

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

December 3, 2024

David Aube
Studio SW Architects
2101 Mountain Rd NW
Albuquerque, NM 87104

**RE: Albuquerque Collegiate Charter School
Conceptual Grading and Drainage Plan
Engineer's Stamp Date: 11/17/2024
Hydrology File: L09D032**

Dear Mr. Aube:

Based upon the information provided in your submittal received 11/18/2024, the Conceptual Grading & Drainage Plan is approved for action by the Development Facilitation Team (DFT) on Site Plan for Building Permit.

PO Box 1293

PRIOR TO BUILDING PERMIT:

Albuquerque

1. Please submit a more detailed Grading & Drainage Plan to Hydrology for review and approval. This digital (.pdf) is emailed to PLNDRS@cabq.gov along with the Drainage Transportation Information Sheet.

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 (Doug Hughes, PE, jhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.

www.cabq.gov

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

Sincerely,

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: _____

(Please note that a DFT SITE is one that needs Site Plan Approval & ADMIN SITE is one that does not need it.)

TYPE OF DEVELOPMENT: PLAT (#of lots) _____ RESIDENCE
DFT SITE ADMIN SITE

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:

- ENGINEER/ARCHITECT CERTIFICATION
- PAD CERTIFICATION
- CONCEPTUAL G&D PLAN
- GRADING & DRAINAGE PLAN
- DRAINAGE REPORT
- DRAINAGE MASTER PLAN
- CLOMR/LOMR
- TRAFFIC CIRCULATION LAYOUT (TCL)
ADMINISTRATIVE
- TRAFFIC CIRCULATION LAYOUT FOR DFT
APPROVAL
- TRAFFIC IMPACT STUDY (TIS)
- STREET LIGHT LAYOUT
- OTHER (SPECIFY) _____

TYPE OF APPROVAL SOUGHT:

- BUILDING PERMIT APPROVAL
- CERTIFICATE OF OCCUPANCY
- CONCEPTUAL TCL DFT APPROVAL
- PRELIMINARY PLAT APPROVAL
- FINAL PLAT APPROVAL
- SITE PLAN FOR BLDG PERMIT DFT
APPROVAL
- SIA/RELEASE OF FINANCIAL GUARANTEE
- FOUNDATION PERMIT APPROVAL
- GRADING PERMIT APPROVAL
- SO-19 APPROVAL
- PAVING PERMIT APPROVAL
- GRADING PAD CERTIFICATION
- WORK ORDER APPROVAL
- CLOMR/LOMR
- OTHER (SPECIFY) _____

DATE SUBMITTED: _____



A1 CONCEPTUAL EXISTING CONDITIONS DRAINAGE PLAN
1" = 40'-0"

I. PURPOSE AND SCOPE

THE PURPOSE OF THIS DRAINAGE PLAN IS TO PRESENT THE EXISTING AND PROPOSED DRAINAGE CONDITIONS FOR THE PROPOSED ALBUQUERQUE COLLEGIATE CHARTER SCHOOL. THE SITE IS LOCATED AT THE NORTH WEST CORNER OF SUNSET GARDENS SW, AND 90TH STREET, SW, IN SOUTHWEST ALBUQUERQUE. THE ZONE ATLAS PAGE FOR THE SITE IS L-09-Z.

II. SITE DESCRIPTION AND HISTORY

THE PROJECT SITE IS LOCATED ON THE NORTHWEST CORNER OF SUNSET GARDENS AND 90TH STREET SW.

THE SITE IS CURRENTLY UNDEVELOPED WITH PARTIALLY DEVELOPED STREETS TO THE EAST AND SOUTH. PARCELS TO THE NORTH AND WEST ARE DEVELOPED.

III. COMPUTATIONAL PROCEDURES

HYDROLOGIC ANALYSIS WAS PERFORMED UTILIZING THE DESIGN CRITERIA BASED ON CHAPTER 6, HYDROLOGY, OF THE DEVELOPMENT PROCESS MANUAL RELEASED 2020. TABLES WITHIN CHAPTER 6, WERE USED TO AID IN THE STUDY OF THE SITE HYDROLOGY.

IV. PRECIPITATION

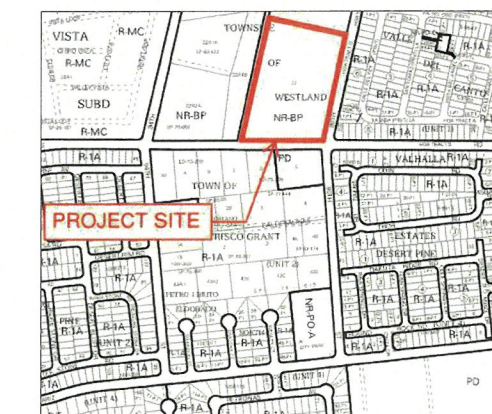
THE STORM EVENT USED FOR THE FOLLOWING CALCULATIONS IS THE 100YR-24HR STORM. THE PROJECT SITE IS LOCATED IN ZONE 1 (WEST OF RIO GRANDE).

V. EXISTING DRAINAGE CONDITIONS

THE SITE IS CURRENTLY UNDEVELOPED GENERALLY DRAINS FROM THE WEST TO THE EAST. THE PARCELS TO THE NORTH AND WEST ARE FULLY DEVELOPED. NO OFF-SITE FLOW WERE IDENTIFIED DURING THE SITE VISIT.



A4 FEMA FIRMETTE
NOT TO SCALE



A5 ZONE ATLAS PAGE L-09-Z
NOT TO SCALE

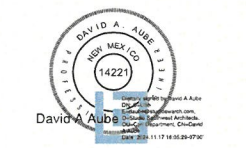
City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
PRELIMINARY APPROVED
DATE: 12-03-2024
BY: [Signature]
HydroTrans #: L09D032

THESE PLANS AND/OR REPORT ARE CONCEPTUAL ONLY. MORE INFORMATION MAY BE NEEDED IN THEM AND SUBMITTED TO HYDROLOGY FOR BUILDING PERMIT APPROVAL.

STUDIO SW
ARCHITECTS



ARCHITECT/ENGINEER



**ALBUQUERQUE COLLEGIATE
CHARTER SCHOOL**
SUNSET GARDENS AND 90TH
ALBUQUERQUE, NM

SITE PLAN - DFT

REVISION DATE

DATE 11-17-24

PROJECT NO

CONCEPTUAL
EXISTING
CONDITION
DRAINAGE
PLAN

SHEET NO

CD-1

City of Albuquerque
 Planning Department
 Development Review Services
HYDROLOGY SECTION
PRELIMINARY APPROVED
 DATE: 12-03-2024
 BY: [Signature]
 HydroTeam ID: L09D032

THIS PLAN AND/OR REPORT ARE CONCEPTUAL ONLY. MORE INFORMATION MAY BE REQUIRED IN TOTAL AND SUBMITTED TO HYDROLOGY FOR BUILDING PERMIT APPROVAL.



VI. PROPOSED DRAINAGE CONDITIONS

THE PURPOSE OF THIS CONCEPTUAL GRADING AND DRAINAGE PLAN IS TO SHOW THE FULLY DEVELOPED SITE WILL HAVE SUFFICIENT PONDING TO RESTRICT FLOW TO BELOW HISTORIC RATES AS WELL AS TO PROVIDE THE NECESSARY WATER QUALITY VOLUME.

THE SITE GENERALLY DRAINS FROM WEST TO EAST. AS SERIES OF DRAINAGE PONDS WILL BE CONSTRUCTED ALONG THE SOUTHERN AND EASTER BOUNDARIES. EACH POND WILL HAVE A MAXIMUM DEPTH OR 18" DEEP.

OVERALL VOLUME AVAILABLE IN PONDS A-E IS 24,207 CUBIC FEET.

WITH THIS PONDING VOLUME THE PEAK FLOW RATE WILL BE REDUCED FROM THE INCOMING RATE OF 27.65CFS DOWN TO 11.00CFS.

VII. CONCLUSIONS

THIS PLAN IS SHOWING THE FULL BUILDOUT FOR THE CAMPUS. PONDS HAVE BEEN CREATED TO CONTAIN THE FULL WATER QUALITY VOLUME OF 6,458CF. PEAK FLOW RATE WILL BE REDUCED FROM 17.65CFS TO 11CFS AFTER THE WATER IS ROUTED THROUGH THE STORM WATER MANAGEMENT PONDS.

MATERIAL LEGEND

- ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE
- CONCRETE SIDEWALK
- RIPRAP EROSION PROTECTION
- EARTHEN POND. SEE GRADING AND DRAINAGE PLANS (SHEET C-201 AND C-202)
- LANDSCAPING AREA.

Drainage Summary

Project: Albuquerque Collegiate Charter School
 Project Number: 2406 ACDS
 Date: 08/15/24
 By: DAA

Site Location: 1 Per COA DPM Chapter 6
 Precipitation Zone: 1 Per COA DPM Chapter 6

Existing summary

Basin Name	Area (sf)	Ex Basin 1
Area (acres)	8.05	
%A Land treatment	0	
%B Land treatment	100	
%C Land treatment	0	
%D Land treatment	0	
Soil Treatment (acres)		
Area "A"	0.00	
Area "B"	8.05	
Area "C"	0.00	
Area "D"	0.00	
Excess Runoff (acre-feet)		
100yr. 6hr.	0.4897	acre-ft
10yr. 6hr.	0.1744	acre-ft
2yr. 6hr.	0.0067	acre-ft
100yr. 24hr.	0.4897	acre-ft
Peak Discharge (cfs)		
100 yr.	17.38	cfs
10yr.	8.52	cfs
2yr.	0.16	cfs

Pond Routing and Volumes

	Full Buildout
Incoming Flow Rate	Qin 27.65 cfs
Allowable Discharge Rate	Qout 11 cfs
Hydrology Zone	1 per Figure A-1
Area Total	8.051 acres
Area Type A	Aa 0%
Area Type B	Ab 35%
Area Type C	Ac 0%
Area Type D Impervious	Ad 65%
Excess runoff rates	
A	0.55
B	0.73
C	0.95
D	2.24
Weighted E (Excess Runoff)	
Time of Concentration	0.2 hours
Time to Peak	0.216 hours
Time of Base	0.888 hours
Duration of Peak	0.193 hours
Time for end of peak	0.382 hours
Time when storage begins	0.097 hours
Time incoming is less than discharge	0.688 hours
Volume Required during storm	
Volume Required during storm	6.652 acre-inch
Volume Required during storm	24148 cubic feet
Volume Stored in Pond during storm	24207 cubic feet

Proposed summary

Basin Name	Area (sf)	Overall Site
Area (acres)	8.051	350684.85
%A Land treatment	35	
%B Land treatment	0	
%C Land treatment	0	
%D Land treatment	65	
Soil Treatment (acres)		
Area "A"	0.00	
Area "B"	2.82	
Area "C"	0.00	
Area "D"	5.23	
Excess Runoff (acre-feet)		
100yr. 6hr.	1.1482	acre-ft
10yr. 6hr.	0.6846	acre-ft
2yr. 6hr.	0.4035	acre-ft
100yr. 24hr.	1.3575	acre-ft
100yr. 10day	1.9026	acre-ft
Peak Discharge (cfs)		
100 yr.	27.65	cfs
10yr.	15.73	cfs
2yr.	8.22	cfs
Water Quality Ponding Volume (cf)		
	6458.4	cf
Water Quality Acre Feet		
	0.1483	acre-ft



ARCHITECT/ENGINEER



ALBUQUERQUE COLLEGIATE
 CHARTER SCHOOL
 SUNSET GARDENS AND 90TH
 ALBUQUERQUE, NM

SITE PLAN - DFT

REVISION DATE

DATE 11-17-24

PROJECT NO

CONCEPTUAL
 DEVELOPED
 CONDITIONS
 DRAINAGE
 PLAN

SHEET NO.

CD-2

