

# CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



July 21, 2015

Glen Broughton, PE  
**BOHANNAN-HUSTON, INC.**  
7500 Jefferson Street NE Courtyard I  
Albuquerque, NM 87109

Richard J. Berry, Mayor

**RE: Presbyterian Paradise Clinic (File: C12D003B7)**  
**Grading and Drainage Plan**  
**Engineer's Stamp Date – NO Stamp**

Dear Mr. Broughton:

Based upon the information provided in your submittal received 7-10-15, the above referenced plan is approved for Site Plan for Building Permit action by the DRB with the following condition.

1. Approval by AMAFCA for the license agreement is required for Building Permit.

The plans still need to be reviewed for Building Permit, and the plans need to be stamped.

PO Box 1293

If you have any questions, you can contact me at 924-3695.

Albuquerque

New Mexico 87103

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

Sincerely,

Rita Harmon, P.E.  
Senior Engineer, Planning Dept.  
Development Review Services

Orig: Drainage file  
c.pdf Addressee via Email



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

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: \_\_\_\_\_

**Surveyor:** \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Contractor:** \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

### TYPE OF SUBMITTAL:

- \_\_\_\_\_ DRAINAGE REPORT
- \_\_\_\_\_ DRAINAGE PLAN 1st SUBMITTAL
- \_\_\_\_\_ DRAINAGE PLAN RESUBMITTAL
- \_\_\_\_\_ CONCEPTUAL G & D PLAN
- \_\_\_\_\_ GRADING PLAN
- \_\_\_\_\_ EROSION & SEDIMENT CONTROL PLAN (ESC)
- \_\_\_\_\_ ENGINEER'S CERT (HYDROLOGY)
- \_\_\_\_\_ CLOMR/LOMR
- \_\_\_\_\_ TRAFFIC CIRCULATION LAYOUT (TCL)
- \_\_\_\_\_ ENGINEER'S CERT (TCL)
- \_\_\_\_\_ ENGINEER'S CERT (DRB SITE PLAN)
- \_\_\_\_\_ ENGINEER'S CERT (ESC)
- \_\_\_\_\_ SO-19
- \_\_\_\_\_ OTHER (SPECIFY)

### CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- \_\_\_\_\_ SIA/FINANCIAL GUARANTEE RELEASE
- \_\_\_\_\_ PRELIMINARY PLAT APPROVAL
- \_\_\_\_\_ S. DEV. PLAN FOR SUB'D APPROVAL
- \_\_\_\_\_ S. DEV. FOR BLDG. PERMIT APPROVAL
- \_\_\_\_\_ SECTOR PLAN APPROVAL
- \_\_\_\_\_ FINAL PLAT APPROVAL
- \_\_\_\_\_ CERTIFICATE OF OCCUPANCY (PERM)
- \_\_\_\_\_ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- \_\_\_\_\_ FOUNDATION PERMIT APPROVAL
- \_\_\_\_\_ BUILDING PERMIT APPROVAL
- \_\_\_\_\_ GRADING PERMIT APPROVAL
- \_\_\_\_\_ PAVING PERMIT APPROVAL
- \_\_\_\_\_ WORK ORDER APPROVAL
- \_\_\_\_\_ GRADING CERTIFICATION
- \_\_\_\_\_ SO-19 APPROVAL
- \_\_\_\_\_ ESC PERMIT APPROVAL
- \_\_\_\_\_ ESC CERT. ACCEPTANCE
- \_\_\_\_\_ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED: \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Copy Provided

DATE SUBMITTED: \_\_\_\_\_ By: \_\_\_\_\_

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development



GENERAL NOTES

1. ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE, CITY OF ALBUQUERQUE PUBLIC WORKS STANDARDS SHALL APPLY.
2. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER DISCHARGE.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS INCLUDING ALL UNDERGROUND UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OBSERVER OR ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
4. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
5. ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS AND OTHER UTILITY LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION, SHALL BE COORDINATED WITH THAT UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.
6. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND APPROVED BY THE CONSTRUCTION OBSERVER.
7. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
8. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY.
9. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E., BARRICADING, TOPSOIL DISTURBANCE, EXCAVATION PERMITS, EPA STORM WATER PERMITS, ETC.).
10. ALL PROPERTY CORNERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A REGISTERED LAND SURVEYOR.
11. THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE CITY OF ALBUQUERQUE, TRAFFIC ENGINEERING DEPARTMENT, PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
12. ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), US DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
13. THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.
14. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO CONFORM WITH EPA REQUIREMENTS, INCLUDING COMPLIANCE WITH NPDES PHASE 2 REQUIREMENTS.

GRADING NOTES

1. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
2. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
3. ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION". ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).
4. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
5. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
6. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY.
7. A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
8. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
9. VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.

KEYED NOTES

1. RETAINING WALL.
2. STORM DRAIN PIPE.
3. STORM DRAIN INLET.
4. STORM DRAIN MANHOLE.
5. RIP-RAP PAD.
6. CONCRETE RUNDOWN.

LEGEND

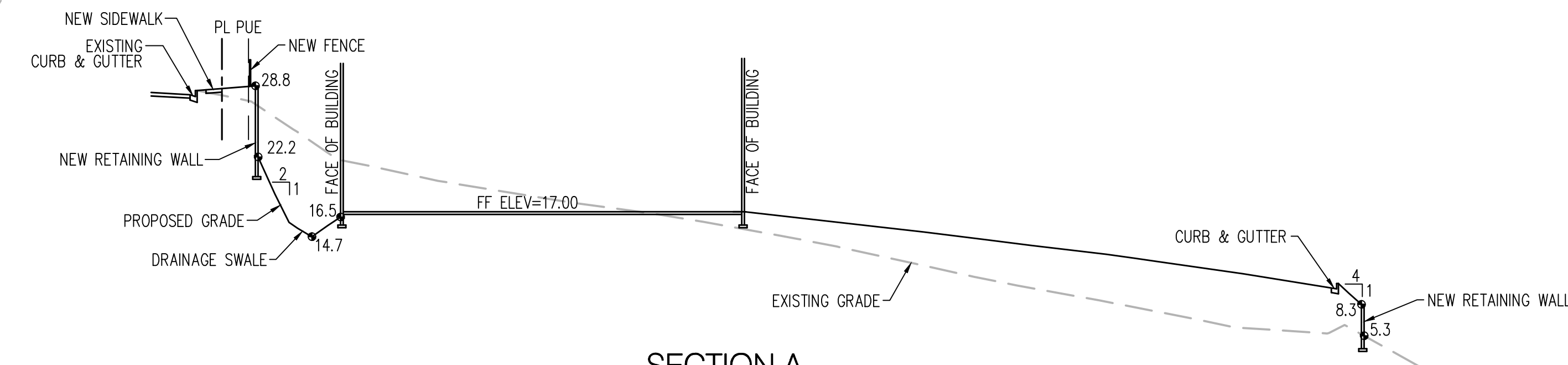
- PROPERTY LINE
- - - - - 5301 - - - - - EXISTING CONTOURS
- X 5301.15 EXISTING GROUND SPOT ELEVATION
- 65.23 PROPOSED SPOT ELEVATION
- TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK, TA=TOP OF ASPHALT, EX=EXISTING, FG=FINISHED GRADE, TG=TOP OF GRATE, INV=INVERT, FGH=FINISHED GRADE HIGH, FGL=FINISHED GRADE LOW
- S=2.0% PROPOSED DIRECTION OF FLOW
- WATER BLOCK / RIDGE OR HIGH POINT
- PROPOSED RETAINING WALL
- - - - - 5305 - - - - - PROPOSED INDEX CONTOURS
- PROPOSED INTER CONTOURS
- PROPOSED CURB & GUTTER
- - - - - EASEMENT
- SD PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLET

GRADING & DRAINAGE NARRATIVE

THE SITE IS LOCATED ON TRACT D OF FOUNTAIN HILLS PLAZA AND IS APPROXIMATELY 5.1 ACRES. THE SLOPES FROM WEST TO EAST AT AN AVERAGE SLOPE OF ROUGHLY 5% ELEVATIONS RANGE FROM 5100 AT THE EAST PROPERTY LINE TO 5127 AT NUNZIO AVE. NEAR PARADISE BLVD. THE SITE CURRENTLY DRAINS TO AN AMAFCA DETENTION POND ADJACENT TO THE PROJECT SITE. THE SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD PLAIN AS SHOWN ON FIRM PANEL NO. 01166, MAP NUMBER 35001C0116G.

FOR THE PROPOSED CONDITIONS THE BUILDING WILL BE LOCATED ADJACENT TO NUNZIO AVE. AS REQUIRED BY THE FOUNTAIN HILLS DESIGN STANDARDS, THE SITE WILL DRAIN TO THE EAST AS IT HISTORICALLY HAS. A STORM DRAIN SYSTEM WILL CONVEY SITE DRAINAGE TO THE AMAFCA DETENTION POND. RETAINING WALLS WILL BE REQUIRED ALONG THE EASTERN AND WESTERN SIDES OF THE SITE TO ENSURE THE REASONABLE GRADES CAN BE ACHIEVED IN THE PARKING LOT AND TO ACCOMMODATE PEDESTRIAN ACCESSIBILITY.

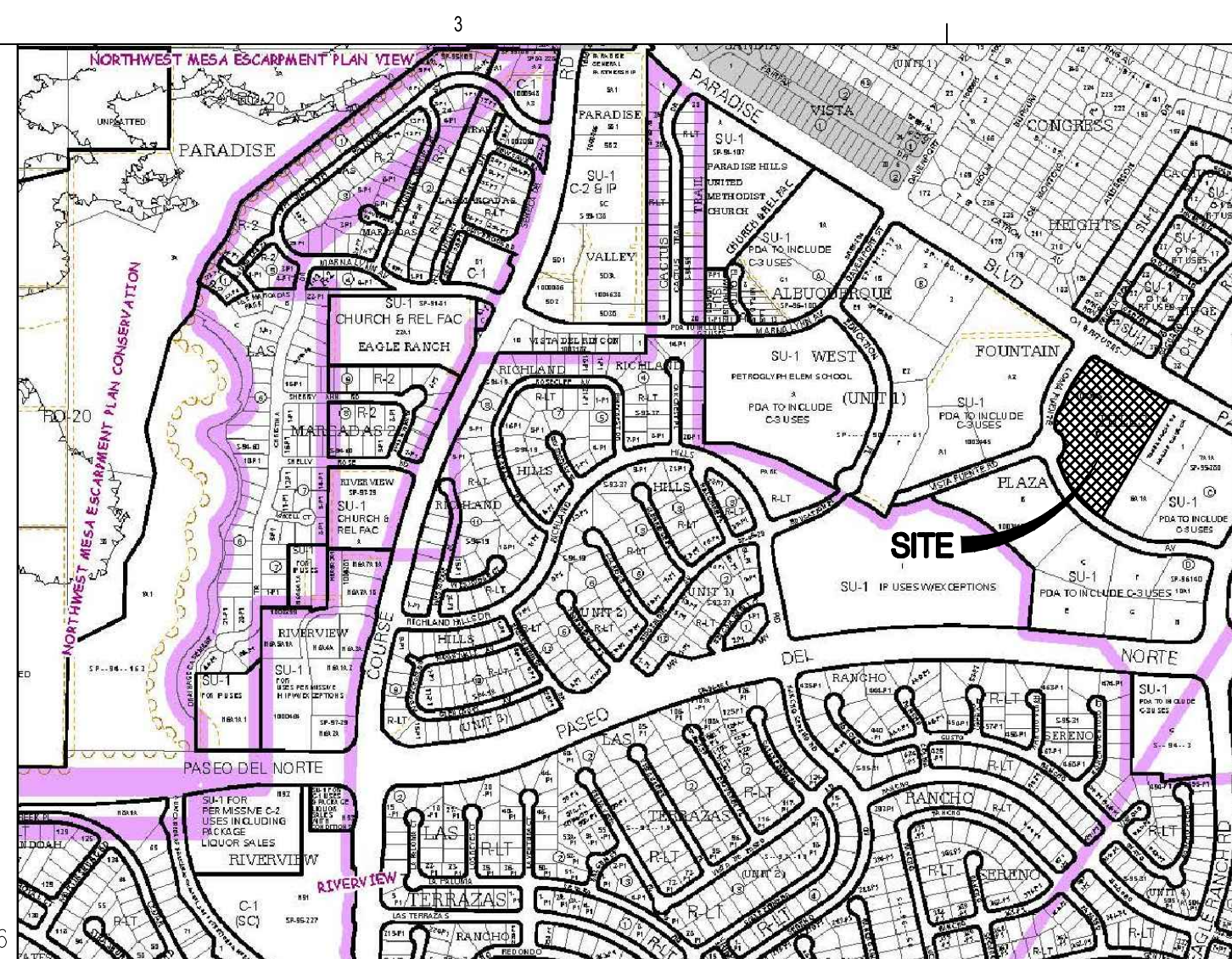
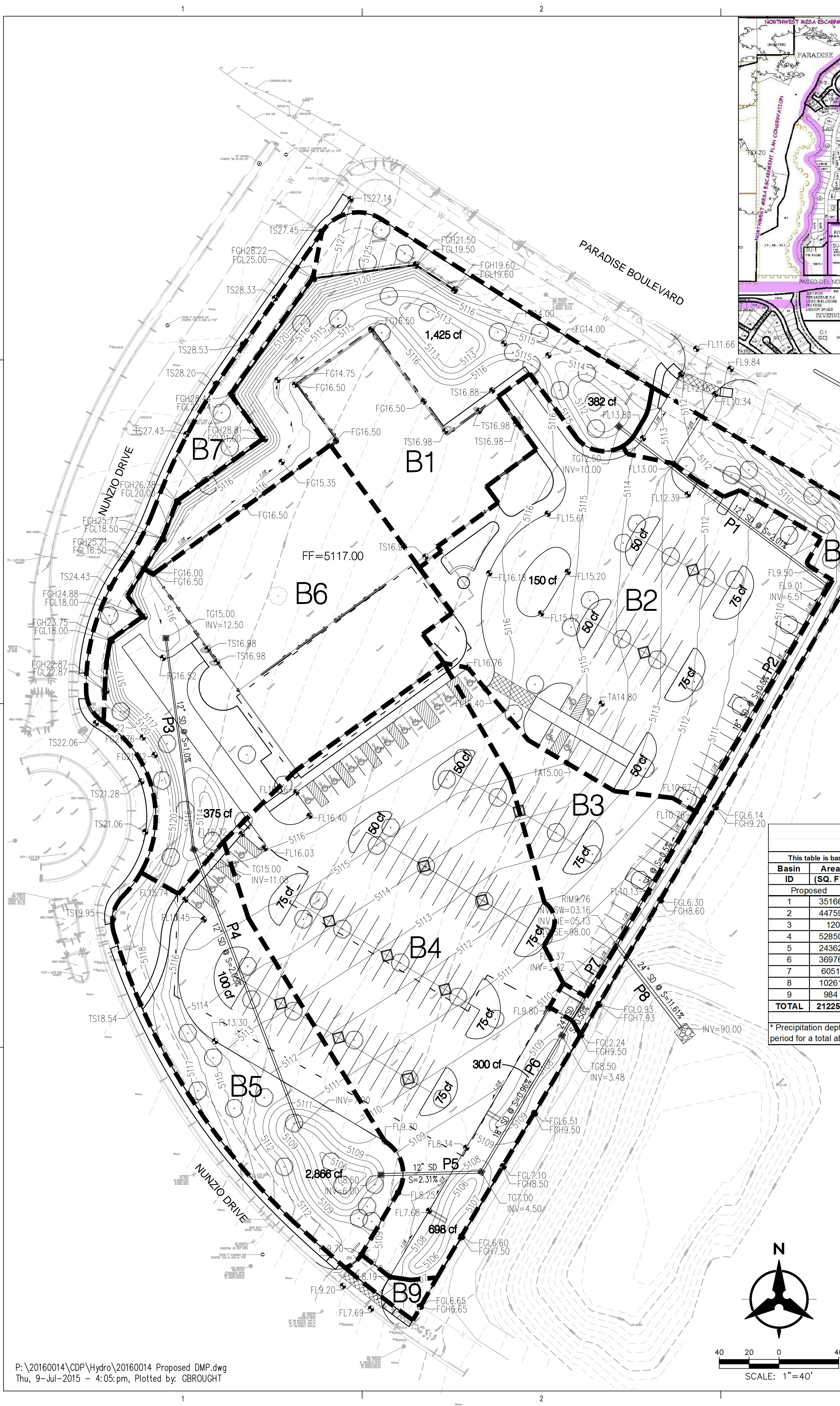
THE MASTER DRAINAGE REPORT OF THE SUBDIVISION ALLOWS FOR THIS SITE TO FREE DISCHARGE TO THE RIGHT OF WAY OR AMAFCA DETENTION POND. NO ONSITE DETENTION PONDS ARE REQUIRED. WATER HARVESTING AREAS WILL BE INCORPORATED INTO THE LANDSCAPE DESIGN AND WILL BE SIZED TO MITIGATE THE "FIRST FLUSH" RAIN FALL EVENT.



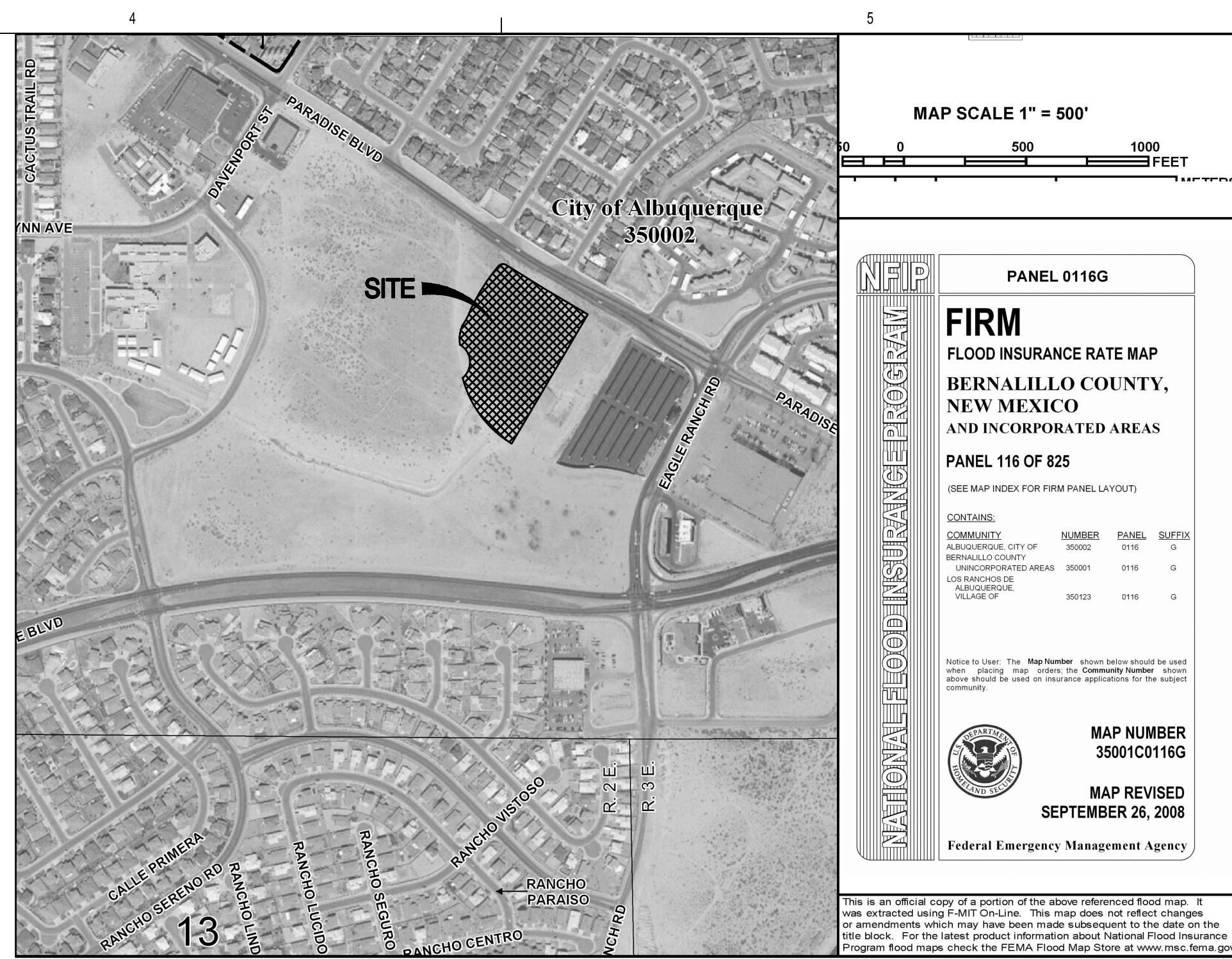
SECTION A

SCALE: HORIZ 1"=40'  
VERT 1"=10'





VICINITY MAP: C-12



FEMA FIRM MAP # 35001C0116G

PREBYTERIAN PARADISE CLINIC							
STORM DRAIN PIPE TABLE							
PIPE #	Contributing Basins & Pipes	Size in.	Slope	Capacity cfs	ACTUAL FLOW cfs	PIPE LENGTH ft	INVERT IN
STORM DRAIN PIPE							
P1	B1	12	2.01%	5.1	3.1	174.0	5110.00
P2	B1+B2	18	0.50%	7.4	7.4	275.0	5106.50
P3	B6	12	1.00%	3.6	3.4	142.0	5112.50
P4	B6	12	2.00%	5.0	3.4	204.0	5111.08
P5	B5+B6	12	2.31%	5.4	5.3	65.0	5106.00
P6	B4+B5+B6	18	0.96%	10.3	10.3	106.0	5104.50
P7	B3+B4+B5+B6	24	0.50%	16.0	11.5	64.0	5103.48
P8	P2+P7	24	11.68%	77.3	18.8	68.5	5098.00
CAPACITY IS BASED ON GRAVITY FLOW, USING MANNING'S EQUATION WITH n=0.013							

PREBYTERIAN PARADISE CLINIC															
Proposed Ultimate Development Conditions Basin Data Table															
This table is based on the DPM Section 22.2, Zone: 1															
Basin ID	Area (Sq. Ft)	Area (Ac.)	Land Treatment Percentages				Q(100yr) (cfs/ac.)	Q(100yr-6hr) (CFS)	WT E (inches)	V(100yr-6hr) (CF)	V(100yr-10day) CF	*Precip. Depth (in.)	Impervious Area (SF)	Vol. Rqd. (CF)	Vol. Provided (CF)
Proposed															
1	35166	0.81	0.0%	0.0%	34.0%	66.0%	3.86	3.12	1.64	4797	7640	0.30	23210	580	1807
2	44759	1.03	0.0%	0.0%	15.0%	85.0%	4.15	4.26	1.82	6800	11460	0.30	38045	951	450
3	12087	0.28	0.0%	0.0%	6.0%	94.0%	4.28	1.19	1.91	1925	3317	0.30	11362	284	125
4	52850	1.21	0.0%	0.0%	17.0%	83.0%	4.12	4.99	1.80	7942	13316	0.30	43866	1097	1348
5	24362	0.56	0.0%	0.0%	63.0%	37.0%	3.43	1.92	1.35	2746	3850	0.30	9014	225	2866
6	36976	0.85	0.0%	0.0%	27.0%	73.0%	3.97	3.37	1.71	5255	8561	0.30	26992	675	375
7	6051	0.14	0.0%	0.0%	100.0%	0.0%	2.87	0.40	0.99	499	499	0.30	0	0	0
8	10261	0.24	0.0%	0.0%	84.0%	16.0%	3.11	0.73	1.15	981	1182	0.30	1642	41	0
9	984	0.02	0.0%	0.0%	64.0%	36.0%	3.41	0.08	1.34	110	154	0.30	354	9	0
TOTAL	212251	5.13						20.0			49979		154484	3862	6971
* Precipitation depth includes a deduction for initial abstraction of 0.1" and 0.04" for infiltration over a one hour period for a total abstraction of 0.14" for Land Treatment D.															
"First Flush" Vol. Calc.															
*Rainfall Depth: 0.30"															
TOTAL VOLUME REQUIRED: 3862 CF															
TOTAL VOLUME PROVIDED: 6971 CF															
*INITIAL ABSTRACTION OF 0.1" WAS USED FOR PAVED AREAS AND AN INFILTRATION RATE OF 0.04" PER OVER A PERIOD OF ONE HOUR PER DPM CHAPTER 22, TABLES A-6 AND A-7.															
THE REQUIRED VOLUME AND PROVIDED VOLUME ARE SHOWN ON THE DEVELOPED CONDITIONS BASIN TABLE. LANDSCAPE ISLANDS WILL BE DEPRESSED WITH CURB OPENINGS TO INTERCEPT DRAINAGE. BASINS B2 AND B3 PROVIDE ROUGHLY HALF OF THE REQUIRED VOLUME. RETENTION VOLUME IN BASIN B6 IS UNDER SIZED; HOWEVER THIS BASIN OVERFLOWS INTO THE RETENTION AREA IN BASIN B5 WHICH HAS EXCESS CAPACITY. DUE TO THE EXISTING TOPOGRAPHY IT WAS NOT POSSIBLE TO PROVIDE ONSITE RETENTION FOR BASINS B8 AND B9. BOTH OF THESE BASINS ARE SMALL AND REQUIRE VERY SMALL VOLUMES. OVERALL THE TOTAL "FIRST FLUSH" VOLUME THAT IS NOT INTERCEPTED WAS CALCULATED TO BE 710 CUBIC FEET. THIS REPRESENTS THE DIFFERENCE BETWEEN RETENTION VOLUME PROVIDED AND REQUIRED VOLUME TO BE RETAINED ONSITE. THIS REPRESENTS APPROXIMATELY 18% OF THE TOTAL REQUIRED "FIRST FLUSH" VOLUME.															
THERE ARE SEVERAL CONTRIBUTING FACTORS THAT LIMITED THE VOLUME THAT COULD BE INCORPORATED INTO THE SITE DESIGN. THE SITE HAS AN EXISTING SLOPE OF APPROXIMATELY 10.00% STEEP SLOPE SITES MAKE IT CHALLENGING TO INCORPORATE SHALLOW RETENTION AREAS IN THE LANDSCAPE DESIGN AND REDUCE THE ACTUAL VOLUME INTERCEPTED. THIS DESIGN MAXIMIZED THE "FIRST FLUSH" RETAINED WITHIN THE SITE.															
CONCLUSION:															
THE PEAK DISCHARGE FROM THE SITE IS 20.0 CFS WHICH IS LESS THAN THE ALLOWABLE PEAK DISCHARGE RATE, THEREFORE WE ARE IN CONFORMANCE WITH CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND REQUEST SITE PLAN FOR BUILDING PERMIT APPROVAL.															

- LEGEND**
- PROPERTY LINE
  - EXISTING CONTOURS
  - PROPOSED SPOT ELEVATION
  - TC=TOP OF CURB, FL=FLOW LINE
  - FGL=FINISHED GRADE LOW SIDE OF WALL
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  - WATER BLOCK
  - PROPOSED RETAINING WALL
  - PROPOSED INDEX CONTOURS
  - PROPOSED INTER CONTOURS
  - EASEMENT
  - PROPOSED STORM DRAIN LINE

**INTRODUCTION:**

THE PROJECT IS LOCATED ON THE SOUTHEAST CORNER OF THE INTERSECTION OF PARADISE BOULEVARD AND NUNZIO DRIVE. THIS SITE IS NOT WITHIN A DEFINED FLOOD ZONE AS SHOWN ON FIRM MAP NUMBER 35001C0116G (THIS SHEET). THE PURPOSE OF THIS SUBMITTAL IS TO PROVIDE A DRAINAGE MANAGEMENT PLAN FOR THE DEVELOPMENT OF THE PRESBYTERIAN PARADISE CLINIC AND REQUEST SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.

**EXISTING CONDITIONS:**

THE 5.13 ACRE SITE IS CURRENTLY UNDEVELOPED. THE SITE SLOPES TO THE EAST / SOUTHEAST WHERE THE RUNOFF DISCHARGES TO AN EXISTING AMAFCA DETENTION FACILITY ADJACENT TO THE SUBJECT PROPERTY.

BASED ON THE DRAINAGE STUDY FOR FOUNTAIN HILLS (CITY OF ALBUQUERQUE DRAINAGE FILE #C12/D3B), THE ALLOWABLE PEAK DISCHARGE FROM THE SITE IS 21.43 CFS (BASIN D-1-A). THE DRAINAGE MANAGEMENT PLAN ASSUMES THAT UP TO 20% OF THE DEVELOPED FLOW WILL DISCHARGE TO ADJACENT ROADWAYS AND THE REMAINING 80% WILL BE CAPTURED BY PROPOSED STORM DRAIN STUBS.

**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" (THIS SHEET).

**PROPOSED CONDITIONS:**

THIS DRAINAGE MANAGEMENT PLAN WAS DEVELOPED IN ACCORDANCE WITH A FULLY DEVELOPED SITE. IT WAS DETERMINED THAT THE MAXIMUM ALLOWABLE PEAK DISCHARGE FROM THE SITE IS 21.43 CFS (AS MENTIONED ABOVE).

THE SITE IS DIVIDED INTO NINE SMALL DRAINAGE BASINS. BASINS B7 AND B9 FREE DISCHARGE TO NUNZIO DRIVE. BASIN B8 FREE DISCHARGES TO PARADISE BOULEVARD AND THE ADJOINING PROPERTY TO THE EAST. THE REMAINDER OF THE DRAINAGE BASINS ARE CONVEYED TO THE AMAFCA DETENTION FACILITY VIA AN ONSITE STORM DRAIN SYSTEM.

**FIRST FLUSH CALCULATIONS:**

IMPERVIOUS AREA: 154,538 SF (PAVED AREA 119,754 & ROOF AREA 34,784 SF)  
\*RAINFALL DEPTH: 0.30"  
TOTAL VOLUME REQUIRED: 3862 CF  
TOTAL VOLUME PROVIDED: 6971 CF  
\*INITIAL ABSTRACTION OF 0.1" WAS USED FOR PAVED AREAS AND AN INFILTRATION RATE OF 0.04" PER OVER A PERIOD OF ONE HOUR PER DPM CHAPTER 22, TABLES A-6 AND A-7.

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**CONCLUSION:**

THE PEAK DISCHARGE FROM THE SITE IS 20.0 CFS WHICH IS LESS THAN THE ALLOWABLE PEAK DISCHARGE RATE, THEREFORE WE ARE IN CONFORMANCE WITH CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND REQUEST SITE PLAN FOR BUILDING PERMIT APPROVAL.

ARCHITECTURE / DESIGN / INSPIRATION

**DEKKER PERICH SABATINI**

7601 JEFFERSON NE, SUITE 100  
ALBUQUERQUE, NM 87109

505.761.9700 / DPSDESIGN.ORG

ARCHITECT

ENGINEER

PROJECT

PRESBYTERIAN PARADISE CLINIC

4588 PARADISE BLVD  
ALBUQUERQUE, NM

REVISIONS

DRAWN BY	BO
REVIEWED BY	GSB
DATE	06/25/2015
PROJECT NO.	15-0028
DRAWING NAME	DRAINAGE MANAGEMENT PLAN
SHEET NO.	

OF