

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

June 11, 2018

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

RE: Smiles for Kids Dental Office – Site Expansion
Conceptual Grading and Drainage Plan
Stamp Date: 06/01/18
Hydrology File: C12D056

Dear Mr. Broughton:

Based upon the information provided in your revised submittal received 06/01/2018, the Conceptual Grading and Drainage Plan is approved for action by the DRB on the Site Plan for Building Permit.

Since you are only providing 95 cubic feet of the required first flush volume of 817 cubic feet. The Fee in Lieu payment (Amount = $722 \text{ CF} \times \$8/\text{CF} = \$5,776.00$) for the remainder of the required first flush volume must be made using the attached City of Albuquerque Treasury Deposit form. The Owner needs to bring three copies to the Building Permits and pay the fee. Then provide Hydrology with one copy showing the receipt. This needs to be done prior to Hydrology's approval of the project for Building Permit.

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

Sincerely,

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 09/2015)

Project Title: _____ **Building Permit #:** _____ **City Drainage #:** _____

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: _____

City Address: _____

Engineering Firm: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Owner: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Architect: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Check all that Apply:

DEPARTMENT:

- ☐ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ ARCHITECT CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ OTHER (SPECIFY) _____

CHECK 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
- ☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

DATE SUBMITTED: _____ **By:** _____

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____

June 1, 2018

Renee Brissette, PE, CFM
Senior Engineer, Hydrology
COA Planning Department

Re: Smiles For Kids – West Site: Tract G – Fountain Hills
Hydrology Resubmittal Memo

Dear Renee:

Based on BHI's review of the AMAFCA Drainage Report for the Northeast Detention Pond at Paseo Del Norte and Coors Boulevard (Smith Engineering – dated April, 2009) and conversations with the City of Albuquerque, the discharge location for Tract G – Fountain Hills appears to differ from that of the Fountain Hills Drainage Management Plan (BHI – dated June 4, 2007).

Tract G lies with Basin 305A of the Smith Engineering Drainage Report (see Exhibit A). Basin 305A free discharges to the Right of Way where it is conveyed through a series of ponds and other infrastructure before entering the "Movie Pond" near Paseo del Norte and Coors Boulevard. The Fountain Hills Master Drainage Management Plan places a restriction on Tract G, requiring a portion of the site to discharge to the Fountain Hills Regional Pond. It is understood from the Smith Engineering Drainage Report that downstream infrastructure was sized to convey discharge from Basin 305A (i.e. Tract G).

The topography suggests that Tract G should discharge East and North, rather than west to the Fountain Hills Regional Pond. This is confirmed by the Smith Engineering Drainage Report. Due to the Smith Engineering Drainage Report being completed after the Fountain Hills Master Drainage Management Plan, it is assumed that the Smith Engineering Drainage Report supersedes the Approved Fountain Hills Master Drainage Management Plan related directly to this area, therefore Tract G is allowed to discharge to the Right of Way. The allowable discharge rate of Tract G (3.7 CFS) will follow the Fountain Hills Master Drainage Management Plan, as discussed in the Smiles For Kids DMP.

Tract F, not a part of the Smiles for Kids project, lies within both Basin 305A and Basin 303 of the Smith Engineering Report (see Exhibit A). The portion that lies within Basin 305A will discharge to the Right of Way similarly to Tract G at the runoff rate described within the Fountain Hills Drainage Management Plan. The portion that lies with Basin 303 will discharge to the Fountain Hills Regional Pond as described in the Fountain Hills Drainage Management Plan.

Engineering ▲

Spatial Data ▲

Advanced Technologies ▲

Given the above information, the Drainage Management Plan for Smiles For Kids, Tract G – Fountain Hills now reflects the drainage patterns described in the AMAFCA Drainage Report for the Northeast Detention Pond at Paseo Del Norte and Coors Boulevard. Approximately 3.7 CFS will discharge to Nunzio Road via the private access drive to the east of the site. With this submittal we are requesting Site Development Plan for Building Permit Approval. If I can answer any questions or comments, please feel free to contact me at 823-1000.

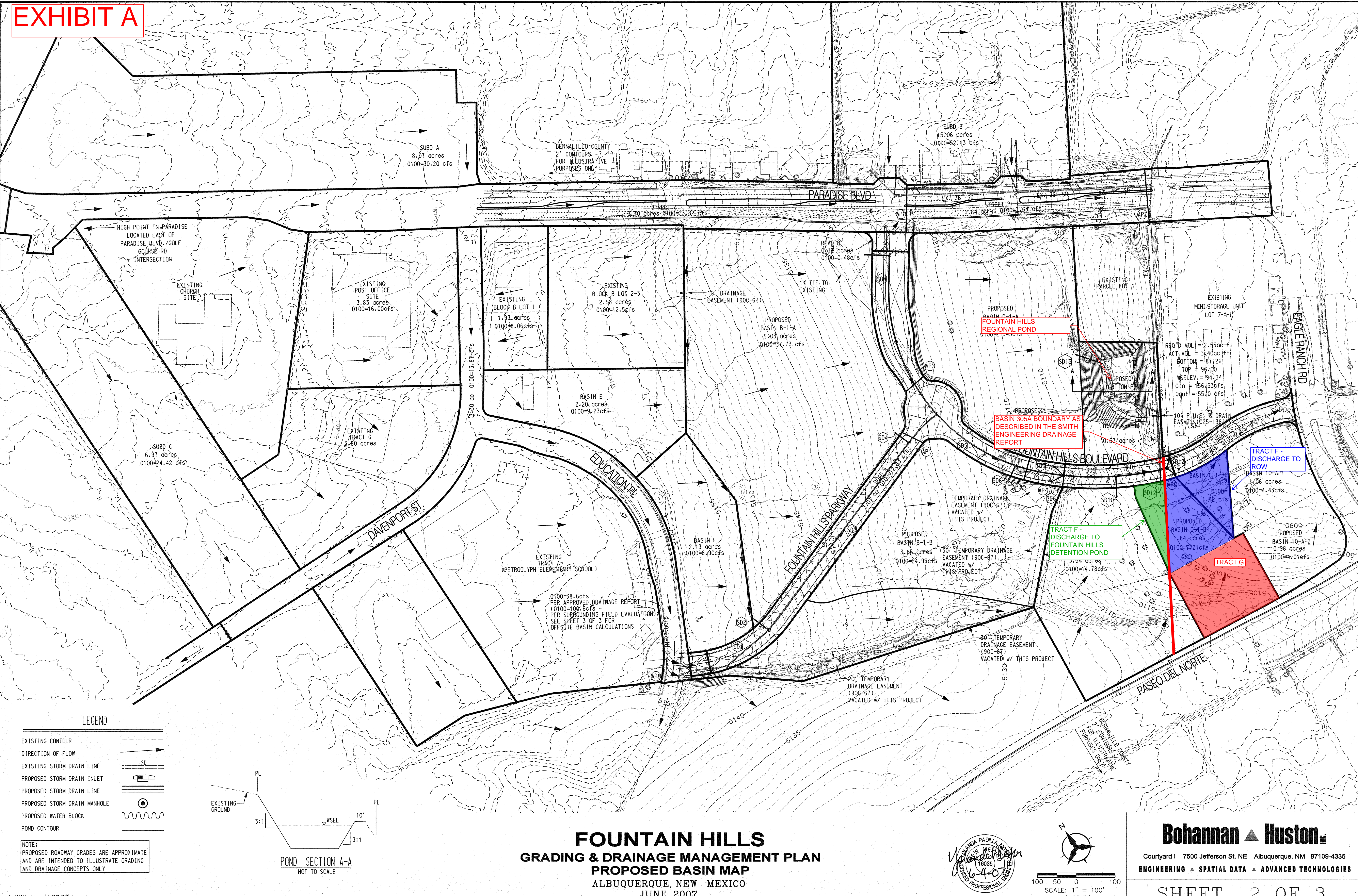
Sincerely,

A handwritten signature in black ink, appearing to read "Matt Satches".

Matt Satches, PE
Engineer
Community Development & Planning

MHS

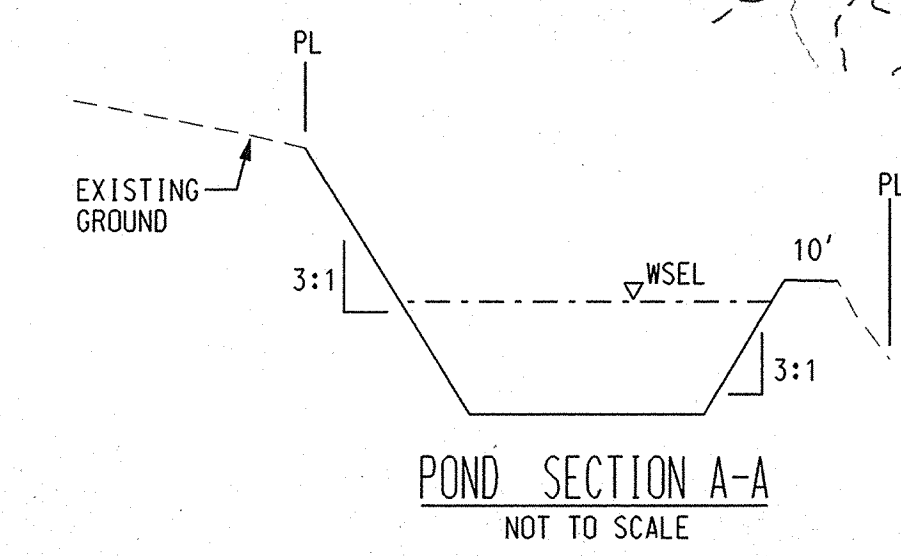
Enclosures



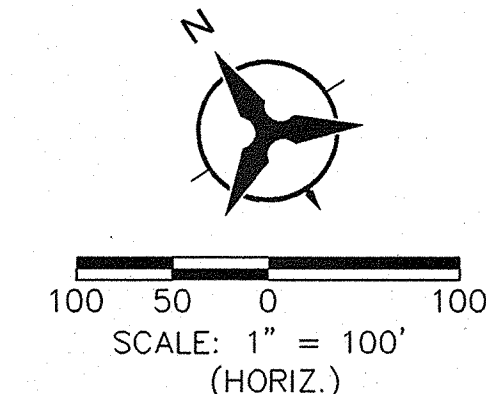
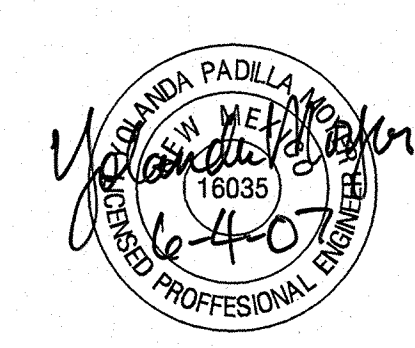
LEGEND

- EXISTING CONTOUR
- DIRECTION OF FLOW
- EXISTING STORM DRAIN LINE
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED WATER BLOCK
- POND CONTOUR

NOTE:
PROPOSED ROADWAY GRADES ARE APPROXIMATE
AND ARE INTENDED TO ILLUSTRATE GRADING
AND DRAINAGE CONCEPTS ONLY

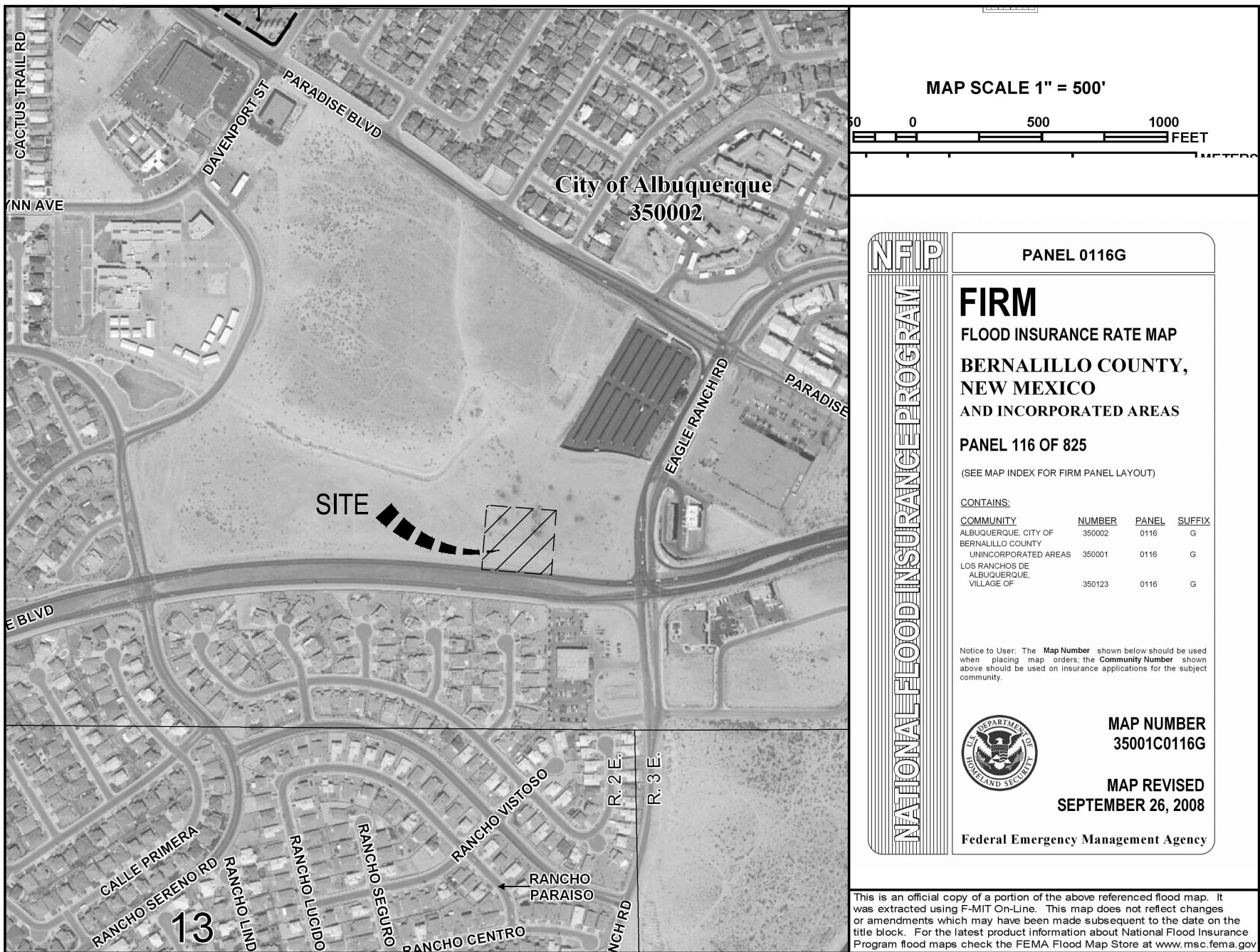
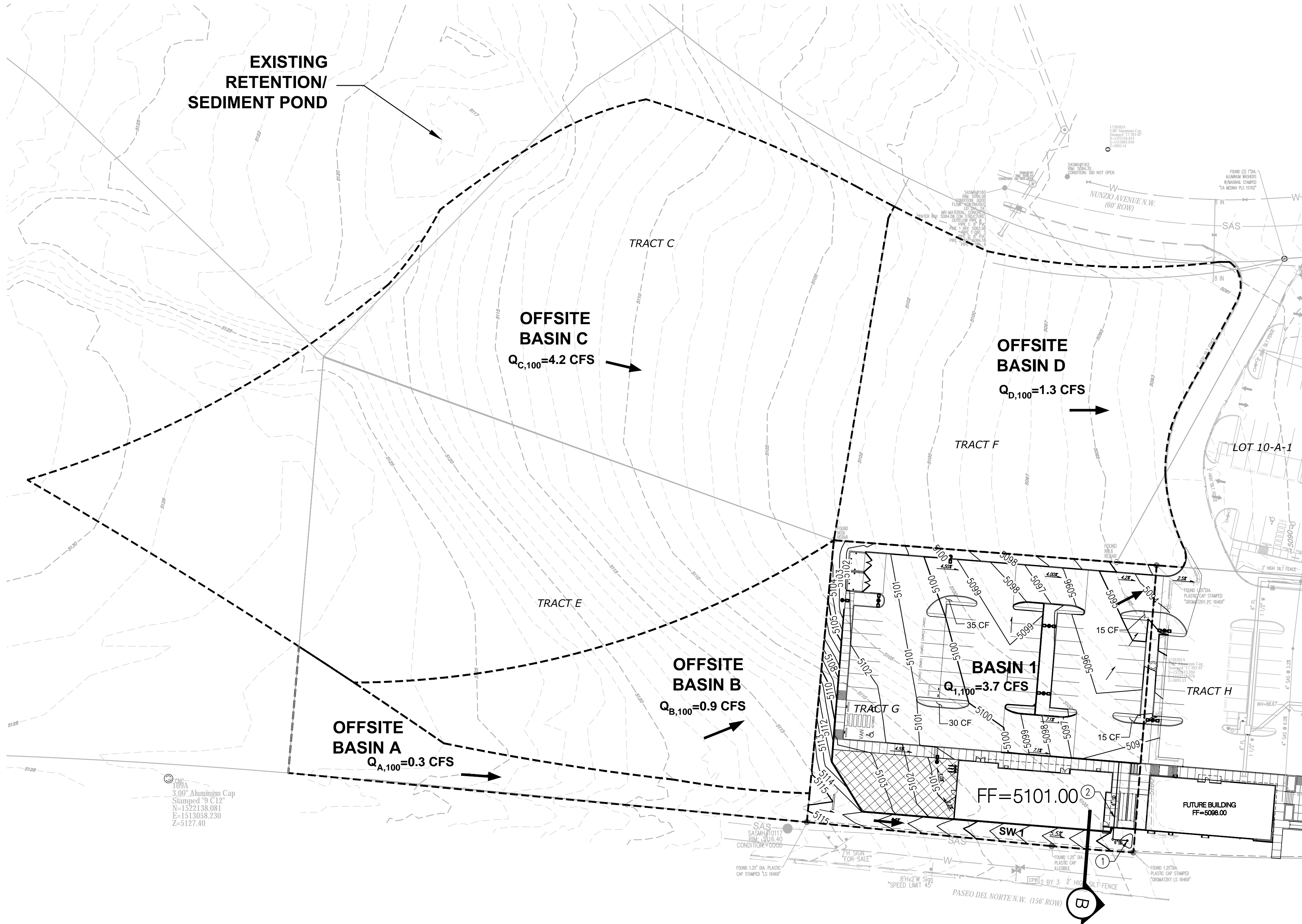


FOUNTAIN HILLS
GRADING & DRAINAGE MANAGEMENT PLAN
PROPOSED BASIN MAP
ALBUQUERQUE, NEW MEXICO
JUNE, 2007



Bohannon & Huston
Court yard | 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING & SPATIAL DATA & ADVANCED TECHNOLOGIES

SHEET 2 OF 3



FEMA FIRM MAP # 35001C0116G

LEGAL DESCRIPTION: TRACT G OF FOUNTAIN HILLS PLAZA.

INTRODUCTION:

THE PROJECT IS LOCATED ON TRACT G OF FOUNTAIN HILLS PLAZA WHICH IS NEAR THE NORTHWEST CORNER OF PASEO DEL NORTE AND EAGLE RANCH RD. THE PURPOSE OF THIS SUBMITTAL IS TO PROVIDE A DRAINAGE MANAGEMENT PLAN FOR THE DEVELOPMENT OF SMILES FOR KIDS DENTIST OFFICE SITE EXPANSION AND REQUEST SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.

EXISTING CONDITIONS:

TRACT G OF FOUNTAIN HILLS PLAZA IS A 0.95 ACRE SITE THAT IS CURRENTLY UNDEVELOPED. THE SITE SLOPES TO THE NORTH / NORTHEAST WHERE THE RUNOFF FREE DISCHARGES ONTO TRACT F AND LOT 10-A-1 OF ALBUQUERQUE WEST UNIT 1 AND ULTIMATELY INTO EAGLE RANCH RD AND NUNZIO AVE. THIS SITE IS NOT WITHIN A DEFINED FLOOD ZONE AS SHOWN ON FIRM MAP NUMBER 35001C0116G (THIS SHEET).

BASED ON THE DRAINAGE STUDY FOR FOUNTAIN HILLS (CITY OF ALBUQUERQUE DRAINAGE FILE C12/D3B), BASIN C-1-B1 IS 1.84 ACRES WITH A PEAK DISCHARGE OF 7.21 CFS. THIS EQUATES TO AN ALLOWABLE PEAK DISCHARGE FROM THE SITE OF APPROXIMATELY 3.7 CFS.

PER THE APPROVED AMAFCA DRAINAGE REPORT FOR THE NORTHEAST DETENTION POND AT PASEO DEL NORTE AND COORS BOULEVARD BY SMITH ENGINEERING, TRACT G FALLS WITHIN BASIN 305A. BASIN 305A DISCHARGES TO NUNZIO ROAD BEFORE CONTINUING INTO EAGLE RANCH ROAD. THE DRAINAGE REPORT SHOWS THE DISCHARGE FROM THIS BASIN CONTINUING EAST TO THE POND NEAR THE EXISTING MOVIE THEATER ON COORS BOULEVARD. IT HAS BEEN DETERMINED THROUGH ANALYSIS OF THE SMITH ENGINEERING DRAINAGE REPORT THAT THE DISCHARGE RATE OF 3.7 CFS FROM TRACT G FULLY DISCHARGES INTO THE RIGHT OF WAY AT NUNZIO ROAD. SEE MEMO DISCUSSING THE AMAFCA DRAINAGE REPORT AND FOUNTAIN HILLS DRAINAGE REPORT (SUBMITTED WITH THIS DRAINAGE MANAGEMENT PLAN) FOR MORE INFORMATION.

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 ACTUAL CONDITIONS IN EACH ONSITE BASIN AND ARE SUMMARIZED IN THE "PROPOSED BASIN DATA TABLE".

PROPOSED CONDITIONS:

THIS DRAINAGE MANAGEMENT PLAN WAS ANALYZED BASED ON A FULLY DEVELOPED SITE. IT WAS DETERMINED THAT THE MAXIMUM ALLOWABLE PEAK DISCHARGE FROM THE SITE IS 3.7 CFS (AS MENTIONED ABOVE). THIS DMP INCLUDES ANALYSIS OF UNDEVELOPED OFFSITE DRAINAGE FROM BASIN C-A-1 AS SHOWN ON THE FOUNTAIN HILLS PLAZA DMP AS WELL AS RUNOFF FROM TRACT F, INCLUDING BASIN C-1-B2.

TRACT G IS DEFINED AS ONE BASIN, ONSITE BASIN 1. ONSITE BASIN 1 DISCHARGES APPROXIMATELY 3.7 CFS TO THE EXISTING PRIVATE ACCESS ROAD TO THE EAST, WHERE IT SURFACE FLOWS TO NUNZIO ROAD BEFORE CONTINUING TO EAGLE RANCH ROAD. THIS IS CONSISTENT WITH BASIN 305A. PER THE APPROVED AMAFCA DRAINAGE REPORT AS MENTIONED ABOVE. A SMALL DRAINAGE SWALE IS PROPOSED ALONG THE SOUTHERN PROPERTY LINE TO CONVEY A SMALL OFFSITE DRAINAGE BASIN (OFFSITE BASIN A) AND THE AREA SOUTH OF THE BUILDING. AN INLET AND 6" STORM DRAIN WILL INTERCEPT THIS RUNOFF AND DRAIN INTO THE PARKING LOT OF TRACT G. SEE DMP CALCULATIONS FOR DRAINAGE SWALE CAPACITY CALCULATIONS.

RETENTION AREAS WITHIN TRACT G WILL BE INCORPORATED INTO THE LANDSCAPE AREAS WHERE POSSIBLE. THE FIRST FLUSH CALCULATIONS FOR THE OVERALL DEVELOPMENT AREA ARE SHOWN ON THE DRAINAGE BASIN CALCULATIONS. DUE TO THE STEEP SITE AND LIMITED OPPORTUNITIES FOR SURFACE PONDING THE ENTIRE FIRST FLUSH RETENTION VOLUME COULD NOT BE ACHIEVED WITH SURFACE PONDING. SEE BELOW FOR FIRST FLUSH CALCULATIONS:

- VOLUME REQUIRED: 817 CF
- VOLUME PROVIDED: 95 CF
- VOLUME REMAINING: 722 CF

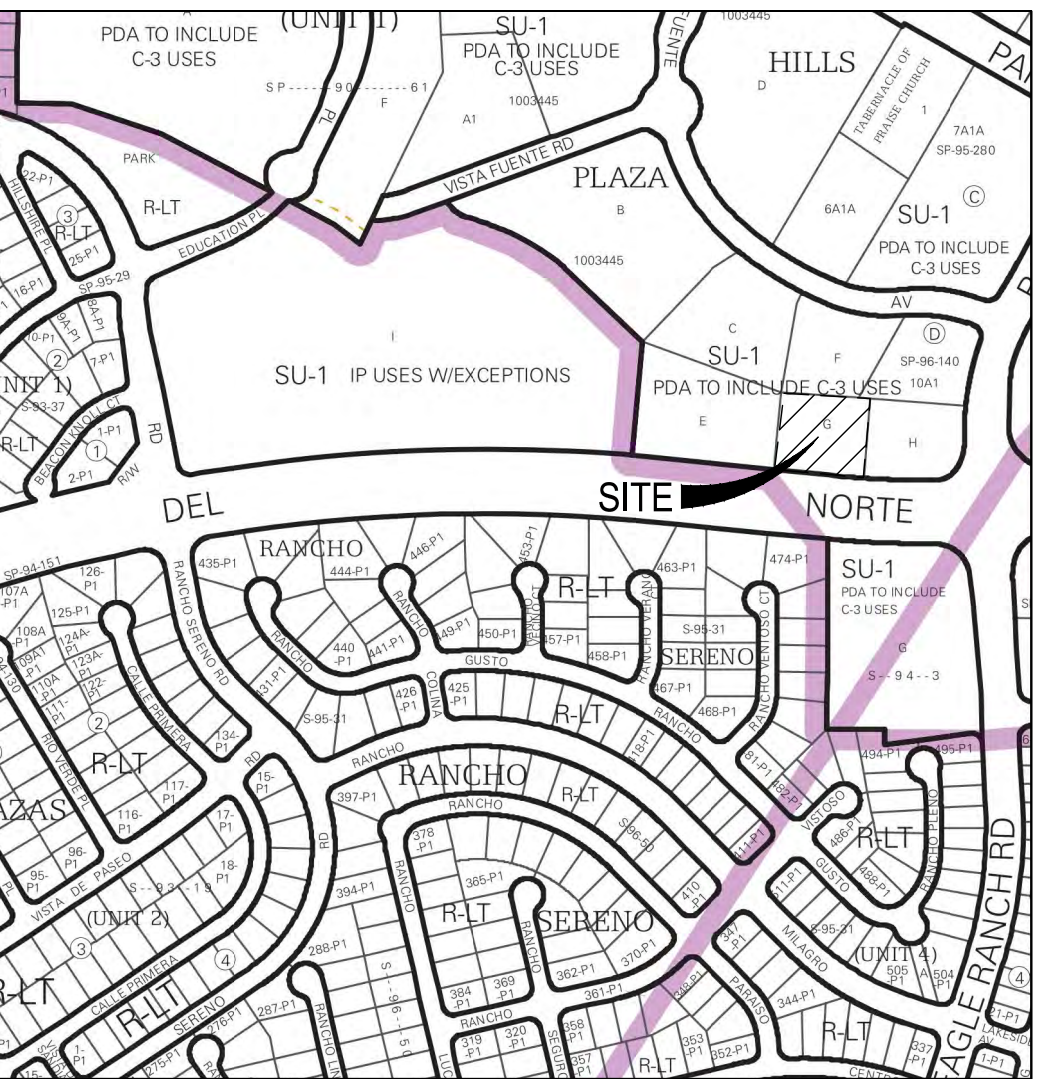
THE REMAINING FIRST FLUSH VOLUME IS UNATTAINABLE AND WILL BE COVERED VIA THE CITY OF ALBUQUERQUE HYDROLOGY DEPARTMENT'S CASH IN-LIEU PROCESS.

OFFSITE DRAINAGE WEST OF THE SITE CURRENTLY DRAINS ONTO TRACT G. IN THE INTERIM CONDITION, OFFSITE FLOWS ARE CONVEYED THROUGH TRACT G OR CONTINUE ON THEIR HISTORICAL DRAINAGE PATHS. THEREFORE, WE ARE IN CONFORMANCE WITH CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND REQUEST SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.

CONCLUSION:

THE PEAK DISCHARGE FROM THE SITE IS 3.7 CFS WHICH IS EQUAL TO THE ALLOWABLE PEAK DISCHARGE RATE. THE SITE WILL DISCHARGE INTO NUNZIO ROAD BEFORE ENTERING EAGLE RANCH, PER THE APPROVED SMITH ENGINEERING DRAINAGE REPORT. IN ADDITION, OFFSITE FLOWS ARE CONVEYED THROUGH TRACT G OR CONTINUE ON THEIR HISTORICAL DRAINAGE PATHS. THEREFORE, WE ARE IN CONFORMANCE WITH CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND REQUEST SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.

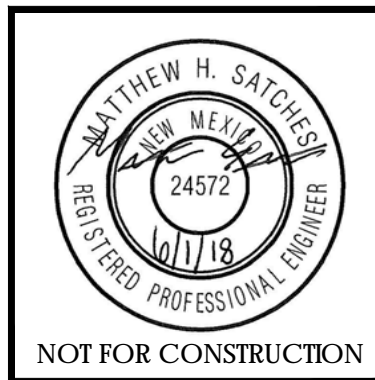
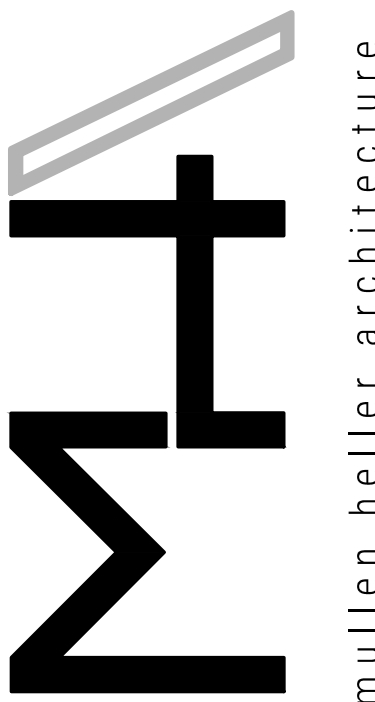
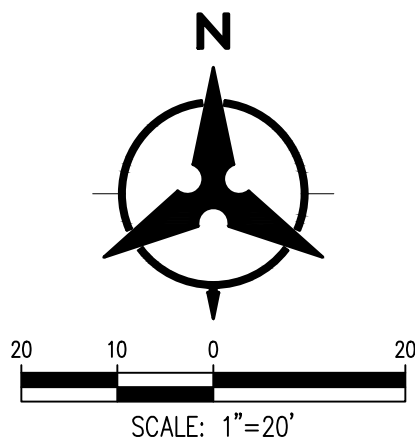
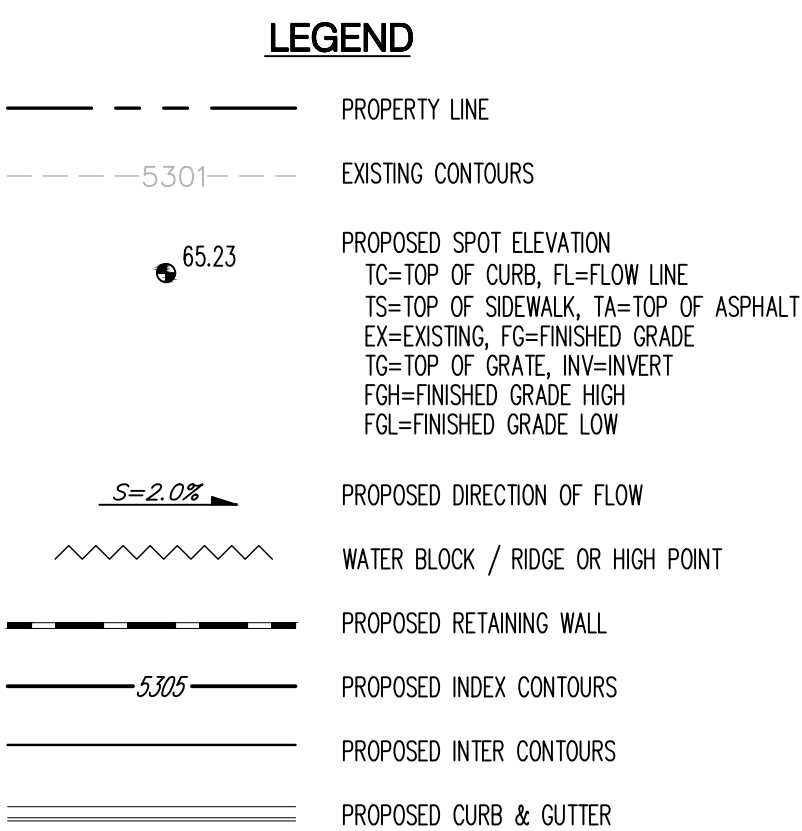
Smiles for Kids Dental Office - Site Expansion															
Proposed Ultimate Development Conditions Basin Data Table															
The table below is for the DPM Sector 22.2 Zone											"FPE" USEFUL CALCULATIONS				
Basin	Area	Area	Land Treatment Percentages				Q ₁₀₀	Q ₁₀₀	WTE	V ₁₀₀	V ₁₀₀	Impermeable Area (SF)	Infiltration Depth (ft)	Required Volume (CF)	
D	SQ. FT.	AC.	A	B	C	D	(cfs)	(cfs)	(inches)	(CF)	(CF)				
Proposed															
1	44111	0.02	100%	100%	100%	100%	0.02	0.02	0.02	0.02	0.02	0.02	25815	0.04	0.04
2	11111	0.02	100%	100%	100%	100%	0.02	0.02	0.02	0.02	0.02	0.02	0	0.04	0
3	25815	0.06	100%	100%	100%	100%	0.06	0.06	0.06	0.06	0.06	0.06	0	0.04	0
4	12906	0.03	100%	100%	100%	100%	0.03	0.03	0.03	0.03	0.03	0.03	0	0.04	0
5	44111	0.02	100%	100%	100%	100%	0.02	0.02	0.02	0.02	0.02	0.02	0	0.04	0
6	44111	0.02	100%	100%	100%	100%	0.02	0.02	0.02	0.02	0.02	0.02	0	0.04	0
TOTAL	297432	4.76						0.2				15516			0.17



○ KEYED NOTES

1. PROPOSED RETAINING WALL.
2. PROPOSED STORM DRAIN PIPE. SEE PLAN FOR SIZE & SLOPE.
3. INSTALL 12" WIDE CURB OPENING.
4. INSTALL 12" WIDE SIDEWALK CULVERT PER COA STD. DETAIL 2236
5. NOT USED.
6. NOT USED.
7. 12" DRAIN BASIN WITH DOME GRATE.
8. STORM DRAIN CLEANOUT.
9. DAYLIGHT 6" STORM DRAIN THRU RETAINING WALL.

NOTE: NOT ALL KEYED NOTES MAY APPLY TO THIS SHEET.



MULLEN HELLER ARCHITECTURE
1718 CENTRAL AVE SW | STE. D
ALBUQUERQUE, NM | 87109
P | 505.268.4144
F | 505.268.4244
www.mullenheller.com

JOB NUMBER 17-44

DRAWN BY BC

PROJECT MGR GSE

DATE 5-16-2018

PHASE	ENTITLEMENTS
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Smiles For Kids -West Site
9211 Eagle Ranch Road NW
Albuquerque, NM 87114

CONCEPTUAL GRADING & DRAINAGE PLAN

11

HEE

C100