

# CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

June 2, 2017

Glenn Broughton  
Bohannon Huston, Inc.  
7500 Jefferson St NE  
Albuquerque, NM 87109

**RE: Smiles for Kids Dental Office – Phase 2**  
**Conceptual Grading and Drainage Plan**  
**Stamp Date: 6/1/17**  
**Hydrology File: C12D055**

Dear Mr. Broughton:

Based upon the information provided in your re-submittal received 6/1/2017, the Conceptual Grading and Drainage Plan **is not** approved for Site Plan for Building Permit. The following comments need to be addressed for approval of the above referenced project:

1. Please place a note **“Not for Construction”** on C001, C002, and C100.
2. On Sheet C001. Under the First Flush Calculations, the volume provided shows 1310 CF and the labeled volume of the pond is 1240 CF. Please correct whichever one is incorrect.
3. On Sheet C100. It appears that the proposed bike lane should continue to the corner of Eagle Ranch and Nunzio. This would mean that the pond will have to be shifted over a little bit and the valley cutter across Nunzio Avenue will have to be replaced to reflect the new bike lane. Please get the bike lane layout approved by transportation before resubmitting. Also please do not forget to place the valley gutter on the infrastructure list.

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

Sincerely,

*Renee C. Brissette*

Reneé C. Brissette, P.E.  
Senior Engineer, Hydrology  
Planning Department

June 1, 2017

Ms. Renee C. Brissette, PE  
Senior Engineer, Hydrology  
City of Albuquerque  
Planning Department  
600 2<sup>nd</sup> Street NW  
Albuquerque, NM 87103

Re: Tract 10-A-1 (Smile for kids Phase 2) / Hydrology File C12D055

Dear Ms. Brissette:

Enclosed for your review and comment is a re-submittal of the Tract 10-A-1 (Smiles for Kids Phase 2). Please see the responses to your comments dated May 8, 2017 below: Note that the comment response number corresponds to the number on your review letter. A copy of the review letter is attached for reference.

1. Tract G has been removed from the drainage management plan. Note that the undeveloped lot currently drains onto Tract 10-A-1. This is not accounted for in this Drainage Management Plan. When this tract is developed, drainage will be conveyed north across Tract F as required by the Fountain Hills Drainage Report.
2. A drainage easement will be provided on Tract 10-A-1 for the benefit of Tract H. The easement will be recorded prior to final sign off of the Site Plan for Building Permit.
3. Legal description has been added.
4. The flood plain note is included in the first paragraph of existing conditions narrative.
5. The project bench mark has been added to the plan. This is based on NAD\_83 and NAVD88.
6. The applicable drainage report for this tract has been revised.
7. The land treatments for Basin 2 have been revised to match the land treatments on the approved DMP for Tract H.
8. Q100 for Basin 4 has been added to the DMP. Note that this basin ID has been revised to Basin 3.
9. The reference to Nunzio 60' R/W has been deleted. The recording information for the access easement has been added to the sheet.
10. The weir capacity calculation has been added. See Sidewalk Culvert Capacity Table.
11. The private storm drains are all designed for gravity flow. A storm drain pipe table have been added to demonstrate that the storm drain pipes are adequately sized.
12. Top of curb and flow line elevations have been added.
13. Top of curb and flow line elevations have been added.

Engineering ▲

Spatial Data ▲

Advanced Technologies ▲



Ms. Renee C. Brissette, P.E.  
City of Albuquerque  
June 1, 2017  
Page 2

14. The Phase 1 storm drain sump pump discharge line connection has been added. This discharge line will connect to a new inlet on Tract H.
15. The Phase 2 storm drain sump pump discharge line connection has been added. This discharge line will connect to the Phase 1 line and new inlet on Tract H.
16. The cross sections along Nunzio and Eagle Ranch have been added.
17. The paved asphalt trail along Nunzio and concrete sidewalk along Eagle Ranch have been added.
18. The sidewalk adjacent to Tract H were financially guaranteed by the Fountain Hills project. Construction of those sidewalks are the responsibility of the Fountain Hills Developer.
19. We have discussed this with Transportation. The conceptual pond design has been modified based on widening of Eagle Ranch for a right turn lane and bike lane.
20. Sheet C-002, Eagle Ranch Capacity Calculations have been added to the submittal package.

We are requesting Hydrology approval in support of Site Plan for Building Permit approval. Please feel free to contact me at 823-1000 with questions or comments.

Sincerely,



Glenn Broughton, PE  
Senior Project Manager  
Community Development and Planning

GSB/jcm  
Enclosures

# CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

May 8, 2017

Gleen Broughton  
Bohannon Huston, Inc.  
7500 Jefferson St NE  
Albuquerque, NM 87109

**RE: Smiles for Kids Dental Office – Phase 2  
Conceptual Grading and Drainage Plan  
Stamp Date: 4/26/17  
Hydrology File: C12D055**

Dear Mr. Broughton:

Based upon the information provided in your submittal received 4/26/2017, the Conceptual Grading and Drainage Plan is **not** approved for Site Plan for Building Permit. The following comments need to be addressed for approval of the above referenced project:

PO Box 1293

Albuquerque

New Mexico 87103

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

1. According to "Fountain Hills DMP", Tract G is not supposed to drain thru Tract H and Lots 10A-1 to Eagle Ranch Road so the increased flow from Tract G will not be allowed at Eagle Ranch Road. The flow from Tract G was not anticipated in the "North Coors DMP Revision" and again it was not anticipated in the "Grandma's Pond" drainage design.
2. Please provide a Private Facility Drainage Covenant and Reservation of Private Drainage Easement. This covenant and easement should be between Lot 10A-1 and Tracts G & H and please add a note of the recorded covenant and easement on either Sheet C001 or C100.
3. On Sheet C001. Please provide the legal description of the property.
4. On Sheet C001. Please provide the flood plain note.
5. On Sheet C001. Please provide the benchmark information.
6. On Sheet C001. Under Existing Conditions, the drainage study for Fountain Hills is referenced. Even though Lots 10A-1 and Tract H are shown in the study, these lots are not in the same watershed basin as Fountain Hills. Please reference the drainage study which these sites are part of the watershed, "Proposed Tract 2B Detention Pond (North Coors DMP Revision) by Smith Engineering, 2003 (AMAFCA #353.04.05). The Allowable discharge for from the site is 4.094 cfs/ac.



# CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

7. On Sheet C001. Under Proposed Ultimate Development Conditions, for Basin 2 please verify that the area shown on the Phase 1 Site Plan listed as future building was included as land treatment D. Correct calculation if needed.
8. On Sheet C001. Please show the  $Q_{100}$  for Basin 4 to be discharge on to Nunzion Avenue.
9. On Sheet C001. Please remove Nunzio Avenue (60' R.O.W.) from the drive to Smiles for Kids. Please then label this as a private drive with an access agreement for Lot 10-A-1 and Tract H.
10. On Sheet C001. Please provide the weir calculation for the 2 foot sideways culverts with the total Q for the four culverts.
11. On Sheet C001. Please provide HGL Calculations for the 18-inch pipe system.
12. On Sheet C100. Please provide the existing TC & FL at the corners of the Phase 1 parking lot in a 70 foot radius around the proposed inlet. I would like to insure the drainage pattern for the proposed inlet.
13. On Sheet C100. Along the existing access drive, please provide the existing TC & FL at the proposed curb return for the parking lot entrances.
14. On Sheet C100. There is an existing inlet for the Phase 1 underground parking. This inlet has a sump pump and a pvc discharge pipe that goes into the existing concrete rundown. See photo below. The Phase 2 plan does not show that there is a connection to the proposed storm sewer system. Please provide the connection.

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# CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

15. On Sheet C100. The Phase 2 underground parking has a proposed inlet without a connection to the proposed storm sewer system. Please provide the connection.
16. On Sheet C100. Please provide two cross sections of the proposed retention pond. One along Eagle Ranch Road and the other at the proposed sidewalk culverts on Nunzio Avenue.
17. On Sheet C100. Lot 10 A-1 and Tracts G & H are not included in the Fountain Hill financial deferment of the sidewalks. Therefore please show the sidewalk along Nuzio Avenue and Eagle Ranch Road.
18. Phase 1 plans showed a proposed sidewalk along Eagle Ranch Road and Paseo del Norte. However, the sidewalks were never built. Please include the sidewalks in Phase 2.
19. Please note that according to the 2040 Metropolitan Transportation Plan, Eagle Ranch Road may be widened for a bike lane. Please check with Transportation and anticipate this in the pond design.
20. Please show the capacity calculations on Eagle Ranch Road right below the pond's outfall for the 10 year and 100 year storm event.

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

Sincerely,

*Renee C. Brissette*

Reneé C. Brissette, P.E.  
Senior Engineer, Hydrology  
Planning Department




Date Submitted: \_\_\_\_\_  
Date Site Plan Approved: \_\_\_\_\_  
Date Preliminary Plat Approved: \_\_\_\_\_  
Date Preliminary Plat Expires: \_\_\_\_\_  
DRB Project No. \_\_\_\_\_

## INFRASTRUCTURE LIST

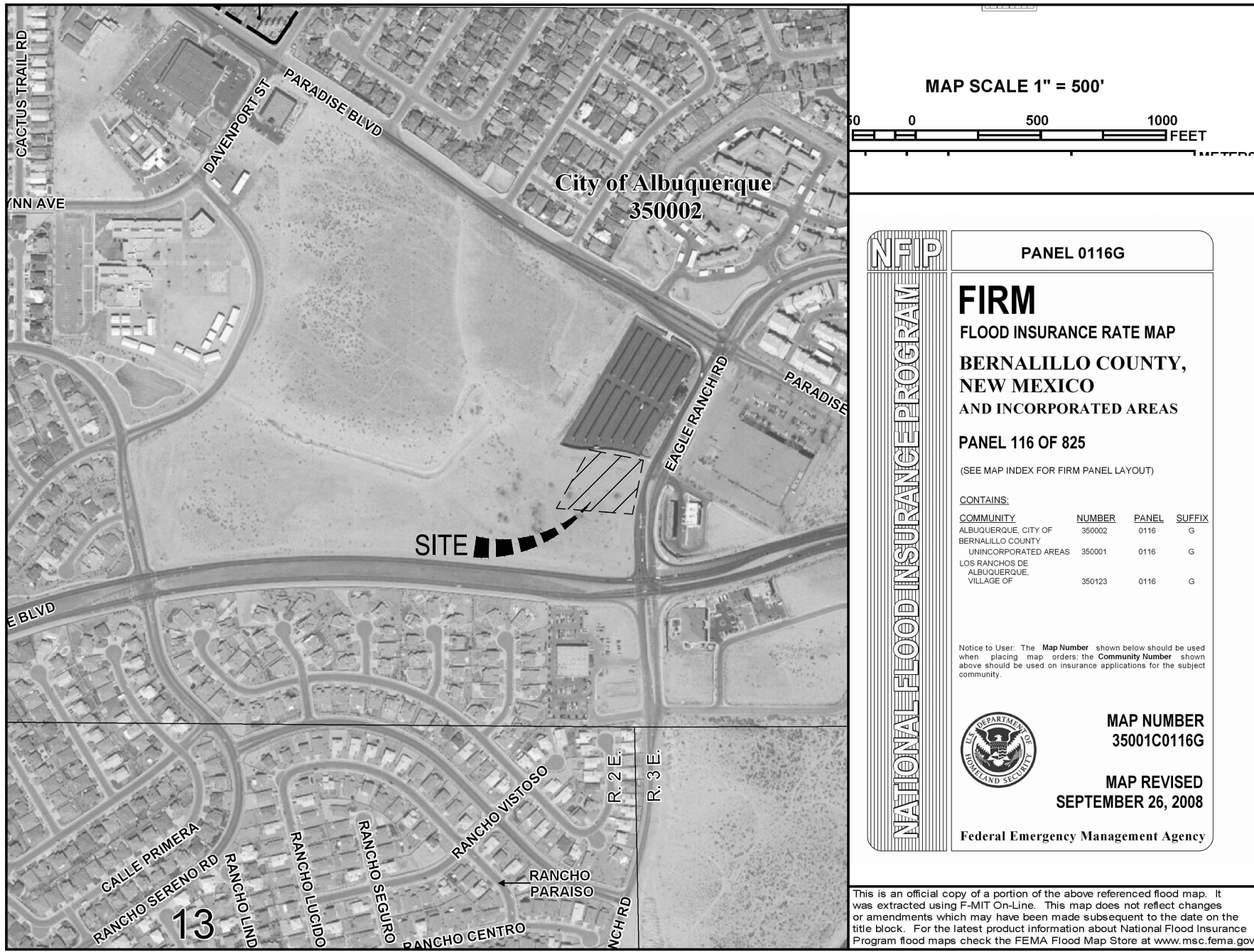
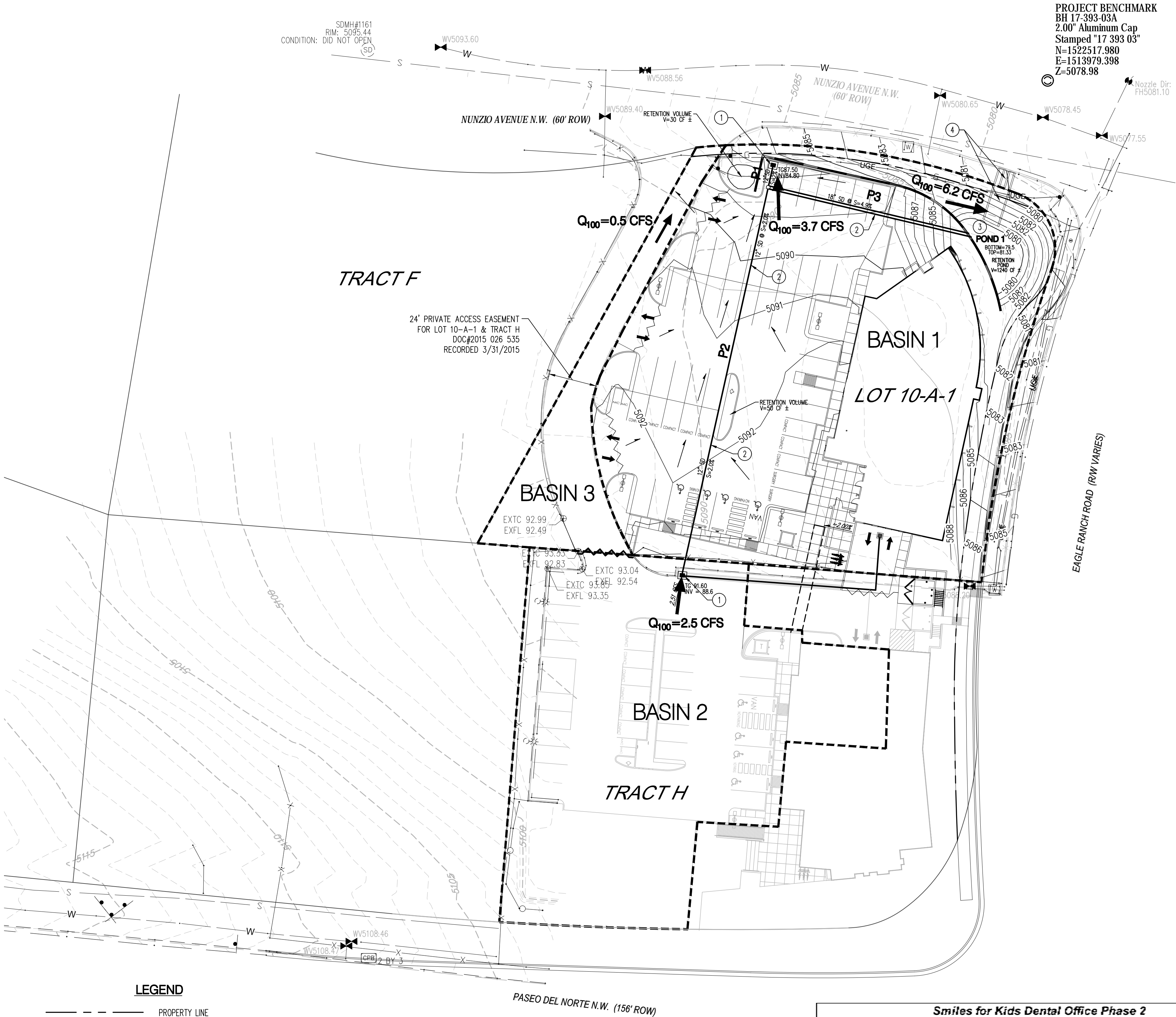
SMILE FOR KIDS  
LOT 10-A-1  
(TRACT ALBUQUERQUE WES UNIT 1)

SIA Sequence #	COA DRC Project #	Size	Type of Improvement	Location	From	To	Private Inspector	City Inspector	City Cnst Engineer
<u>PUBLIC ROADWAY IMPROVEMENTS - OFFSITE PHASE 2 (DEFERRED)</u>									
		12'-14'	ARTERIAL PAVEMENT W/ PCC CURB & GUTTER 6' WIDE PCC SIDEWALK ON THE WESTSIDE	EAGLE RANCH ROAD	NUNZIO AVENUE	SOUTH BOUNDARY	<u>  /  </u>	<u>  /  </u>	<u>  /  </u>
		10'	ASPHALT TRAIL	NUNZIO AVENUE	WEST BOUNDARY	EAGLE RANCH NW ROAD	<u>  /  </u>	<u>  /  </u>	<u>  /  </u>

GLENN BROUGHTON, P.E. PREPARED BY: PRINT NAME	DRB CHAIR	DATE	PARKS & RECREATION	DATE
BOHANNAN HUSTON INC. FIRM: 	TRANSPORTATION DEVELOPMENT	DATE	AMAFCA	DATE
SIGNATURE	ABCWUA	DATE	CITY ENGINEER	DATE
MAXIMUM TIME ALLOW TO CONSTRUCT IMPROVEMENTS WITHOUT A DRB EXTENSION <div style="border: 1px solid black; height: 20px; width: 100px;"></div>		DATE		DATE

REVISION	DATE	DRC CHAIR	USER	DEPARTMENT	AGENT/OWNER

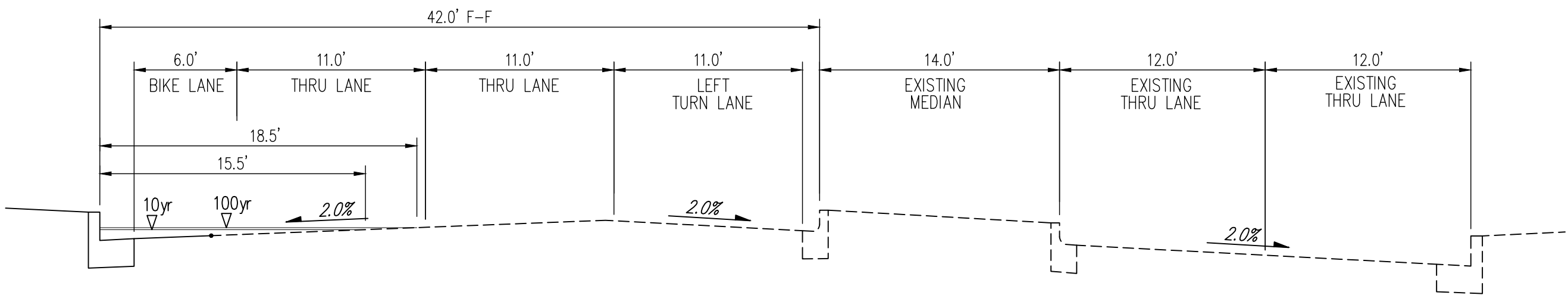




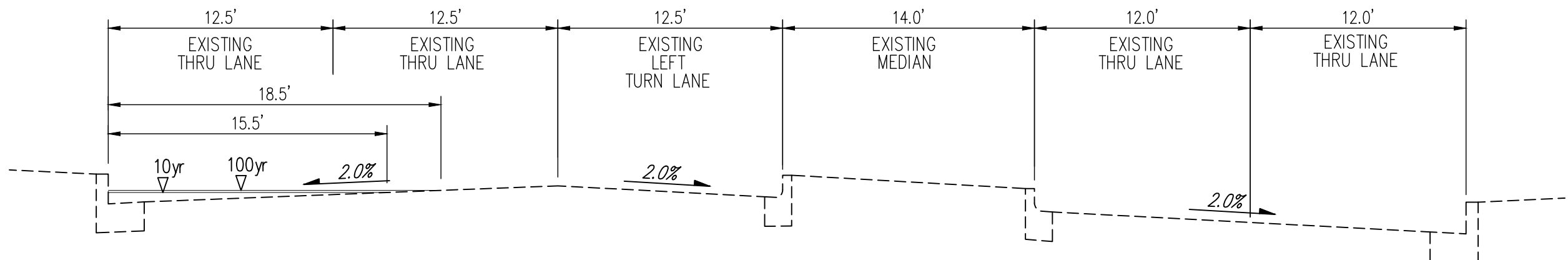




Smiles for Kids Dental Office Phase 2 - Offsite Drainage Basin											
Proposed Ultimate Development Conditions Basin Data Table											
This table is based on the DPM Section 22.2, Zone: 1											
Basin	Area	Area	Land Treatment Percentages				Q <sub>(100yr)</sub>	Q <sub>(100yr-6hr)</sub>	WTE	V <sub>(100yr-6hr)</sub>	V <sub>(100yr-10day)</sub>
ID	(SQ. FT)	(AC.)	A	B	C	D	(cfs/ac.)	(CFS)	(inches)	(CF)	CF
Proposed											
1	180627	4.15	0.0%	0.0%	27.0%	73.0%	3.97	16.4	1.71	25670	41823
TOTAL	180627	4.15						16.4			41823



SECTION A - EAGLE RANCH ROAD - PROPOSED CROSS SECTION  
NTS



SECTION A - EAGLE RANCH ROAD - EXISTING CROSS SECTION  
NTS

INTRODUCTION:

THE SMILES FOR KIDS PHASE 2 PROJECT IS LOCATED ON THE SOUTHWEST CORNER AT THE INTERSECTION OF NUNZIO AVE NW AND EAGLE RANCH RD. THE PURPOSE OF THIS SUBMITTAL IS TO ANALYZE THE CAPACITY OF EAGLE RANCH ROAD IMMEDIATELY DOWNSTREAM OF THE PROJECT. THIS ANALYSIS IS BEING PERFORMED IN SUPPORT OF SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.

METHODOLOGY:

THE HYDROLOGIC ANALYSIS PROVIDED WITH THIS DRAINAGE MANAGEMENT PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 22.2 OF THE DPM. THE SITE IS LOCATED WEST OF THE RIO GRANDE WITHIN PRECIPITATION ZONE 1. LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ON THE DEVELOPED CONDITIONS AS SUMMARIZED IN THE "PROPOSED BASIN DATA TABLE" (THIS SHEET).

PROPOSED CONDITIONS:

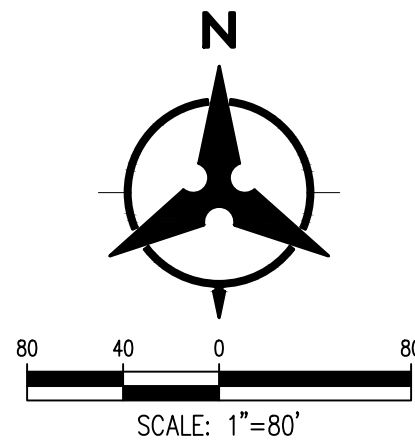
THE PEAK FLOW RATE CALCULATIONS ARE BASED ON FULLY DEVELOPED CONDITIONS AND APPROVED DRAINAGE REPORTS. PEAK FLOW FOR THE 10 AND 100 YEAR STORMS WERE CALCULATED THE DRAINAGE BASIN INCLUDES THE NORTH LANES OF PASEO DEL NORTE, WEST HALF OF EAGLE RANCH, TRACT H AND LOT 10-A-1. THE MAJORITY OF THE FULLY DEVELOPED FIRST BAPTIST CHURCH SITE DISCHARGES TO A PUBLIC STORM DRAIN IN PASEO DEL NORTE. THE NORTHEASTERN PORTION OF THE SITE (BASIN 2-4) DRAINS NORTHEAST AND ULTIMATELY TO THE DETENTION POND NORTH OF NUNZIO.

THE CAPACITY OF EAGLE RANCH WAS CALCULATED USING MANNINGS EQUATION. IN THE 10 YEAR STORM THE DEPTH OF FLOW IS 0.4 FEET AND SPREAD IS 18.5 FEET. THE SPREAD IN THE 10 YEAR STORM ENDOACHES INTO THE SECOND THROUGH LANE BY APPROXIMATELY 4 FEET. THIS TECHNICALLY DOES NOT MEET THE CRITERIA SPECIFIED IN THE DPM, BUT LEAVES A 6.5 FOOT DRIVING LANE. THE DEPTH OF FLOW IN THE 100 YEAR STORM IS 0.46 FEET AND IS CONTAINED WITHIN THE ROADWAY.

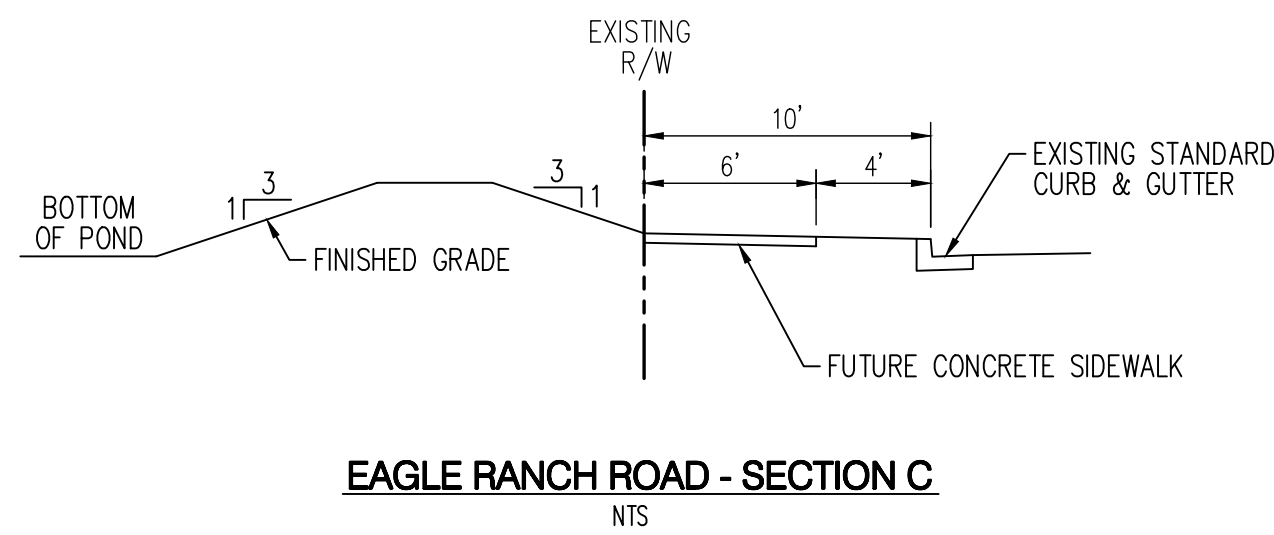
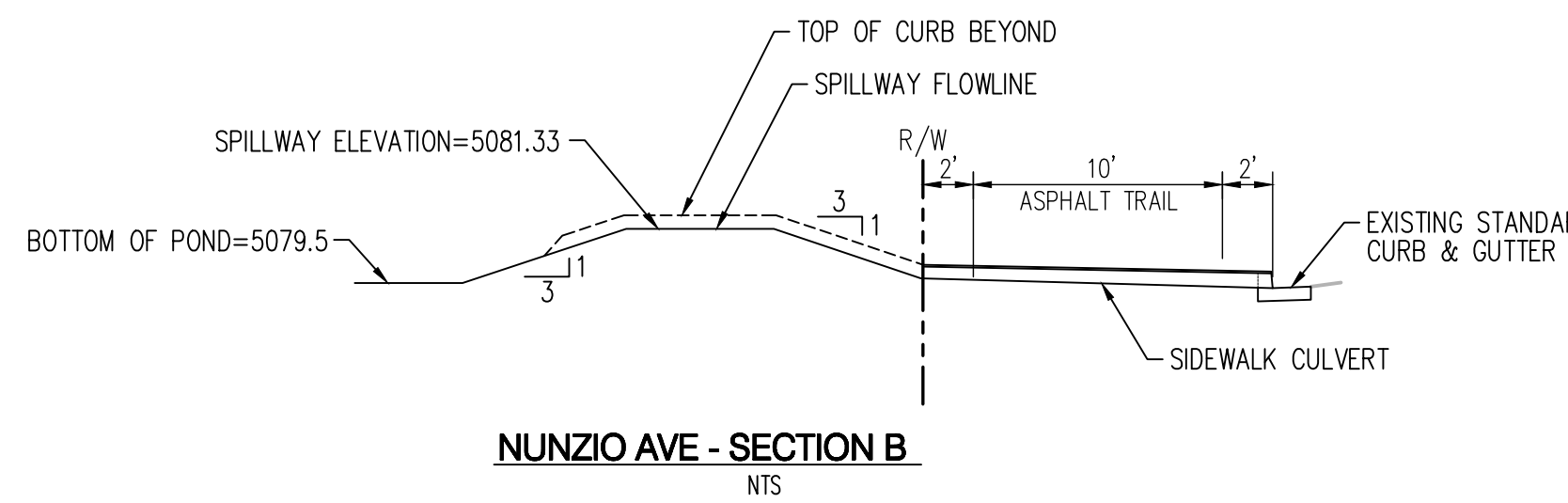
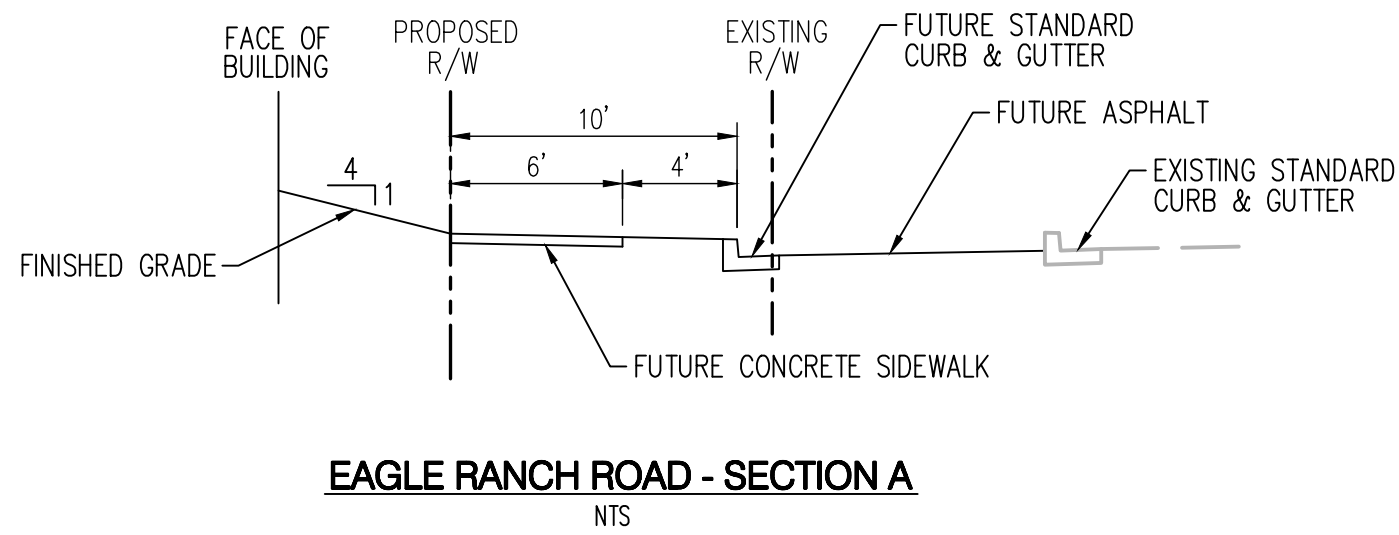
CONCLUSION:

THE PEAK DISCHARGE FROM THE SITE IS 3.7 CFS WHICH IS LESS THAN THE ALLOWABLE PEAK DISCHARGE RATE, THEREFORE WE ARE IN CONFORMANCE WITH CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND REQUEST SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.

EAGLE RANCH CAPACITY CALCULATION											
MANNING'S N=0.016			SLOPE = 2.7%								
POINT	DIST	ELEV									
1	0	0.67									
2	0	0									
3	2	0.13									
4	25	0.59									
5	37.5	0.34									
6	37.5	0.84									
WSL	DEPTH	FLOW	FLOW	WETTED	FLOW	TOP WIDTH	TOTAL				
(FT)	INC	AREA	RATE	PER	VEL	(FT)	ENERGY				
	(FT)	SQ.FT.	(CFS)	(FT)	(FPS)	(FT)	(FT)				
0.02	0.02	0.00	0.0	0.33	0.7	0.3	0.03				
0.04	0.04	0.01	0.0	0.66	1.1	0.6	0.06				
0.06	0.06	0.03	0.0	0.99	1.4	0.9	0.09				
0.08	0.08	0.05	0.1	1.31	1.7	1.2	0.13				
0.1	0.1	0.08	0.2	1.64	2.0	1.5	0.16				
0.12	0.12	0.11	0.2	1.97	2.2	1.8	0.20				
0.14	0.14	0.15	0.3	2.64	2.3	2.5	0.22				
0.16	0.16	0.21	0.5	3.67	2.3	3.5	0.24				
0.18	0.18	0.29	0.7	4.69	2.4	4.5	0.27				
0.2	0.2	0.39	1.0	5.71	2.6	5.5	0.30				
0.22	0.22	0.51	1.4	6.73	2.7	6.5	0.34				
0.24	0.24	0.65	1.9	7.75	2.9	7.5	0.37				
0.26	0.26	0.81	2.5	8.77	3.1	8.5	0.41				
0.28	0.28	0.99	3.3	9.79	3.3	9.5	0.45				
0.3	0.3	1.19	4.2	10.81	3.5	10.5	0.49				
0.32	0.32	1.41	5.2	11.83	3.7	11.5	0.53				
0.34	0.34	1.65	6.4	12.85	3.9	12.5	0.58				
0.36	0.36	1.92	7.5	14.89	3.9	13.5	0.60				
0.38	0.38	2.23	8.8	16.93	4.0	14.5	0.62				
0.4	0.4	2.58	10.4	18.97	4.0	15.5	0.65				
0.42	0.42	2.97	12.3	21.01	4.1	16.5	0.69				
0.44	0.44	3.40	14.5	23.05	4.3	17.5	0.72				
0.46	0.46	3.87	17.0	25.09	4.4	18.5	0.76				
0.48	0.48	4.38	19.8	27.13	4.5	19.5	0.80				
0.5	0.5	4.93	23.0	29.17	4.7	20.5	0.84				
0.52	0.52	5.52	26.6	31.21	4.8	21.5	0.88				
0.54	0.54	6.15	30.5	33.25	5.0	22.5	0.92				
0.56	0.56	6.82	34.8	35.29	5.1	23.5	0.97				
0.58	0.58	7.53	39.5	37.33	5.3	24.5	1.01				
0.6	0.6	8.28	45.4	38.37	5.5	37.5	1.07				
0.62	0.62	9.03	52.5	38.41	5.8	37.5	1.15				
0.64	0.64	9.78	59.9	38.45	6.1	37.5	1.22				
0.66	0.66	10.53	67.7	38.49	6.4	37.5	1.30				

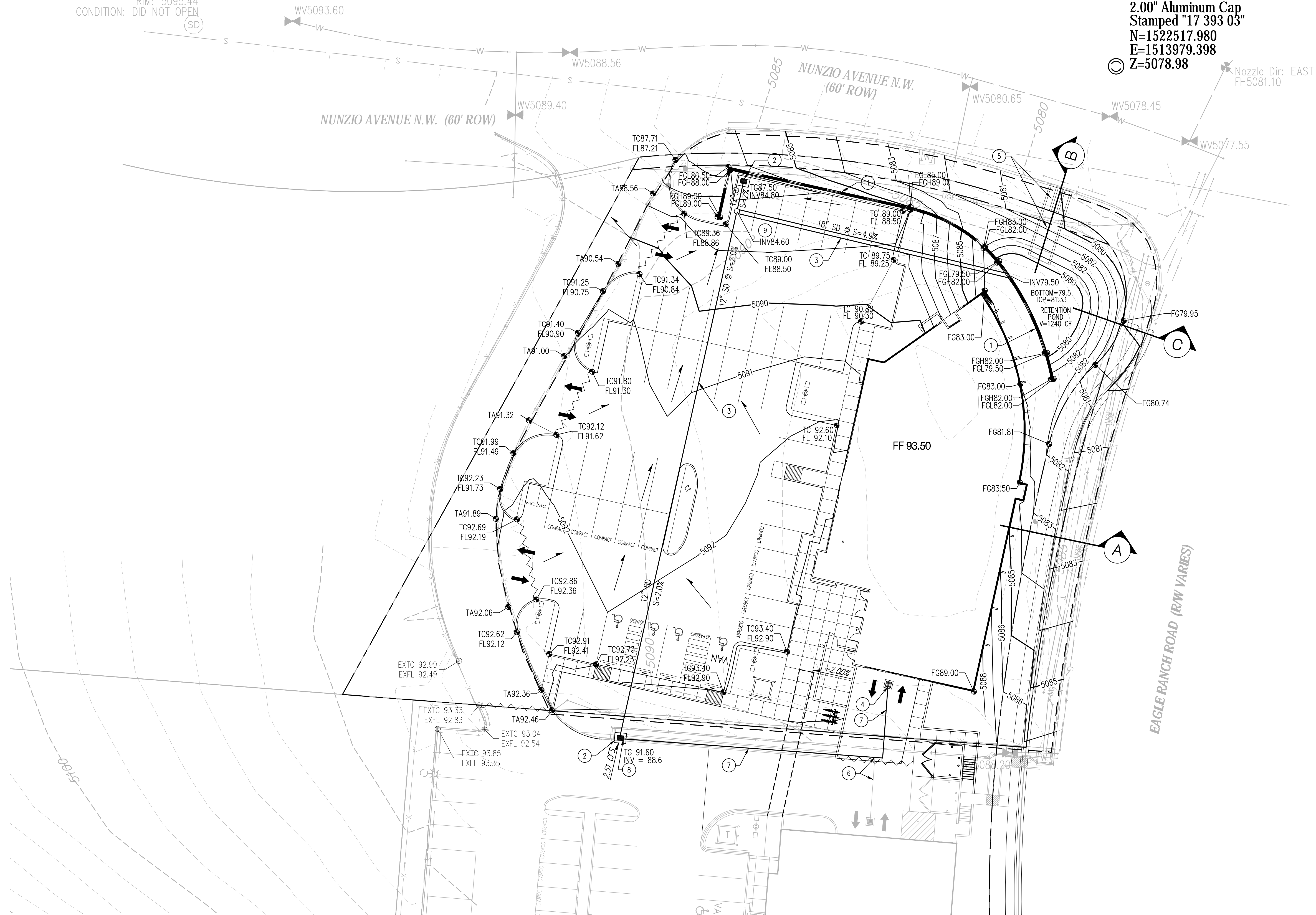






**PROJECT BENCHMARK**  
BH 17-393-03A  
2.00" Aluminum Cap  
Stamped "17 393 03"  
N=1522517.980  
E=1513979.398  
Z=5078.98

SDMH#1161  
RIM: 5095.44  
CONDITION: DID NOT OPEN  
(SD)

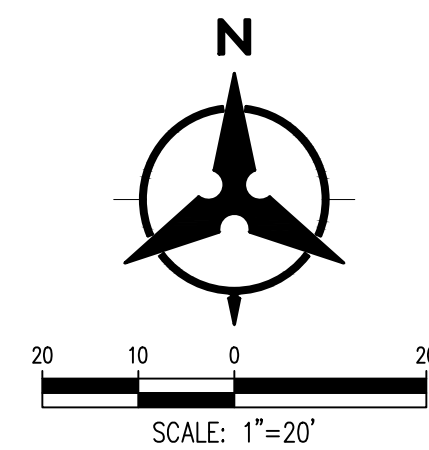


### GRADING KEYNOTES

1. PROPOSED RETAINING WALL.
2. PROPOSED STORM DRAIN INLET.
3. PROPOSED STORM DRAIN LINE, SEE PLAN FOR SIZE & SLOPE.
4. PROPOSED STORM WATER SUMP PUMP.
5. CONCRETE SPILLWAY WITH 3-24" WIDE SIDEWALK CULVERTS.
6. EXISTING SUMP PUMP DISCHARGE LINE. CONNECT TO PHASE 2 SUMP PUMP DISCHARGE LINE.
7. PHASE 2 SUMP PUMP DISCHARGE LINE.
8. CONNECT SUMP PUMP DISCHARGE LINE TO PROPOSED INLET.
9. DRAIN BASIN WITH SOLID COVER.

### GRADING LEGEND

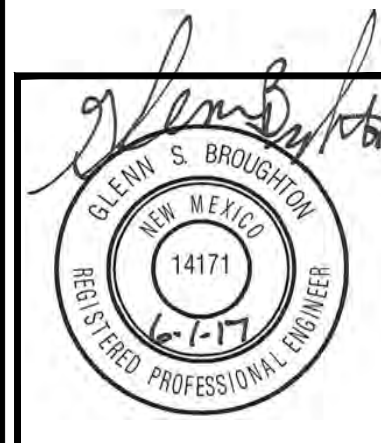
--- PROJECT LIMITS OF GRADING	~ 2.0% ~	DIRECTION OF FLOW
- - - 5025 - - - EXISTING INDEX CONTOUR	~~~~~	WATER BLOCK/GRADE BREAK
- - - 5024 - - - EXISTING INTERMEDIATE CONTOUR	-----	PROPOSED STORM DRAIN LINE
⊕ 25.25 EXISTING GROUND SPOT ELEVATION	⊕	PROPOSED STORM DRAIN INLET
— 5025 — PROPOSED INDEX CONTOUR	■	PROPOSED RETAINING WALL
— 5024 — PROPOSED INTERMEDIATE CONTOUR		
PROPOSED FINISHED GRADE SPOT ELEVATION TC=TOP OF CURB, FL=FLOW LINE, FG=FINISHED GRADE TS=TOP OF SIDEWALK TG=TOP OF GRATE, FGH=FINISH GROUND HIGH, FGL=FINISH GROUND LOW EXFL=EXISTING FLOW LINE EXTC=EXISTING TOP OF CURB		



rev	by	date
1		
2		
3		
4		

**Mullen Heller**  
Architecture P.C.

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Suite B  
Albuquerque 87102  
505 268 4144[p]  
505 268 4244 [f]



job number	17-04
drawn by	AO
project manager	CSB
date	06-01-2017

project title  
**Smiles for Kids Dental Office PHASE 2**  
9211 Eagle Ranch Road, NW,  
Albuquerque, New Mexico 87114  
sheet title  
**Conceptual Grading & Drainage Plan**

sheet  
**C100**