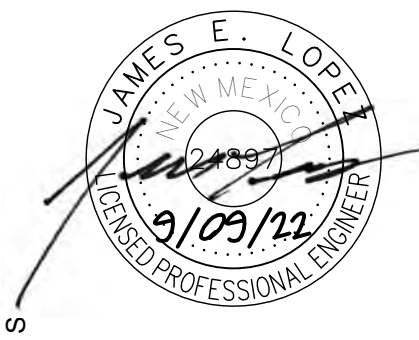


RECORD DRAWING: 11/11/24

WILSON & COMPANY

4401 WASTHEAD ST. NE, SUITE 150
ALBUQUERQUE, NM 87109
PHONE: 505-348-4000
FAX: 505-348-4055
WWW.WILSONCO.COM

CONSULTANTS



PROJECT NAME
**NEW OFFICE/WAREHOUSE
FOR BRUNACINI DEVELOPMENT
541 AIRPORT DRIVE, NW
ALBUQUERQUE, NM 87121**

REV.	DESCRIPTION	DATE	BY

PROJECT NO: 22-600-175-00
DESIGNED BY: JEL
DRAWN BY: DY
CHECKED BY: JEL
DATE: JUNE 2022
SHEET TITLE

GRADING AND
DRAINAGE PLAN

SHEET NO:



C-101



C-102