CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director

Mayor Timothy M. Keller

February 1, 2021

Dennis Lorenz, P.E.
Lorenz Design & Consulting
2501 Rio Grande NW
Albuquerque, NM 87104

RE: The Learning Experience
Coors Pavilion
Grading & Drainage Plan
Engineer's Stamp Date: 02/01/21
Hydrology File: G11D069E

Dear Mr. Lorenz:

PO Box1293

Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 11/24/2020 and 02/01/2021, the Grading and Drainage Plan is approved for Building Permit.

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

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, 924-3420) 14 days prior to any earth disturbance.

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

Sincerely,

Renée C. Brissette

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

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 #: _____

DRB#: — EPC#: — Work Order#: —

Legal Description: LOT 9 COORS PAVILION

City Address: 4131 COORS BLVD NW

Applicant: LORENZ DESIGN + CONSULTING Contact: D. LORENZ

Address: 2501 RIO GRANDE BLVD NW, ABQ NM 87104

Phone#: 220 0869 Fax#: _____ E-mail: DENNISL@LORENZNM.COM

Other Contact: SCM PARTNERS Contact: S. HAYNES

Address: PO BOX 9043 ABQ NM 87119

Phone#: 898.6622 Fax#: _____ E-mail: SCOOTER@SCMPARTNERS.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:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
X GRADING PLAN
X 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:

X BUILDING PERMIT APPROVAL
____ 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: 11.23.20 By: DENNIS LORENZ

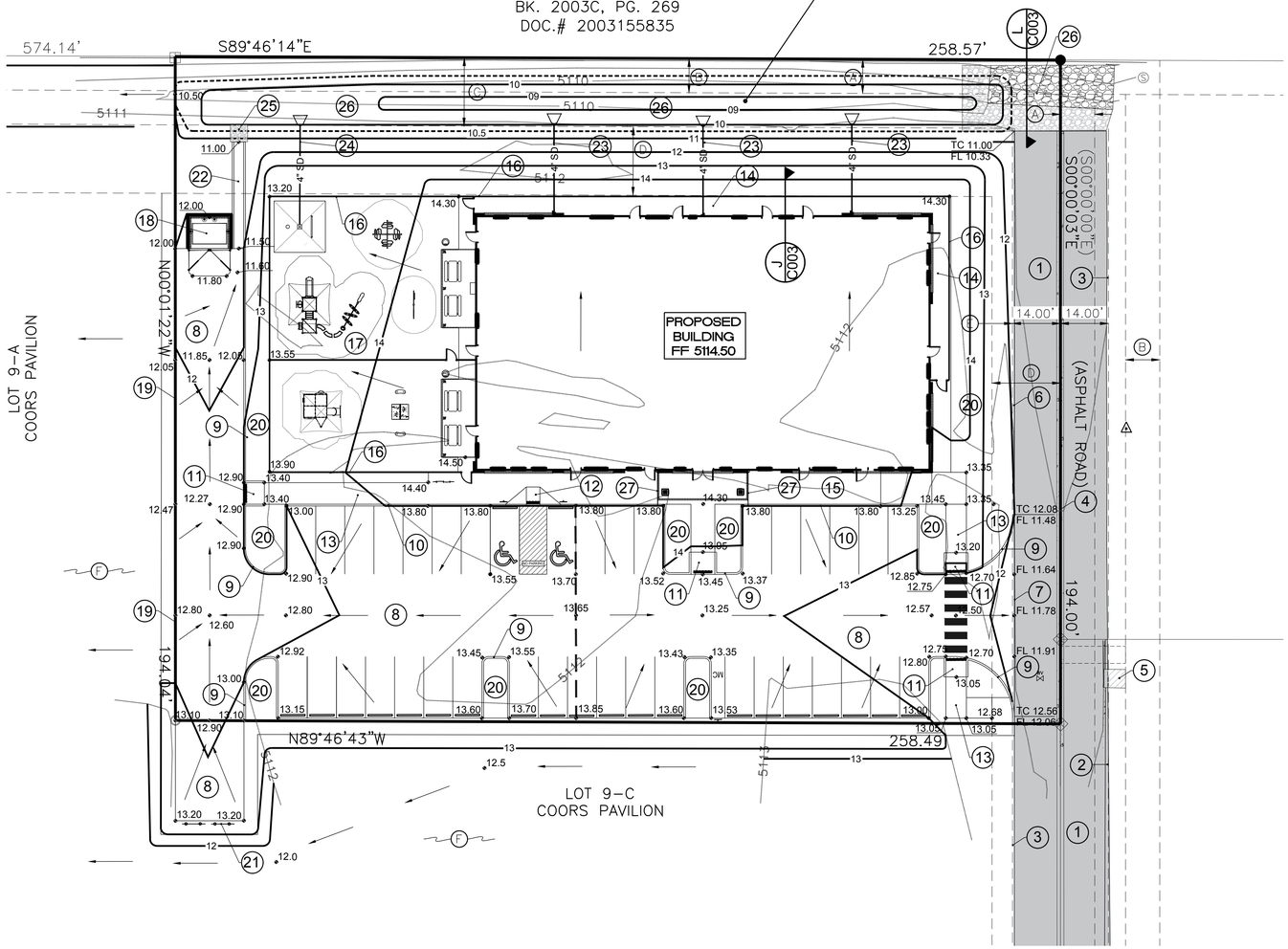
COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

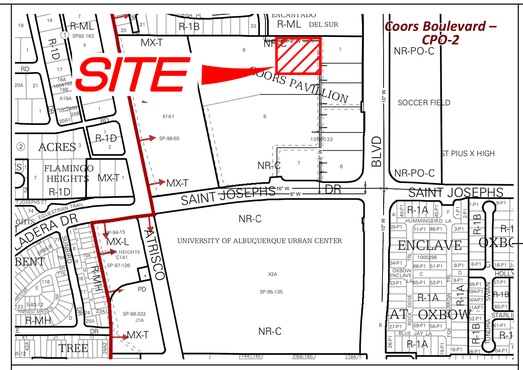
FEE PAID: _____

WATER QUALITY POND STORAGE TABLE			
ELEVATION	AREA (sf)	VOL (cf)	VOL (ac-ft)
5109.00	660	0	0.0000
5110.00	2710	1685	0.0387
5110.50	3875	3331.25	0.0765

STORM WATER QUALITY POND
WSE=5110.50
VOL=3,331 cf

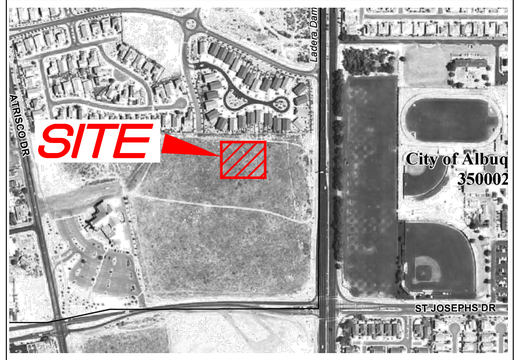
TRACT 4-B
RANCHO ENCANTADO DEL SUR
09/02/2003
BK. 2003C, PG. 269
DOC.# 2003155835





LOCATION MAP

NOT TO SCALE



FIRM PANEL 35001C0114H

NOT TO SCALE

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		

PROJECT DATA

PROPERTY ADDRESS:

4131 COORS BLVD NW
ALBUQUERQUE, NEW MEXICO 87114

LEGAL DESCRIPTION:

LOT 9, COORS PAVILION

SURVEY:

ALL PROJECT SURVEYING BY
TERRA LAND SURVEYING
CHRIS A. MEDAINA. HUGG NMPLS 15702
DATE OF SURVEY: JULY 2020

PROJECT BENCHMARK:

ELEVATIONS ARE BASED ON CITY OF ALBUQUERUQUE STATION No. "8-G11 2004", HAVING AN ELEVATION OF 50116.009 FEET, NAVD 1988

DRAINAGE PLAN NOTES

1. **LDC recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.**
2. **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.**
3. **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.**
4. **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.**
5. **LDC recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.**
6. **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.**
7. **All spot elevations are finished grade or top of pavement, unless noted otherwise.**

IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DRAINAGE ORDINANCE, EFFECTIVE MAY 12, 2014, ALL NEW DEVELOPMENT PROJECT S 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 FACITLITIES. 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.

EASEMENT NOTES:

- (A) 10.0' P.U.E.
- (B) 10.0' PRIVATE SANITARY SEWER EASEMENT
- (C) 20.0' PRIVATE DRAINAGE EASEMENT
- (D) 20.0' PRIVATE WATER EASEMENT
- (E) 20.0' PRIVATE ACCESS AND SURFACE DRAINAGE EASEMENT
- (F) PRIVATE BLANKET DRAINAGE EASEMENT ACROSS LOTS 8A, 8B, 9A, 9B AND 9C FOR THE BENEFIT AND USE OF THE OWNERS OF LOTS 8A, 8B, 9A, 9B, AND 9C, COORS PAVILION.

20 0 10 20

SCALE : 1" = 20'

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 02/01/21
BY: René C. Brissette
HydroTrans # G11D069E

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO BE A VIOLATION OF THIS OR ANY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS/REPORT, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

KEYED NOTES

1. EXISTING ASPHALT PAVEMENT
2. EXISTING CONCRETE CURB AND GUTTER.
3. EXISTING ASPHALT CURB.
4. EXISTING CONCRETE VALLEY GUTTER.
5. EXISTING SIDEWALK CULVERT.
6. REMOVE & DISPOSE EXISTING ASPHALT CURB. CONSTRUCT DEPRESSED MEDIAN CURB & GUTTER. SEE COA STD DWG 2415B.
7. REMOVE & DISPOSE EXISTING ASPHALT CURB.
8. CONSTRUCT ASPHALT PAVEMENT. SEE DETAIL A/C004.
9. CONSTRUCT 6-INCH CONCRETE CURB. SEE DETAIL B/C004.
10. CONSTRUCT TURNDOWN SIDEWALK. SEE DETAIL C/C004.
11. CONSTRUCT HANDICAP RAMP TYPE-1. SEE DETAIL D/C004.
12. CONSTRUCT HANDICAP RAMP TYPE-2. SEE DETAIL E/C004.
13. CONSTRUCT 6' PEDESTRIAN LINK.
14. CONSTRUCT 6' CONCRETE SIDEWALK.
15. CONSTRUCT CONCRETE SIDEWALK.
16. CONSTRUCT PVC FENCE.
17. CONSTRUCT PLAYGROUND.
18. CONSTRUCT NEW REFUSE ENCLOSURE.
19. EDGE OF PAVEMENT. NO CURB
20. NEW LANDSCAPING. SEE LANDSCAPE PLAN.
21. INSTALL 2 TYPE II BARRICADES PER COA STD DWG 2803 AT TERMINUS OF ACCESS DRIVE.
22. CONSTRUCT CONCRETE DRAINAGE CHANNEL. SEE DETAIL H/C004.
23. INSTALL 4" PVC ROOF DRAINS. EXTEND TO POND BOTTOM WITH END SECTION OR EQUIVALENT.
24. INSTALL 4" PVC FOUNTAIN DRAINS. EXTEND TO POND BOTTOM WITH END SECTION OR EQUIVALENT.
25. INSTALL 5' X 5' RIP RAP EROSION CONTROL PAD. SEE DETAIL K/C004.
26. REMOVE AND CLEAN EXISTING RIP RAP ROCK AT ROAD TERMINUS. CONSTRUCT NEW EROSION CONTROL PAD BY ADDING NEW RIP RAP ROCK. SEE DETAIL L/C004.
27. LANDSCAPED STORMWATER QUALITY POND. SEE LANDSCAPE PLAN.
28. INSTALL 4" PVC ROOF DRAIN. PENETRATE THRU CURB PER COA STD DWG 2235.

REVISIONS

1. UPDATED PLAN PER APPROVED AMENDED DMP 02-01-2021

THE LEARNING EXPERIENCE
ACADEMY OF EARLY EDUCATION

THE LEARNING EXPERIENCE
GRADING & DRAINAGE PLAN

DENNIS A. LORENZ NEW MEXICO 9647 REGISTERED PROFESSIONAL ENGINEER 02-01-2021

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	DATE: November 2020
CHECKED BY: DAL	C001
FILE: 20-015	

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 in the Coors Pavilion Subdivision. 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 within the Coors Pavilion Subdivision, north of St. Josephs Drive, and west of Coors Boulevard Road NW. The site is undeveloped. Site topography slopes to the west. All on-site runoff drains west into a region detention pond. 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 Amended Master Drainage Plan for Coors Pavilion, prepared by RESPEC, dated 12-21-2020. Masterplan improvements include a regional detention located at the northwest corner of the subdivision. The pond has a storage capacity of 2.99 acre-feet, which includes a first flush volume of 0.96 acre-feet. The pond drains to a public storm drain located in Quaker Heights Place NW. The Masterplan also recommends first flush ponds to be constructed on all properties within the subdivision. A storm water quality pond exists along the north boundary of Lot 9B with a volume of 0.09 acre-feet and a SWQ volume of 2038 cf.

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 a water quality pond. The water quality pond drains to the regional detention pond located west of the site. Each drainage basin is described as follows:

1. Basin A represents the building roof. The roof drains directly to the water quality pond.
2. Basin B drain east to the private access road. The road drains north to the water quality pond.
3. Basin C drains west and north through a concrete drainage channel to the water quality pond.
4. Basin D represents the water quality pond.

The off-site drainage areas affecting the site from the south will drain around the site to the regional detention pond. Future developed runoff will be managed by the offsite properties upon development. A blanket stormwater drainage easement exists for benefit of Lots 8A, 8B, 9A, 9B and 9C.

The developed 100 year 6 hour peak discharge from the site is estimated at 4.35 cfs, which is less than the 4.7 cfs allowed by the DMP. First flush storage will be attained within the Basin 'D' water quality pond and landscaped areas. The existing storm water quality pond will be expanded to provide 3,331 cf of storage, which exceeds the DMP requirement. 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 "Development Process Manual, Chapter 6, effective June 8, 2020.

PROJECT HYDROLOGY
THE LEARNING EXPERIENCE
AHYMO

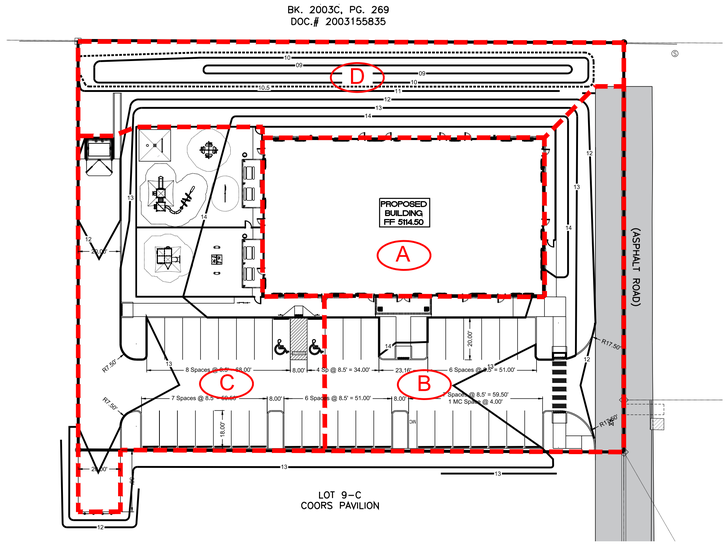
ZONE:	1
P_{6HOUR}	1.69
$P_{10\ DAY}$	3.90

EXISTING CONDITIONS

BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)
SITE	1.16	0.00	0.00	1.10	0.05	1.01	3.36	0.097

PROPOSED CONDITIONS

BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)
SITE	1.16	0.00	0.00	0.34	0.82	1.86	4.35	0.180
A	0.22	0.00	0.00	0.00	0.22	2.24	0.91	0.041
B	0.32	0.00	0.00	0.06	0.26	2.00	1.24	0.053
C	0.37	0.00	0.00	0.03	0.34	2.14	1.49	0.066
D	0.25	0.00	0.00	0.25	0.00	0.95	0.72	0.020



ONSITE DRAINAGE BASIN MAP
NOT TO SCALE

FIRST FLUSH CALCULATION

BY ORDINANCE THE SITE IS REQUIRED TO RETAIN THE 90TH PERCENTILE RAINFALL DEPTH. IN ORDER TO COMPLY WITH THIS CRITERION, WHERE PRACTICAL, ALL SURFACE AREAS WILL BE ROUTED THROUGH LANDSCAPED AREAS BEFORE RELEASE TO DOWNSTREAM PUBLIC DRAINAGE FACILITIES. IN ADDITION TO THE VOLUME WITHIN THE LANDSCAPED AREAS, EXCESS RUNOFF WILL ROUTED THROUGH A WATER QUALITY POND THAT DRAINS TO THE REGIONAL RETENTION POND LOCATED WEST OF THE SITE. STORAGE IN EXCESS OF THE 90TH PERCENTILE RAINFALL WILL BE PROVIDED AS ILLUSTRATED BELOW.

90TH PERCENTILE DEPTH = 0.42"
Ad = 0.82 AC
POND REQUIREMENT = = 0.82 AC(43,560sf/ac/12)(0.42") = 1,250 CF

THE SITE WILL PROVIDE FIRST FLUSH STORAGE FOR THE SITE AND THE MASTERPLAN VOLUME OF 2038 CF. TOTAL FIRST FLUSH VOLUME REQUIRED = 3288 CF.

VOLUME PROVIDED = 3,331 cf

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 02/01/21
BY: René C. Brissette
HydroTrans #: G11D069E
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REVISIONS

1. UPDATED PLAN PER APPROVED AMENDED DMP 02-01-2021

THE LEARNING EXPERIENCE
ACADEMY OF EARLY EDUCATION

THE LEARNING EXPERIENCE
GRADING & DRAINAGE PLAN

DENNIS A. LORENZ — NEW MEXICO — 9647 — REGISTERED PROFESSIONAL ENGINEER — 02-01-2021

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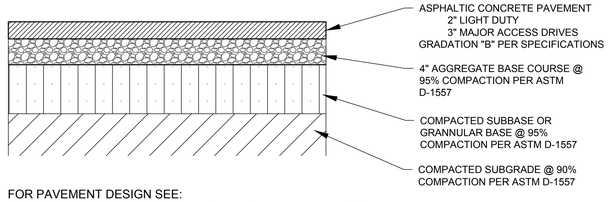
Ph: 505-888-6088 Fax: 505-242-6655

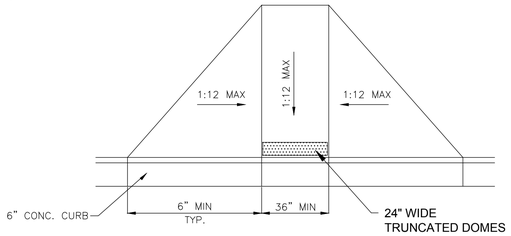
DRAWN BY: DAL
CHECKED BY: DAL
FILE: 20-015
DATE: November 2020

C002

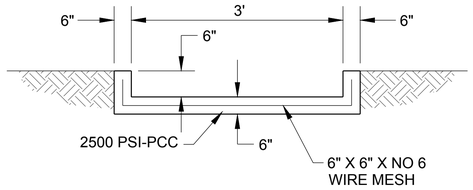


FOR PAVEMENT DESIGN SEE:
GEOTECHNICAL EVALUATION REPORT FOR THE LEARNING CENTER
WESTERN TECHNOLOGIES, INC
MARCH 5, 2020

ASPHALT PAVEMENT SECTION — NTS — A / C004



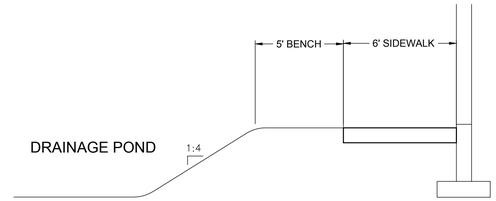
HANDICAP RAMP DETAIL - TYPE 2 — NTS — E / C004



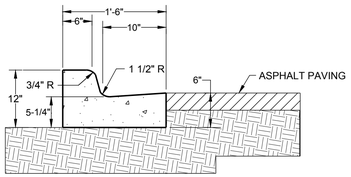
CONCRETE CHANNEL DETAIL — NTS — H / C004

CHANNEL SIZING:

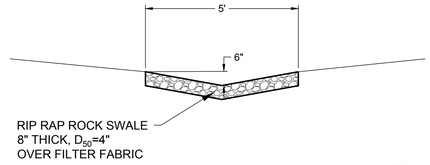
$Q=CLH^{3/2}$
Q= 1.49 cfs
H= 0.50 FT
C= 2.40
L= 1.75' USE 3.0'



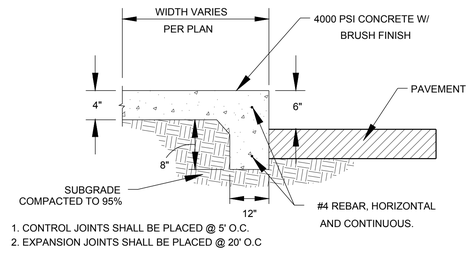
NORTH SIDEWALK SECTION — NTS — J / C004



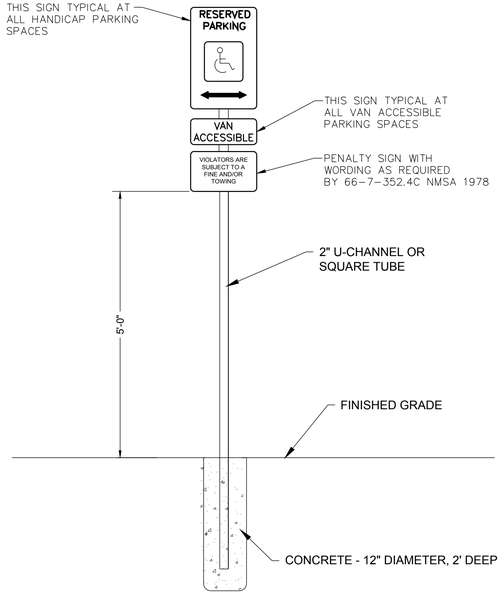
CONCRETE CURB AND GUTTER — NTS — B / C004



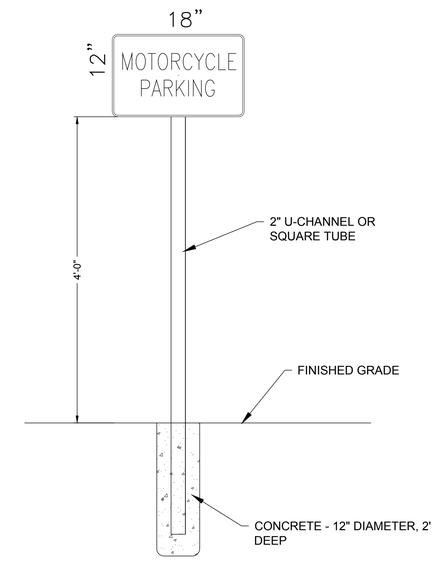
EROSION CONTROL PAD — NTS — K / C004



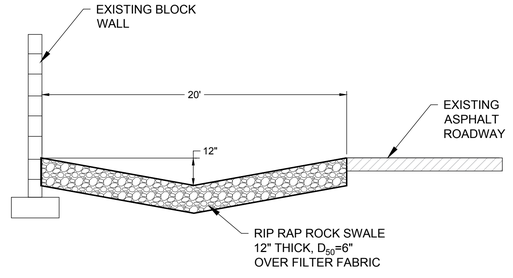
TURNDOWN SIDEWALK DETAIL — NTS — C / C004



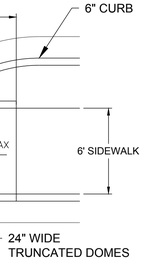
HC SIGN ASSEMBLY / BOLLARD DETAIL — NTS — F / C004



MOTORCYCLE SIGN DETAIL — NTS — G / C004



EROSION CONTROL PAD AT ROAD TERMINUS — NTS — K / C004



HANDICAP RAMP DETAIL - TYPE 1 — NTS — D / C004

City of Albuquerque
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THE LEARNING EXPERIENCE
ACADEMY OF
EARLY EDUCATION

THE LEARNING EXPERIENCE
SITE DETAILS

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