

# CITY OF ALBUQUERQUE

Planning Department  
Brennon Williams, Interim Director



Mayor Timothy M. Keller

August 26, 2019

Hugh Floyd, P.E.  
Respec  
5971 Jefferson St. NE  
Albuquerque, NM 8710

**RE: Achen Office / Warehouse  
6504 Alameda Ave. NE  
Conceptual Grading and Drainage Plan  
Engineer's Stamp Date: 08/16/19  
Hydrology File: C18D105**

Dear Mr. Floyd:

PO Box 1293

Based upon the information provided in your resubmittal received 08/19/2019, the Conceptual Grading & Drainage Plan is approved for action by the DRB on Site Plan for Building Permit.

Albuquerque

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 (Dough Hughes, PE, [jhughes@cabq.gov](mailto:jhughes@cabq.gov), 924-3420) 14 days prior to any earth disturbance.

NM 87103

[www.cabq.gov](http://www.cabq.gov)

Also as a reminder, please provide a Drainage Covenant for the proposed detention ponds per Chapter 17 of the DPM prior to Permanent Release of Occupancy. Please submit this on the 4th floor of Plaza de Sol. A \$25 fee will be required.

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov).

Sincerely,

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

NAME: L:\Active Projects\03783 Achen Alameda\3. DWG\Sheets\03783 Grading plan 19-e-16.dwg PLOT DATE: Aug 16, 2019 4:46pm

\*100 YEAR RAINFALL TABLE

RAINFALL TYPE=13 RAIN QUARTER=0.0 IN  
RAIN ONE=2.14 IN RAIN SIX=2.60 IN  
RAIN DAY=3.10 IN DT=0.05 HR

\*S EXISTING CONDITIONS

\*S COMPUTE HYD BASIN EX

COMPUTE NM HYD ID=1 HYDNO=101 DA=0.0011973945 SQ MI  
PER A=0 PER B=34 PER C=16 PER D=50  
TP=-0.133333333 RAIN=-1

PRINT HYD ID=1 CODE=20

\*S PROPOSED CONDITIONS

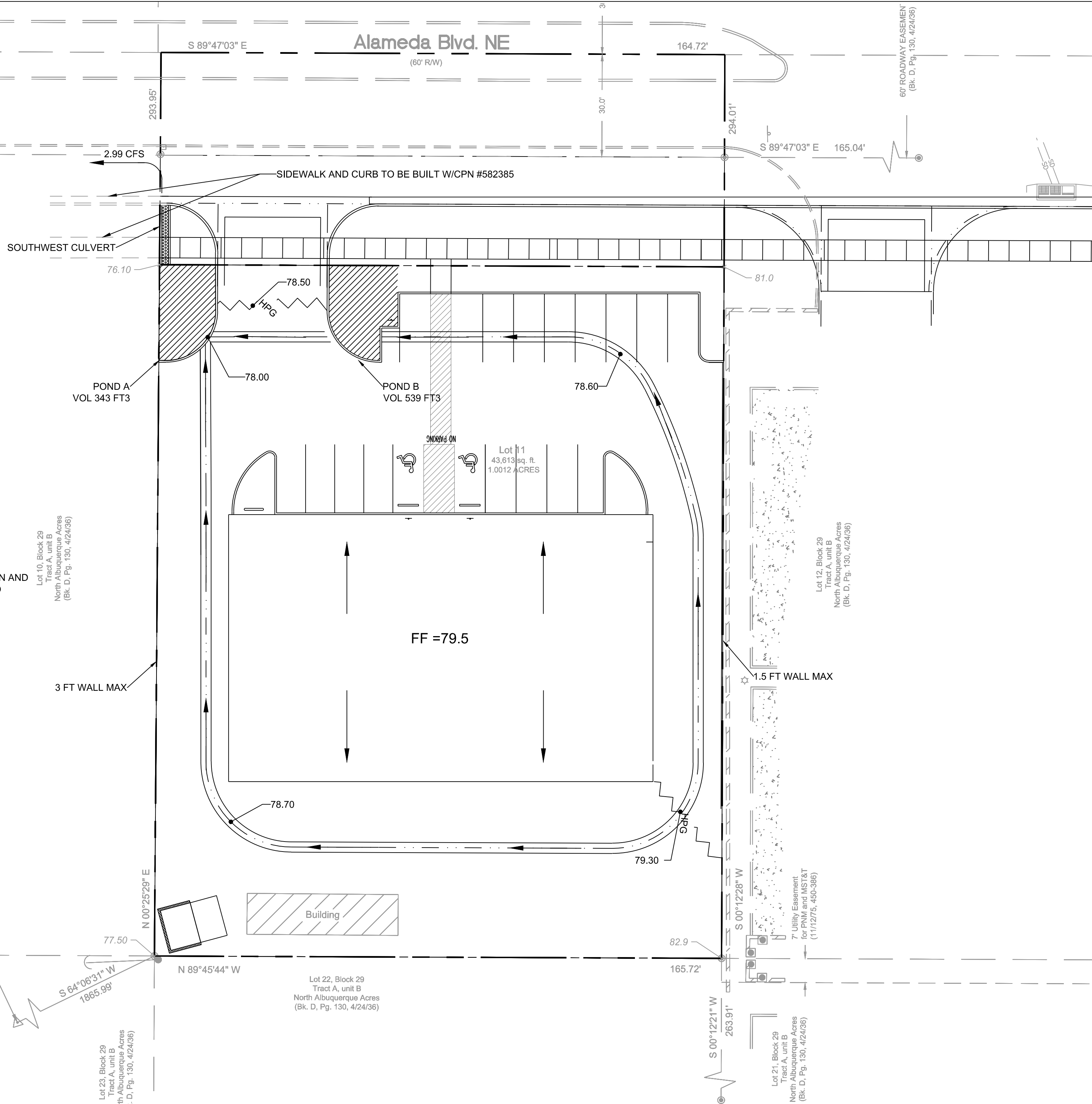
\*S COMPUTE HYD BASIN A

COMPUTE NM HYD ID=2 HYDNO=102 DA=0.0011973945 SQ MI  
PER A=0 PER B=2.9 PER C=2.9 PER D=94.3  
TP=-0.133333333 RAIN=-1

PRINT HYD ID=2 CODE=20

GENERAL NOTES

- ALL WORK WITHIN RIGHT-OF-WAY TO BE CONSTRUCTED WITH WORK ORDER
- THIS SITE IS WITHIN THE NORTH ALBUQUERQUE ACRES MASTER DRAINAGE PLAN AND THE ALAMEDA BLVD SAN PEDRO TO WYOMING PROJECT #7663.91 BY TEC DATED JANUARY 2012. THE ALLOWABLE DISCHARGE FOR THIS SITE IS 3.82 CFS/AC



BACKGROUND

THE OFFICE WAREHOUSE BUILDING SITE IS APPROXIMATELY .766 ACRES IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO. THE PROPERTY IS LOCATED JUST EAST OF INTERSTATE 25 ON ALAMEDA BLVD BETWEEN SAN PEDRO DR AND LOUISIANA BLVD. THE SITE CURRENTLY IS AN UNDEVELOPED LOT. THE PROPOSED PROJECT IS AN OFFICE WAREHOUSE. ACCORDING TO THE FEMA WEBSITE THERE IS NO DESIGNATED 100-YEAR FLOODPLAIN SHOWN ON THE SITE.

THE SITE DOES NOT RECEIVE ANY OFFSITE FLOWS BUT HAS PREVIOUSLY RECEIVED FLOWS FROM THE ADJACENT PROPERTIES TO THE EAST. THE ADJACENT SITE NOW HAS A RETAINING WALL ON THE PROPERTY LINE AND NO LONGER DISCHARGES ONTO THE PROJECT AREA. THIS AREA IS INCLUDED IN THE NORTH ALBUQUERQUE ACRES MASTER DRAINAGE PLAN (NAAMPD).

METHODOLOGY

HYDROLOGY CALCULATIONS FOR THE SITE ARE PERFORMED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE TECHNICAL STANDARDS. AHYMO WAS USED, BASED ON THE 100-YR, 24-HR STORM EVENT, TO CALCULATE PEAK FLOW RATES IN ORDER TO ENSURE ALL FLOW PATHS ARE SUFFICIENT TO CARRY FLOWS. ALL HYDROLOGIC CALCULATIONS CAN BE FOUND ON THIS SHEET.

EXISTING CONDITIONS

THE AREA, IN GENERAL, SLOPES FROM SOUTH-EAST TO NORTH-WEST AT AN APPROXIMATE SLOPE OF 2% - 4% TO A LOW RETENTION BASIN APPROXIMATELY FOUR FEET DEEP. STORM WATER RUNOFF GENERATED BY LOT 11 SHEET DRAINS INTO RETENTION BASIN LOCATED ON THE PROPERTY.

PROPOSED CONDITIONS

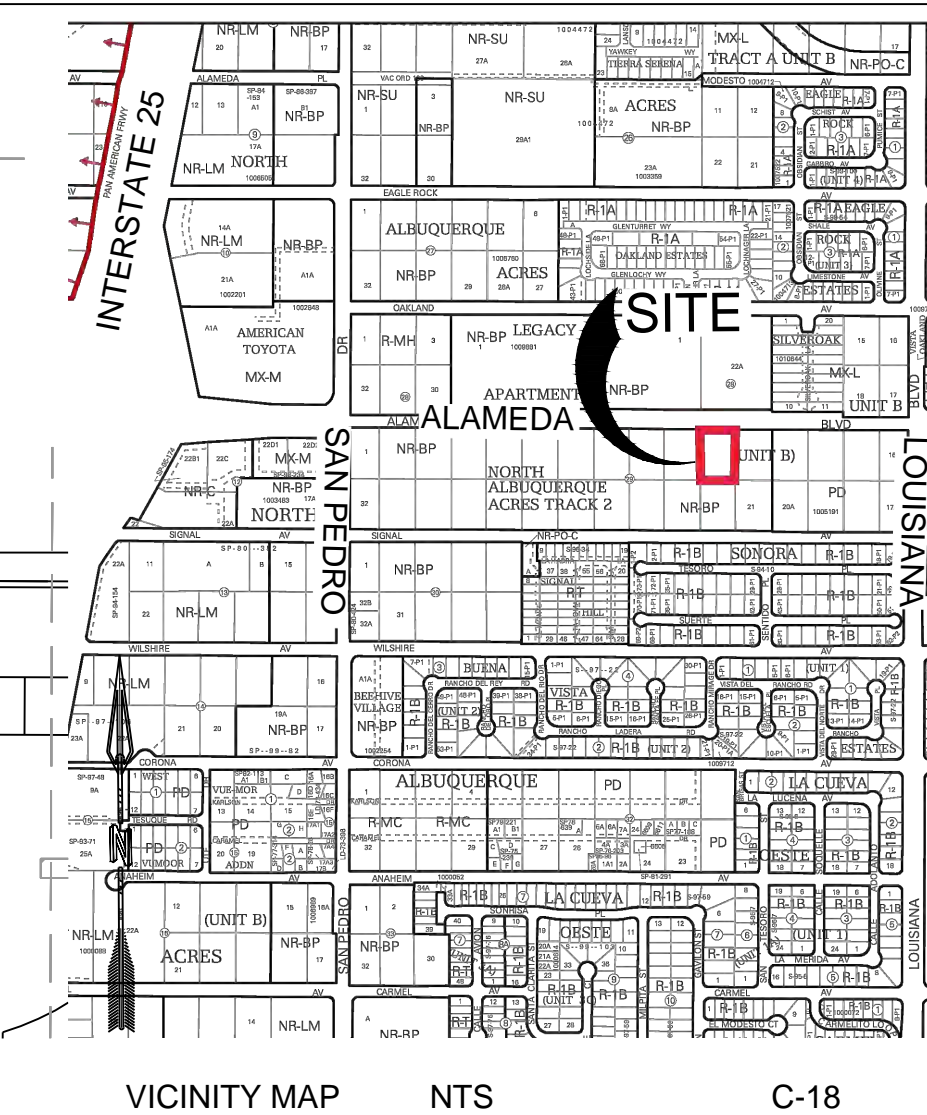
THE PROPOSED DEVELOPMENT WILL CONSIST OF ASPHALT AND CONCRETE PAVING FOR PARKING AND DRIVING SURFACES AND A LARGE OFFICE WAREHOUSE BUILDING. THE PROPERTY HAS ONE BASIN.

THE SUBBASIN IS THE SIZE OF THE PROPERTY AT 0.766 ACRES AND GENERATES 3.71 CFS. THIS SUBBASIN CONSISTS PRIMARILY OF THE RUNOFF GENERATED ON SITE. THE PARKING LOT WILL FLOW FROM SOUTHEAST TO NORTHEAST AND FLOW INTO THE DETENTION POND AT THE NORTHEAST CORNER OF THE PROPERTY. ONCE WATER REACHES THE ELEVATION OF THE WEIR, RUNOFF EXITS THE DETENTION POND AND FLOWS TO THE WEST ALONG ALAMEDA. PER THE NAA DMP, THE SITE IS ALLOWED 2.99 CFS DISCHARGED INTO ALAMEDA. THE FLOW FROM THE PROPERTY WILL BE REDUCED TO THIS ALLOWABLE RATE VIA THE PONDS LOCATED AT THE NORTHWEST CORNER OF THE SITE.

THE REQUIRED WATER QUALITY VOLUME OF 593 CUBIC FEET WAS CALCULATED USING A FIRST FLUSH VALUE OF 0.34'. THIS VOLUME WILL BE STORED IN THE PONDING AREA AT THE NORTHWEST CORNER OF THE PROPERTY.

LEGEND

- PROPERTY BOUNDARY
- HIGH POINT
- PONDING AREAS
- FLOW LINE
- PROPOSED ELEVATION
- EXISTING ELEVATION



DESIGNED DM  
DRAWN JS  
CHECKED JS  
DATE 8.16.2019

REVISION

STAMP

PROJECT NAME: OFFICE WAREHOUSE BUILDING

SHEET TITLE: CONCEPTUAL GRADING AND DRAINAGE PLAN

SUBMITTED FOR: DRB SITE PLAN

SHEET NUMBER: C-100

AHYMO PROGRAM SUMMARY TABLE (AHYMO-S4) - Ver. S4.02a, Rel: 02a RUN DATE (MON/DAY/YR) =07/24/2019  
INPUT FILE = ibrary\HandH Tools\ahymo-s4-r2\DISK1\program files\AHYMO-S4\AchenAlameda.txt USER NO.= AHYMO-S4TempUser05901704

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1
*S*	PROJECT NAME: ACHEN ALAMEDA								
*S*	DATE: JULY 23, 2019								
*S*	INPUT FILE NAME: AchenAlameda.hym								
*S*	OUTPUT FILE NAME: AchenAlameda.out								
*S*	RAINFALL TYPE=13							RAIN24= 3.100	
*S*	EXISTING CONDITIONS								
*S*	COMPUTE HYD BASIN EX								
COMPUTE NM HYD	101.00	-	1	0.00120	2.99	0.124	1.94076	1.500	3.907 PER IMP= 50.00
*S*	PROPOSED CONDITIONS								
*S*	COMPUTE HYD BASIN A								
COMPUTE NM HYD	102.00	-	2	0.00120	3.71	0.176	2.75473	1.500	4.847 PER IMP= 94.21