

CITY OF ALBUQUERQUE



Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

August 23, 2022

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

**Re: 4131 Coors Blvd NW
Request for Certificate of Occupancy - Permanent
Hydrology Final Inspection –Approved
Grading and Drainage Plan Stamp Date: 2/1/2021
Certification dated: 8/1/2022
Drainage File: G11D069E**

Dear Mr. Lorenz,

PO Box 1293

Based on the submittal received 8/1/2022 and inspection on 8/22/2022 this certification is approved for Permanent Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, you can contact me at 505-924-3695 or dggutierrez@cabq.gov.

Sincerely,

NM 87103

David Gutierrez, P.E.
Senior Engineer, Planning Dept.
Development Review Services

www.cabq.gov



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 #: G11-D069E
DRB#: NA EPC#: NA Work Order#: NA
Legal Description: Lot 9-B, Coors Pavilion
City Address: 4131 Coors BlvdNW

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 ADMIN SITE

IS THIS A RESUBMITTAL? Yes _____ No

DEPARTMENT _____ TRANSPORTATION HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- 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
- 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: August 01, 2022 By: Dennis A. Lorenz PE

COA STAFF: _____

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

SURVEYOR'S CERTIFICATE

I, CHRISTOPHER A. MEDINA, N.M.P.L.S. NO. 15702, DO HEREBY CERTIFY THAT THE AS-BUILT INFORMATION SHOWN AND THE ACTUAL SURVEY WHICH IT WAS DERIVED FROM WAS PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT THE INFORMATION SHOWN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Christopher A. Medina
CHRISTOPHER A. MEDINA, N.M.P.L.S. NO. 15702

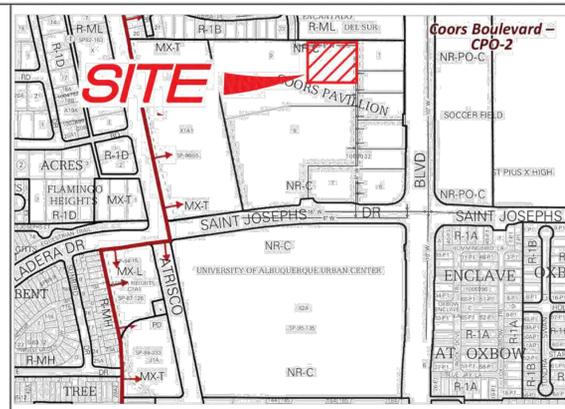
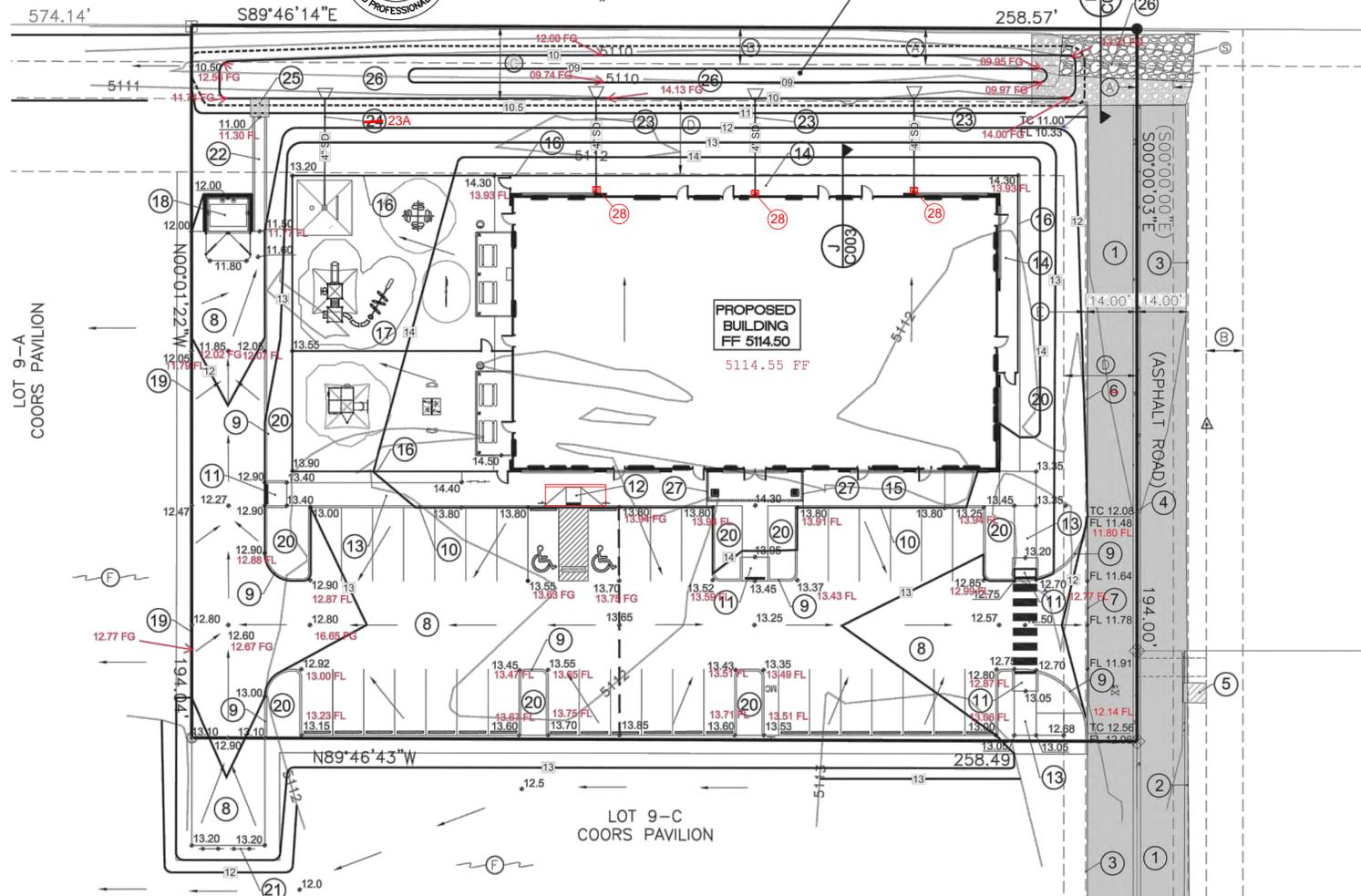
JUNE 3, 2022
DATE



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

STORM WATER
QUALITY POND
WSE=5110.50
VOL=2334 cf

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



DRAINAGE CERTIFICATION WITH SURVEY WORK BY PROFESSIONAL SURVEYOR PERMANENT 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 02-01-2021. The record information edited onto the original design document has been obtained by Christopher A. Medina, NMPLS. I further certify that I have personally visited the project site on 07-29-2022 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 permanent certificate of occupancy.

The record information presented herein 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
08/01/2022

LEGEND

ITEM	EXISTING	PROPOSED
PROPERTY LINE	---	---
EASEMENT	---	---
CURB AND GUTTER	---	---
6" CONCRETE CURB	---	---
RETAINING WALL	---	---
SPOT ELEVATION (AS-BUILT)	✕ 75.5	01.5 01.70
CONTOUR W/ ELEVATION	---5800---	---5800---
DIRECTION OF FLOW	---	---
CONCRETE	[Pattern]	[Pattern]
RIP RAP ROCK	[Pattern]	[Pattern]

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. MEDINA, HUGG NMPLS 15702
DATE OF SURVEY: JULY 2020

PROJECT BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE
STATION No. "B-G11 2004", HAVING AN ELEVATION OF
50116.009 FEET, NAVD 1988

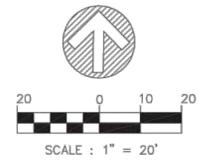
- DRAINAGE PLAN NOTES**
- LDC recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
 - This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration 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.

- KEYED NOTES**
- EXISTING ASPHALT PAVEMENT
 - EXISTING CONCRETE CURB AND GUTTER.
 - EXISTING ASPHALT CURB.
 - EXISTING CONCRETE VALLEY GUTTER.
 - EXISTING SIDEWALK CULVERT.
 - REMOVE & DISPOSE EXISTING ASPHALT CURB. CONSTRUCT DEPRESSED MEDIAN CURB & GUTTER. SEE COA STD DWG 2415B.
 - REMOVE & DISPOSE EXISTING ASPHALT CURB.
 - CONSTRUCT ASPHALT PAVEMENT. SEE DETAIL A/C004.
 - CONSTRUCT 6-INCH CONCRETE CURB. SEE DETAIL B/C004.
 - CONSTRUCT TURNDOWN SIDEWALK. SEE DETAIL C/C004.
 - CONSTRUCT HANDICAP RAMP TYPE-1. SEE DETAIL D/C004.
 - CONSTRUCT HANDICAP RAMP TYPE-2. SEE DETAIL E/C004.
 - CONSTRUCT 6" PEDESTRIAN LINK.
 - CONSTRUCT 8" CONCRETE SIDEWALK.
 - CONSTRUCT CONCRETE SIDEWALK.
 - CONSTRUCT PVC FENCE.
 - CONSTRUCT PLAYGROUND.
 - CONSTRUCT NEW REFUSE ENCLOSURE.
 - EDGE OF PAVEMENT. NO CURB
 - NEW LANDSCAPING. SEE LANDSCAPE PLAN.
 - INSTALL 2 TYPE II BARRICADES PER COA STD DWG 2803 AT TERMINUS OF ACCESS DRIVE.
 - CONSTRUCT CONCRETE DRAINAGE CHANNEL. SEE DETAIL H/C004.
 - INSTALL 4" PVC ROOF DRAINS. EXTEND TO POND BOTTOM WITH END SECTION OR EQUIVALENT.
 - INSTALL 4" PVC FOUNTAIN DRAINS. EXTEND TO POND BOTTOM WITH END SECTION OR EQUIVALENT.
 - INSTALL 5' X 5' RIP RAP EROSION CONTROL PAD. SEE DETAIL K/C004.
 - 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.
 - LANDSCAPED STORMWATER QUALITY POND. SEE LANDSCAPE PLAN.
 - INSTALL 4" PVC ROOF DRAIN. PENETRATE THRU CURB PER COA STD DWG 2235.
 - 12' X 12" STORM INLET AT ROOF DRAIN.

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.

- 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.



- REVISIONS**
- UPDATED PLAN PER APPROVED AMENDED DMP 02-01-2021



THE LEARNING EXPERIENCE GRADING & DRAINAGE PLAN

LORENZ
Dennis A. Lorenz, NMPE 9647
2501 Rio Grande Blvd NW, Suite A
Albuquerque, New Mexico 87104
Ph: 505-855-6088 Fax: 505-242-6655

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

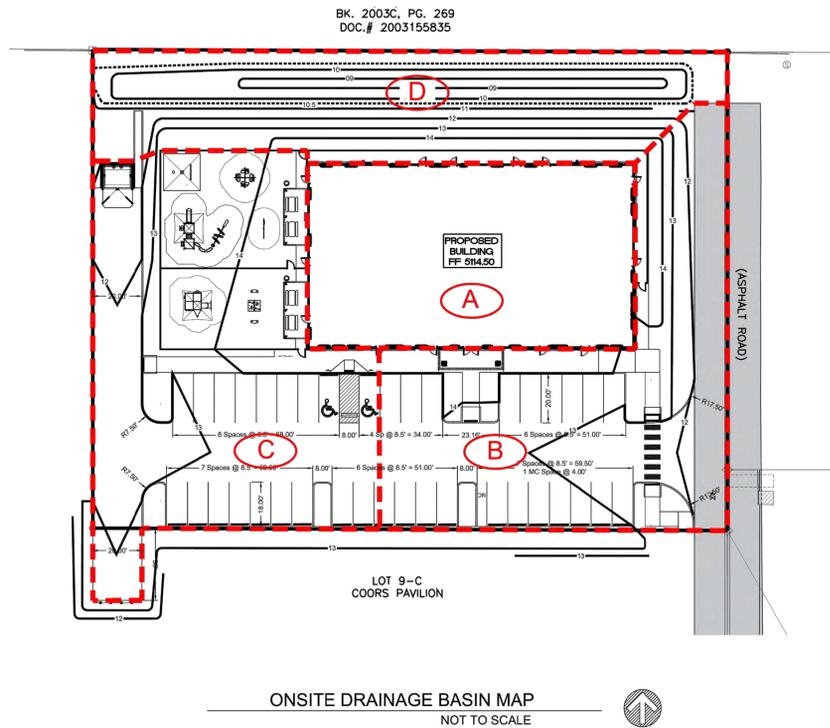
The developed 100 year 6 hour peak discharge from the site is estimated at 4.35 cfs, which is less than the 4.7 cfs allowed by the DMP. First flush storage will be attained within the Basin 'D' water quality pond and landscaped areas. The existing storm water quality pond will be expanded to provide 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 ₆ HOUR	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

**DRAINAGE CERTIFICATION WITH SURVEY WORK BY PROFESSIONAL SURVEYOR
PERMANENT CERTIFICATE OF OCCUPANCY**

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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



REVISIONS

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

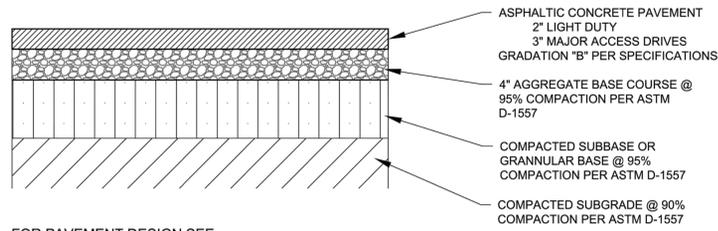


**THE LEARNING EXPERIENCE
GRADING & DRAINAGE PLAN**



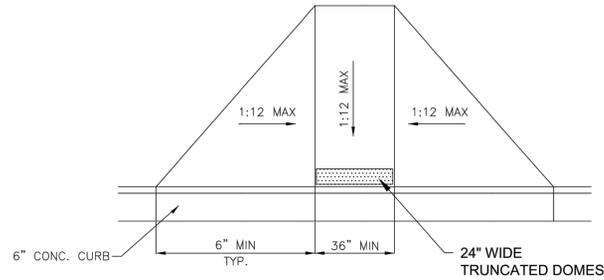
LORENZ
DESIGN & CONSULTING, LLC
Civil Engineering | Construction Management
2501 Rio Grande Blvd NW, Suite A
Albuquerque, New Mexico 87104
Ph: 505-888-6088 Fax: 505-242-6655

DRAWN BY: DAL DATE: November 2020
CHECKED BY: DAL
FILE: 20-015 **C002**

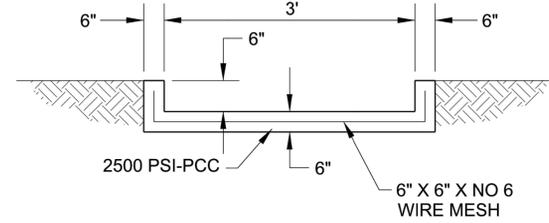


FOR PAVEMENT DESIGN SEE:
 GEOTECHNICAL EVALUATION REPORT FOR THE LEARNING CENTER
 WESTERN TECHNOLOGIES, INC
 MARCH 5, 2020

ASPHALT PAVEMENT SECTION
 NTS **A**
 C004

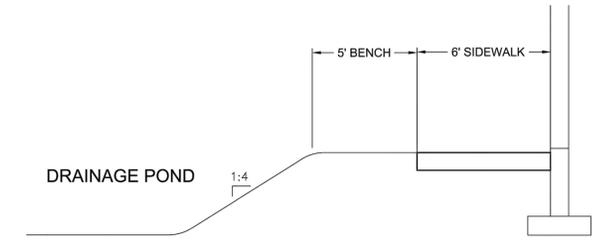


HANDICAP RAMP DETAIL - TYPE 2
 NTS **E**
 C004
NOT USED

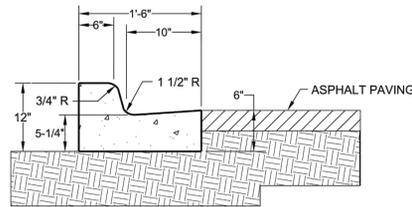


CONCRETE CHANNEL DETAIL
 NTS **H**
 C004

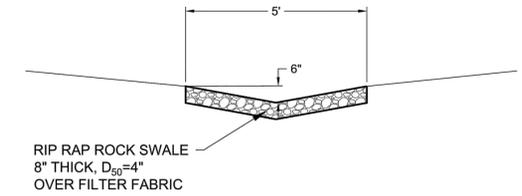
CHANNEL SIZING:
 $Q = CLH^{3/2}$
 $Q = 1.49 \text{ cfs}$
 $H = 0.50 \text{ FT}$
 $C = 2.40$
 $L = 1.75' \text{ USE } 3.0'$



NORTH SIDEWALK SECTION
 NTS **J**
 C004

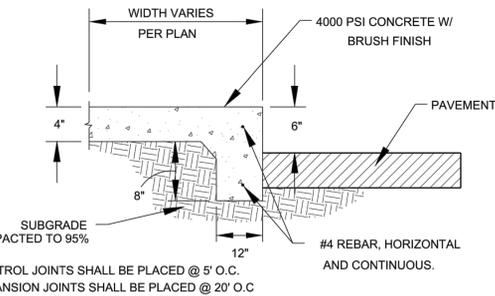


CONCRETE CURB AND GUTTER
 NTS **B**
 C004



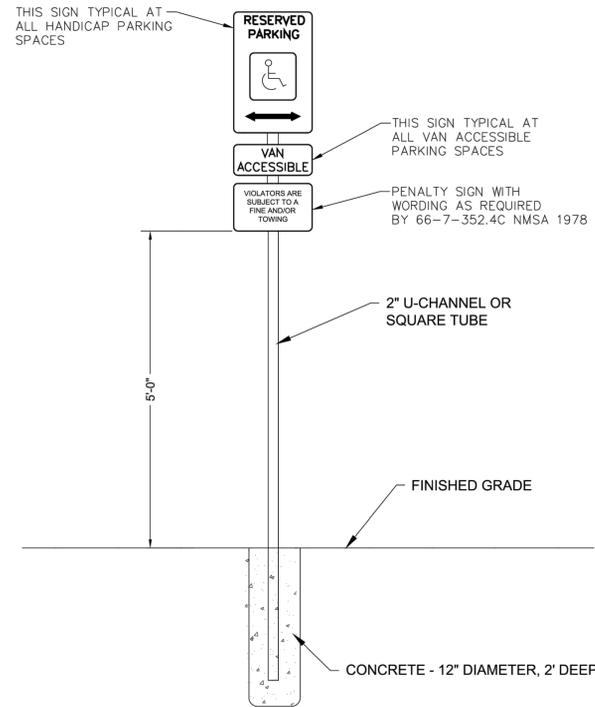
EROSION CONTROL PAD
 NTS **K**
 C004

RIP RAP ROCK SWALE
 8" THICK, $D_{50} = 4"$
 OVER FILTER FABRIC

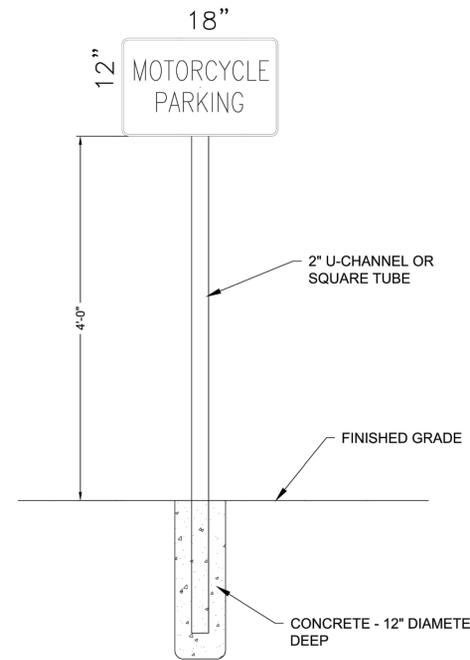


TURNDOWN SIDEWALK DETAIL
 NTS **C**
 C004

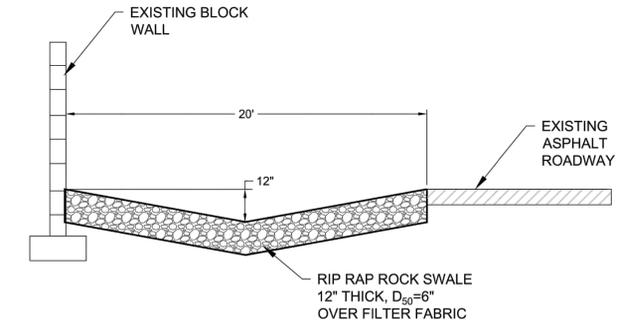
1. CONTROL JOINTS SHALL BE PLACED @ 5' O.C.
 2. EXPANSION JOINTS SHALL BE PLACED @ 20' O.C.



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



MOTORCYCLE SIGN DETAIL
 NTS **G**
 C004



EROSION CONTROL PAD
 AT ROAD TERMINUS
 NTS **K**
 C004



THE LEARNING EXPERIENCE
 SITE DETAILS

LORENZ
 DESIGN & CONSULTING, LLC
 Civil Engineering | Construction Management

2501 Rio Grande Blvd NW, Suite A
 Albuquerque, New Mexico 87104
 Ph: 505-356-0099 Fax: 505-242-6655

DRAWN BY: DAL DATE: November 2020
 CHECKED BY: DAL
 FILE: 20-015 **C004**

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