

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

February 22, 2022

Dennis Lorenz, PE
Lorenz Design & Consulting LLC
3308 Calle de Daniel NW
Albuquerque, NM 87104

RE: The Learning Experience
4850 Nunzio Ave. NW
Temporary C.O. - Accepted
Engineer's Certification Date: 2/15/22
Engineer's Stamp Date: 10/7/2020
Hydrology File: C12D003C

Dear Mr. Lorenz:

PO Box 1293

Based on the Certification received 2/16/22 and site visit on 2/21/22, this certification is approved in support of release of Temporary Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, please contact me at 924-3986 or earmijo@cabq.gov.

Sincerely,

NM 87103

www.cabq.gov

Ernest Armijo, P.E.
Principal Engineer, Planning Dept.
Development Review Services



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: The Learning Experience **Building Permit #:** _____ **Hydrology File #:** C12-D003C
DRB#: NA **EPC#:** NA **Work Order#:** NA
Legal Description: Tract F, Fountain Hills Plaza Subdivision
City Address: 4580 Nunzio Ave NW

Applicant: Lorenz Design & Consulting LLC **Contact:** Dennis A Lorenz
Address: 3308 Calle De Daniel NW, Albuquerque, NM
Phone#: 505-220-0869 **Fax#:** _____ **E-mail:** dennisl@lorenznm.com

Other Contact: SCM Partners **Contact:** S. Haynes
Address: PO Box 9043, Albuquerque, NM 87119
Phone#: 505-898-6622 **Fax#:** _____ **E-mail:** Scooter@SCM Partners.com

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

IS THIS A RESUBMITTAL? _____ Yes X No

DEPARTMENT _____ TRANSPORTATION X HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- X ENGINEER/ARCHITECT CERTIFICATION
 _____ PAD CERTIFICATION
 _____ CONCEPTUAL G & D PLAN
 _____ GRADING PLAN
 _____ DRAINAGE REPORT
 _____ DRAINAGE MASTER PLAN
 _____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
 _____ ELEVATION CERTIFICATE
 _____ CLOMR/LOMR
 _____ TRAFFIC CIRCULATION LAYOUT (TCL)
 _____ TRAFFIC IMPACT STUDY (TIS)
 _____ STREET LIGHT LAYOUT
 _____ OTHER (SPECIFY) _____
 _____ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- _____ BUILDING PERMIT APPROVAL
X CERTIFICATE OF OCCUPANCY
 _____ PRELIMINARY PLAT APPROVAL
 _____ SITE PLAN FOR SUB'D APPROVAL
 _____ SITE PLAN FOR BLDG. PERMIT APPROVAL
 _____ FINAL PLAT 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
 _____ FLOODPLAIN DEVELOPMENT PERMIT
 _____ OTHER (SPECIFY) _____

DATE SUBMITTED: February 15, 2022 **By:** Dennis A. Lorenz PE

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DRAINAGE ORDINANCE, EFFECTIVE MAY 12, 2014, ALL NEW DEVELOPMENT PROJECTS ARE REQUIRED TO MANAGE THE RUNOFF WHICH OCCURS DURING THE 90TH PERCENTILE STORM EVENT. IN ORDER TO COMPLY WITH THIS CRITERIA, WHERE PRACTICAL, ALL SURFACE DRAINAGE SHALL BE ROUTED THROUGH LANDSCAPED AREAS BEFORE RELEASE INTO DOWNSTREAM DRAINAGE FACILITIES. THIS PLAN RECOMMENDS ALL LANDSCAPED AREAS BE DEPRESSED A MINIMUM OF 3-INCHES BELOW THE ADJACENT PAVED SURFACE TO RETAIN THE FIRST FLUSH RUNOFF.

CONTRACTOR SHALL PREVENT DIRT FROM GETTING INTO THE STREET. IF DIRT IS PRESENT IN THE STREET, THE DIRT IS TO BE REMOVED AT THE END OF EACH DAY OR DURING THE DAY IF RAIN IS IMMINENT OR IF THE CONTRACTOR INTRODUCES WATER INTO THE STREET.

C3	FL
1	89.14
2	88.80
3	89.90

C2	FL
1	99.00
2	98.60
3	97.83

C1	FL
1	100.48
2	99.93
3	100.32

Set PK Nail & Alum. Disc.
Stamped "SURVEY CONTROL"
Project Surface Coordinates
N=1522590.85
E=1513512.81
Elevation=5102.72 (NAVD88)

Set 5/8" Rebar & Cap
Stamped "SURVEY CONTROL"
Project Surface Coordinates
N=1522591.13
E=1513465.26
Elevation=5105.13 (NAVD88)

TRACT G
FOUNTAIN HILLS PLAZA
Filed 9-19-2007, Bk. 2007C, Pg. 270

TRACT H
FOUNTAIN HILLS PLAZA
Filed 9-19-2007, Bk. 2007C, Pg. 270

TRACT C
FOUNTAIN HILLS PLAZA
Filed 9-19-2007, Bk. 2007C, Pg. 270

24' PRIVATE WATER,
DRAINAGE, SEWER AND
UTILITY EASEMENT

MISSING SECTION OF
PUBLIC SIDEWALK

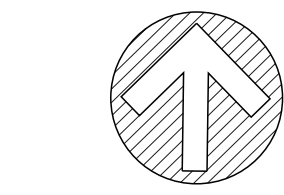
STORM WATER
QUALITY POND
VOL=408 cf (336 cf)

EXISTING 25.5' PRIVATE
CROSS ACCESS AND CROSS
DRAINAGE EASEMENT

PROPOSED
BUILDING
FF 5099.50

TRACT E
FOUNTAIN HILLS PLAZA
Filed 9-19-2007, Bk. 2007C, Pg. 270

TRACT G IS SUBJECT TO A 25'
FLOATING PRIVATE CROSS
ACCESS, WATER, SEWER AND
DRAINAGE EASEMENT



SCALE : 1" = 20'

LOCATION MAP

NOT TO SCALE



FIRM PANEL 35001C0116G

NOT TO SCALE

KEYED NOTES

- EXISTING CONCRETE CURB AND GUTTER.
- EXISTING ASPHALT PAVEMENT.
- EXISTING GRAVEL SURFACING.
- REMOVE & DISPOSE EXISTING CURB & GUTTER. CONSTRUCT CONCRETE VALLEY GUTTER WITH ACCESSIBLE RAMP. SEE COA STD DWGS 2420 & 2426.
- CONSTRUCT 6" PUBLIC SIDEWALK. SEE COA STD DWG 2430.
- REMOVE & DISPOSE EXISTING ASPHALT CURB TO LIMITS SHOWN. CONSTRUCT 6-INCH CONCRETE CURB. SEE DETAIL B/C004.
- REMOVE & DISPOSE EXISTING ASPHALT PAVEMENT TO LIMITS SHOWN. CONSTRUCT ASPHALT PAVEMENT. SEE DETAIL A/C004.
- CONSTRUCT 6-INCH CONCRETE CURB. SEE DETAIL B/C004.
- CONSTRUCT TURNDOWN SIDEWALK. SEE DETAIL C/C004.
- CONSTRUCT 6" CONCRETE PEDESTRIAN CONNECTION TO NUNZIO AVENUE.
- CONSTRUCT CONCRETE SIDEWALK.
- CONSTRUCT HANDICAP RAMP TYPE-1. SEE DETAIL D/C004.
- CONSTRUCT HANDICAP RAMP TYPE-2. SEE DETAIL E/C004.
- INSTALL HANDICAP PARKING SIGNAGE. SEE DETAIL F/C.004. (BUILDING MOUNTED).
- CONSTRUCT MOTOR CYCLE PARKING SIGN. SEE DETAIL G/C.004. (BUILDING MOUNTED).
- PROVIDE STRIPING AT ACCESSIBLE AREA PER CODE.
- INSTALL CONCRETE TIRE STOPS.
- CONSTRUCT ASPHALT PAVEMENT. SEE DETAIL A/C004.
- CONSTRUCT RETAINING WALL. DETAIL BY OTHERS.
- CHILD PLAY AREA.
- CONSTRUCT NEW REFUSE ENCLOSURE.
- INSTALL NEW BICYCLE RACK - 3 SPACES MINIMUM.
- CONSTRUCT PVC FENCING AND GATES.
- NEW LANDSCAPING. SEE LANDSCAPE PLAN.
- CONSTRUCT 4" DIA TYPE 'C' MANHOLE AT EXISTING 24" SD PER COA STD DWG 2101.
- CONSTRUCT 12" STORM DRAIN.
- CONSTRUCT SINGLE TYPE 'D' STORM INLET PER COA STD DWG 2206.
- CONSTRUCT 8" STORM DRAIN.
- CONSTRUCT 4" STORM DRAIN.
- CONSTRUCT CLEANOUT. SEE DETAIL G/C004.
- CONSTRUCT 4" PVC ROOF DRAIN UNDER SIDEWALK. PENETRATE THRU TURN DOWN SIDEWALK.
- CONSTRUCT 6" PVC ROOF DRAIN UNDER SIDEWALK. CONNECT TO 8" STORM DRAIN.
- REMOVE & DISPOSE EXISTING SD PLUG.
INSTALL:
1-45° 18" RCP BEND
6 LF 18" RCP CLASS III
INV 94.50
INSTALL 18" PLUG.
INV 94.50
- CONSTRUCT 24" STORM DRAIN.
- CONSTRUCT: 2-24" - 45° ELBOWS
1-24" MANHOLE TEE
INV 91.00
- INSTALL 24" SD PLUG.
- CONSTRUCT TEMPORARY BERM/SWALE. SEE SECTION J/C004.
- EDGE OF PAVEMENT. NO CURB.
- TEMPORARY SEDIMENTATION POND.

DRAINAGE CERTIFICATION TEMPORARY CERTIFICATE OF OCCUPANCY

I, Dennis A. Lorenz, NMPE 9647, of the firm Lorenz Design & Consulting, LLC, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 10-07-2020. The record information edited onto the original design document has been obtained by Breakline Engineering, LLC. I further certify that I have personally visited the project site on 01-17-2022 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Temporary certificate of occupancy.

The following items must be completed prior to issuance of permanent certificate of occupancy:

- Construction of public sidewalk improvements along the project frontage per plan.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.



DENNIS A. LORENZ, NMPE 9647

LEGEND

ITEM	EXISTING	PROPOSED
PROPERTY LINE	---	---
EASEMENT	---	---
CURB AND GUTTER	---	---
6" CONCRETE CURB	---	---
RETAINING WALL	R/R	---
SPOT ELEVATION	75.5	01.5
CONTOUR W/ ELEVATION	5800	5800
DIRECTION OF FLOW	---	---
CONCRETE	---	---
RIP RAP ROCK	---	---
AS-BUILT SPOT ELEVATION		01.17 04.16

PROJECT DATA

PROPERTY ADDRESS:

4580 NUNZIO AVENUE NW
ALBUQUERQUE, NEW MEXICO 87114

LEGAL DESCRIPTION:

TRACT F, FOUNTAIN HILLS PLAZA SUBDIVISION

SURVEY:

ALL PROJECT SURVEYING BY
RUSS P. HUGG NMPLS 9750
ATE OF SURVEY: APRIL 2019

PROJECT BENCHMARK:

ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE
STATION NO. "10-C12", HAVING AN ELEVATION OF
5095.033 FEET, NAVD 1988

DRAINAGE PLAN NOTES

- LDC recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.
- Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure could cause settlement.
- This Plan is prepared to establish on-site drainage and grading criteria only. LDC assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.
- LDC recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to construction.
- All spot elevations are finished grade or top of pavement, unless noted otherwise.



THE LEARNING
EXPERIENCE
ACADEMY OF
EARLY EDUCATION
NUNZIO AVENUE
ALBUQUERQUE, NM 87114



REVISIONS PER CITY ENGINEER

10-07-2020

THE LEARNING EXPERIENCE
GRADING & DRAINAGE PLAN



LORENZ
DESIGN & CONSULTING, LLC
Civil Engineering & Construction Management

2501 Rio Grande Blvd NW, Suite A
Albuquerque, New Mexico 87104
Ph: 505-888-6088 Fax:
505-242-6655

DRAWN BY: DAL
CHECKED BY: DAL
FILE: 20-005

DATE: June 2020

C001

GRADING AND DRAINAGE PLAN

PURPOSE AND SCOPE

Pursuant to the Drainage Ordinance for the City of Albuquerque and the Development Process Manual, this Grading and Drainage Plan outlines the drainage management criteria for controlling developed runoff from the project site. The project consists of the design and construction of The Learning Experience, a child day care facility, located at 4580 Nunzio Avenue NW. The project includes a 9,587 square foot building with paving, landscaping, utility, grading, and drainage improvements to support the project. The purpose of this Plan is to support building permit approval. The scope of this plan is to present grading and drainage criteria for the safe management of excess runoff impacting the site from upstream drainage basins, and controlling excess runoff from the project site in a well-managed, non-erosive manner.

EXISTING CONDITIONS

The property is located at 4580 Nunzio Avenue NW, west of Eagle Ranch Road NW. The site is undeveloped. Site topography slopes to the east. All on-site runoff drains east onto the shared access drive with Lot 10-A-1 (Smiles for Kid's Dental Office). The access drive conveys these flows north to Nunzio Avenue. The site is impacted by off-site drainage areas to the west and south. Excess runoff from the west drains through the site to Lot 10-A-1. Excess runoff from the south drain eastward to Lot 10-A-1.

As shown by the attached FIRM Panel the site does not lie within a mapped 100 year Flood Zone.

DRAINAGE MASTERPLAN

This Plan is based on the drainage management criteria outlined in the Fountain Hill Grading and Drainage Management Plan, prepared by Bohannon Huston, dated June 4, 2007. Existing Public Masterplan improvements include public storm drains in Nunzio Avenue that drain to a constructed public detention pond located north of Nunzio Avenue within Tract 6-A-1. The bulk of the project site is programmed to discharge to the public storm drain by connection to an existing 24-inch stubout. The remaining site acreage is allowed to free discharge to Nunzio Avenue. The off-site drainage areas are to drain through Tract C and Lot 10-A-1 to Nunzio Avenue. A Public storm drain stubout is provided on Tract C to drain flows to the Public Detention Pond located on Tract 6-A-1.

PROPOSED IMPROVEMENTS

As stated above, the project consists of the construction of a 9,587 square foot building with paving, landscaping, utility, grading, and drainage improvements. All onsite drainage flows will be routed overland within drainage swales and storm drains in accordance with the Masterplan.

The site is divided into several drainage basins (see Onsite Drainage Basin Map) that discharge developed flows to the existing public storm drainage system and Nunzio Avenue. Each drainage basin is described as follows:

- Basin A.1 drains overland to a storm inlet that drains by a 12-inch storm drain. The storm drain connects to an existing 24-inch storm drain stubout from the Nunzio public storm drain. This storm drain conveys flows to the regional detention pond located on Tract 6-A-1.
- Basin A.2 represents the building roof. The roof drains by an 8-inch storm drain that connects to the storm inlet and 12-inch storm drain described above. A small water feature in the play area also connects to the storm drain.
- Basins B.1, B.2 and B.3 drain east to Lot 10-A-1 and Nunzio Avenue.
- Basin C is a front landscape buffer that drains to a shallow retention pond.
- Basin D is a portion of the west driveway that drains to Nunzio Avenue.

The off-site drainage areas affecting the site from the west and east will be routed around the site with temporary erosion control measures. A berm-swale will be constructed to route undeveloped excess runoff north and east. Future developed runoff will be managed by the offsite properties upon development. A 24-inch storm drain will be extended from the Nunzio storm drain stub (at the proposed manhole) south through the proposed private access, utility and drainage easement, for use by Tracts E & G. The existing 18" storm drain stubout from Nunzio located near the west access drive, will be extended into Tract F to eliminate future roadway demolition.

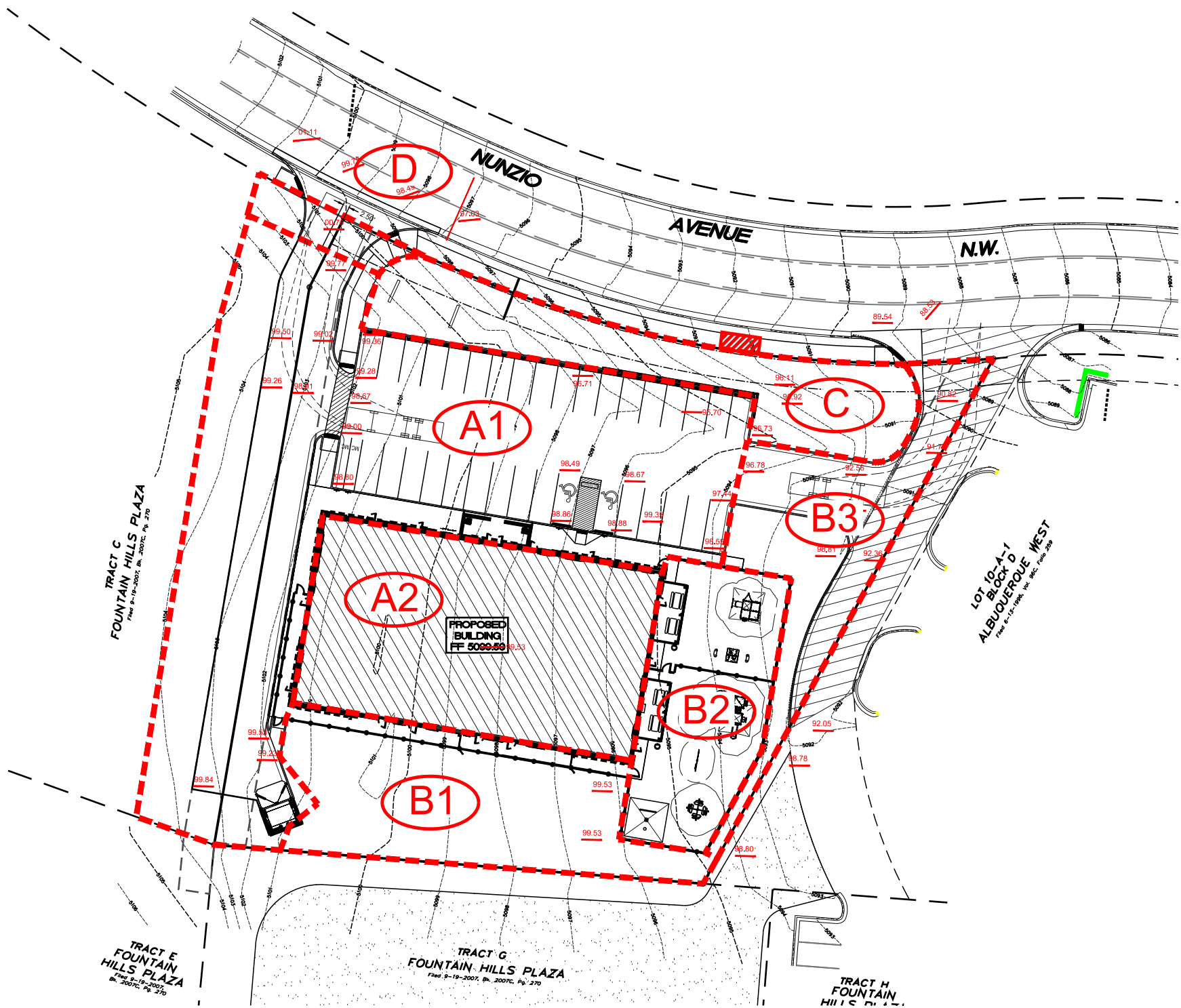
First flush storage will be attained within the Basin 'C' storm water quality pond and landscaped areas. First flush calculations are provided on this Sheet. Construction will disturb an area of more than 1.0 acre; therefore a Storm Water Pollution Prevention Plan will be required.

CALCULATIONS

The calculations are provided on this Sheet that define the 100-year/6 hour design storm falling within the project area under existing and proposed conditions. The hydrology is per "Section 22.2, Part A, Development Process Manual, Vol 2", dated June 1997.

Private Drainage Facilities within City Right-of-Way
Notice to Contractor
(Special Order 19 ~ "SO-19")

- An excavation permit will be required before beginning any work within City Right-Of-Way.
- All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
- Two working days prior to any excavation, the contractor must contact **New Mexico One Call, dial "811"** or (505) 260-1990] for the location of existing utilities.
- Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
- Backfill compaction shall be according to traffic/street use.
- Maintenance of the facility shall be the responsibility of the owner of the property being served.
- Work on arterial streets may be required on a 24-hour basis.
- Contractor must contact Augie Armijo at (505) 857-8607 and Construction Coordination at 924-3416 to schedule an inspection.



ONSITE DRAINAGE BASIN MAP
NOT TO SCALE

PROJECT HYDROLOGY THE LEARNING EXPERIENCE CHILDCARE AHYMO								
ZONE:	1							
P ₂₄ HOUR	2.20							
P ₁₀ DAY	3.67							
EXISTING CONDITIONS								
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)
SITE	1.12	0.00	0.00	1.08	0.04	1.03	3.27	0.096
PROPOSED CONDITIONS								
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)
SITE	1.12	0.00	0.14	0.35	0.63	1.50	4.04	0.140
A.1	0.54	0.00	0.00	0.12	0.42	1.75	2.18	0.079
A.2	0.22	0.00	0.00	0.00	0.22	1.97	0.96	0.036
A.1+2	0.76	0.00	0.00	0.12	0.64	1.82	3.14	0.115
B.1	0.16	0.00	0.07	0.07	0.02	0.97	0.43	0.013
B.2	0.11	0.00	0.00	0.11	0.00	0.99	0.32	0.009
B.3	0.12	0.00	0.04	0.04	0.04	1.21	0.37	0.012
B.1+2+3	0.39	0.00	0.11	0.22	0.06	1.05	1.12	0.034
C	0.12	0.00	0.06	0.06	0.00	0.83	0.29	0.008
D	0.02	0.00	0.00	0.00	0.02	1.97	0.09	0.003

FIRST FLUSH CALCULATION

BASINS A.1 AND A.2 CONNECT DIRECTLY TO THE PUBLIC STORM DRAIN SYSTEM WHICH DRAINS TO THE REGIONAL DETENTION POND LOCATED NORTH OF NUNZIO AVENUE. THE FIRST FLUSH POND REQUIREMENT WILL BE BASED ON THE REMAINING SITE AREA THAT DRAINS TO NUNZIO AVENUE - BASINS B.1, B.2, B.3, C AND D.

90TH PERCENTILE DEPTH = 0.44"
LESS INITIAL ABSTRACTIONS = -0.10"
REQUIRED RETAINED DEPTH = 0.34"

POND REQUIREMENT = Ad(0.34") = 0.14 AC(43,560sf/ac/12")(0.34") = 173 CF
VOLUME PROVIDED = BASIN C POND = 408 cf

STORM DRAIN INVENTORY

CONTRIB BASINS	Q100 cfs	DRAINAGE STRUCTURE	PIPE SLOPE %	CAPACITY cfs	COMMENTS
A.2	0.96	8" SD	1.9	1.5	CONNECTS TO PUBLIC SD
A.1+A.2	3.14	12" SD	1.5	4.0	CONNECTS TO INLET

DRAINAGE CERTIFICATION
TEMPORARY CERTIFICATE OF OCCUPANCY

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DENNIS A. LORENZ, NMPE 9647

THE LEARNING EXPERIENCE
GRADING & DRAINAGE PLAN



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DESIGN & CONSULTING, LLC
Civil Engineering | Construction Management
2501 Rio Grande Blvd NW, Suite A
Albuquerque, New Mexico 87104
Ph: 505-888-6088 Fax: 505-242-6655

DRAWN BY: DAL
CHECKED BY: DAL
FILE: 20-005
DATE: June 2020
C002