

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

August 9, 2018

Fred C. Arfman, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. N.E
Albuquerque, NM, 87108

**RE: Hope Plaza, Lots 7 & 8
Hope in the Desert Episcopal Church
Conceptual Grading and Drainage Plan
Engineer's Stamp Date: 07/31/18
Hydrology File: C20D064A**

Dear Mr. Arfman:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 08/01/18, the Conceptual Grading and Drainage Plan **is not** approved for Building Permit and for action by the DRB on the Final Plat. The following comments need to be addressed for approval of the above referenced project:

1. If this you want both approvals, then please resubmit with a Grading and Drainage Plan with Engineer's Stamp & signature.
2. Please change the existing flow area as type C instead of type B.
3. Please fix the date of the approved amended Preliminary Grading Plan (Rev 2). 2014 was the last date that we have for any activity on this property, not May 1, 2018.
4. Please pay the Fee in Lieu must be paid for the required first flush volume of **201** cubic feet. The Fee in Lieu payment (Amount = 201 CF x \$6/CF = **\$1,206.00**) for the required first flush volume. This will need to be paid prior to approval of the Building Permit.
5. Please provide the calculation of the Q_{100} for the shallow sediment control basin and the calculations for the five 6 inch pipes.
6. Per DPM Ch. 22.5.B, grading and construction of retaining walls at or near the property line must demonstrate that the adjacent property is not damaged or its use constrained. Any such encroachment by the wall or grading must be accompanied by written permission of both landowners. So please insure that the footer does not encroach the adjacent property.

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7. Please add the property line to the retaining wall detail along with the footer.

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

PO Box 1293

Albuquerque

NM 87103

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City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Hope Plaza
Project Title: Lots 7 and 8 **Building Permit #:** _____ **Hydrology File #:** C20
DRB#: 1006520 **EPC#:** _____ **Work Order#:** _____
Legal Description: A Portion of Tract B-1-A, Hope Plaza (to be replatted to Lots 7 and 8, Hope Plaza)
City Address: 8700 Alameda Blvd. NW

Applicant: Isaacson & Arfman, PA **Contact:** Fred C. Arfman or
Bryan J. Bobrick
Address: 128 Monroe Street NE - Albuquerque, NM 87108
Phone#: (505) 268-8828 **Fax#:** _____ **E-mail:** freda@iacivil.com
or bryanb@iacivil.com
Other Contact: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

TYPE OF DEVELOPMENT: ☒ PLAT ☐ RESIDENCE ☐ DRB SITE ☐ ADMIN SITE

Check all that Apply:

DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION

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) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☒ No

DATE SUBMITTED: August 1, 2018 **By:** Fred C. Arfman

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

CALCULATIONS: 2274 Hope Highlands Residential Lots 7 and 8 : July 30, 2018									
Based on Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993									
ON-SITE									
AREA OF SITE:		11844	SF	=	0.27				
100-year, 6-hour									
PREVIOUS DEVELOPED FLOWS:		DEVELOPED FLOWS:		EXCESS PRECIP:					
	Treatment SF	%		Treatment SF	%	Precip. Zone	3		
Area A =	0	0%	Area A =	0	0%	E _A	=	0.66	
Area B =	11844.0	100%	Area B =	2369	20%	E _B	=	0.92	
Area C =	0.0	0%	Area C =	2369	20%	E _C	=	1.29	
Area D =	0.0	0%	Area D =	7106	60%	E _D	=	2.36	
Total Area =	11843.964	100%	Total Area =	11843.964	100%				
On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)									
Weighted E =		$\frac{E_A A_A + E_B A_B + E_C A_C + E_D A_D}{A_A + A_B + A_C + A_D}$							
Historic E	=	0.92 in.	Developed E	=	1.86 in.				
On-Site Volume of Runoff: V ₃₆₀ = E* A / 12									
Historic V ₃₆₀	=	908 CF	Developed V ₃₆₀	=	1834 CF				
On-Site Peak Discharge Rate: Q _p = Q _{pa} A _a +Q _{pb} A _b +Q _{pc} A _c +Q _{pd} A _d / 43,560									
For Precipitation Zone 3									
Q _{pa}	=	1.87	Q _{pc}	=	3.45				
Q _{pb}	=	2.60	Q _{pd}	=	5.02				
Historic Q _p	=	0.7 CFS	Developed Q _p	=	1.1 CFS				
BASIN NO. 01 DESCRIPTION NORTH BASIN DRAINING TO CHURCH PROPERTY									
Area of basin flows	=	5535 SF	=	0.13 Ac.					
The following calculations are based on Treatment areas as shown in table to the right					LAND TREATMENT				
Sub-basin Weighted Excess Precipitation (see formula above)					A = 0%				
Weighted E =					B = 50%				
Sub-basin Volume of Runoff (see formula above)					C = 50%				
V ₃₆₀ =					D = 0%				
510 CF					FIRST FLUSH VOL.				
Sub-basin Peak Discharge Rate: (see formula above)									
Q _p =					0 CF				
0.4 cfs									

PER THE APPROVED AMENDED PRELIMINARY GRADING PLAN (REVISION 2) WITH REVISIONS DATED MAY 01, 2018:

"A SHALLOW SEDIMENT CONTROL BASIN WILL BE CONSTRUCTED ON THE NORTH SIDE OF THE PROPERTY WALL BEFORE PASSING THE MINOR OFFSITE BASIN THROUGH A NEW WALL OPENING INTO THE CHURCH PROPERTY (SEE KEYED NOTE 5)"

GENERAL NOTES

- FINAL GRADES SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, TOP OF CONCRETE BUILDING PAD, TOP OF PAVEMENT MATERIAL, TOP OF LANDSCAPING MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.
- CONTRACTOR SHALL CONTACT NM-811 FOR UTILITY LINE SPOTS TWO WORKING DAYS PRIOR TO CONDUCTING SITE FIELD WORK. CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.
- THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND BERNALILLO COUNTY MAY REQUIRE AN EROSION AND SEDIMENT CONTROL (ESC) PERMIT FOR PROJECTS WHERE CONSTRUCTION ACTIVITIES MEET THE EPA THRESHOLD. IF REQUIRED, CONTRACTOR SHALL OBTAIN AND PROVIDE.
- ALL COBBLE EROSION PROTECTION TO BE 3" AVG. DIA. (2"-4") ANGULAR FACED ROCK PLACED OVER GEOTEX C501 NON-WOVEN GEOTEXTILE (O.E.).
- ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESEED WITH NATIVE GRASS PER C.O.A. SPECIFICATIONS SECTION 1012 (FOR SANDY SOILS).
- ENGINEER RECOMMENDS THAT OWNER MAINTAIN EROSION PROTECTION ELEMENTS. ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY NEW AREAS OF EROSION AND INSTALL ADDITIONAL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.

STORMWATER QUALITY

STORMWATER QUALITY CONTROL MEASURES ARE REQUIRED TO PROVIDE MANAGEMENT OF "FIRST FLUSH". COA HYDROLOGY CURRENTLY HAS THREE CATEGORIES RELATING TO STORMWATER QUALITY VOLUME REQUIREMENTS:

NEW CONSTRUCTION: STORMWATER QUALITY VOLUME BASED ON THE 90TH PERCENTILE STORM EVENT OR 0.34" [0.44" LESS 0.1" FOR INITIAL ABSTRACTION] OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM).

THE ESTIMATED IMPERVIOUS AREA FOR THIS PROPERTY IS CALCULATED AS 60% OF TOTAL AREA. (0.60 * 11,844) = 7,107 SF.

TOTAL STORMWATER QUALITY VOLUME = 0.34" X 7107 SF = 201 CF.

PRIOR TO BUILDING PERMIT APPROVAL, A "PAYMENT IN-LIEU FOR STORMWATER QUALITY VOLUME REQUIREMENT" TREASURY DEPOSIT SLIP WILL BE PROVIDED BY C.O.A. HYDROLOGY. THIS WILL BE BASED ON THE PORTION OF FIRST FLUSH VOLUME (® RESIDENTIAL RATE OF \$6.00 PER CF) THAT IS NOT RETAINED ON-SITE. A COPY OF THE PAID RECEIPT WILL BE REQUIRED PRIOR TO BUILDING PERMIT APPROVAL.

201 CF X \$6.00 / CF = \$1,206.00 (TOTAL FOR BOTH LOTS).

PROJECT SCOPE

PROPERTY: THE SITE IS AN UNDEVELOPED PORTION OF AN EXISTING CHURCH PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP C-20. THE SITE IS BOUND TO THE EAST AND NORTH BY UNDEVELOPED PROPERTY, TO THE WEST BY HOPE IN THE DESERT EPISCOPAL CHURCH (SAME OWNER), AND TO THE SOUTH BY SIGNAL AVE. NE.

PROPOSED IMPROVEMENTS: TWO RESIDENTIAL PROPERTIES.

LEGAL: LOTS 7 AND 8, HOPE PLAZA (PREVIOUSLY A PORTION OF TRACT B-1-A, HOPE PLAZA) CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

BENCHMARK: VERTICAL DATUM IS BASED UPON THE ALBUQUERQUE CONTROL SURVEY MONUMENT "7-C19", ELEVATION = 5485.723 FEET (NAVD 1988).

OFF-SITE: NO OFF-SITE DRAINAGE AFFECTS THIS PROPERTY. A MINOR BASIN WILL CONTINUE TO BE ROUTED THROUGH THE CHURCH PROPERTY.

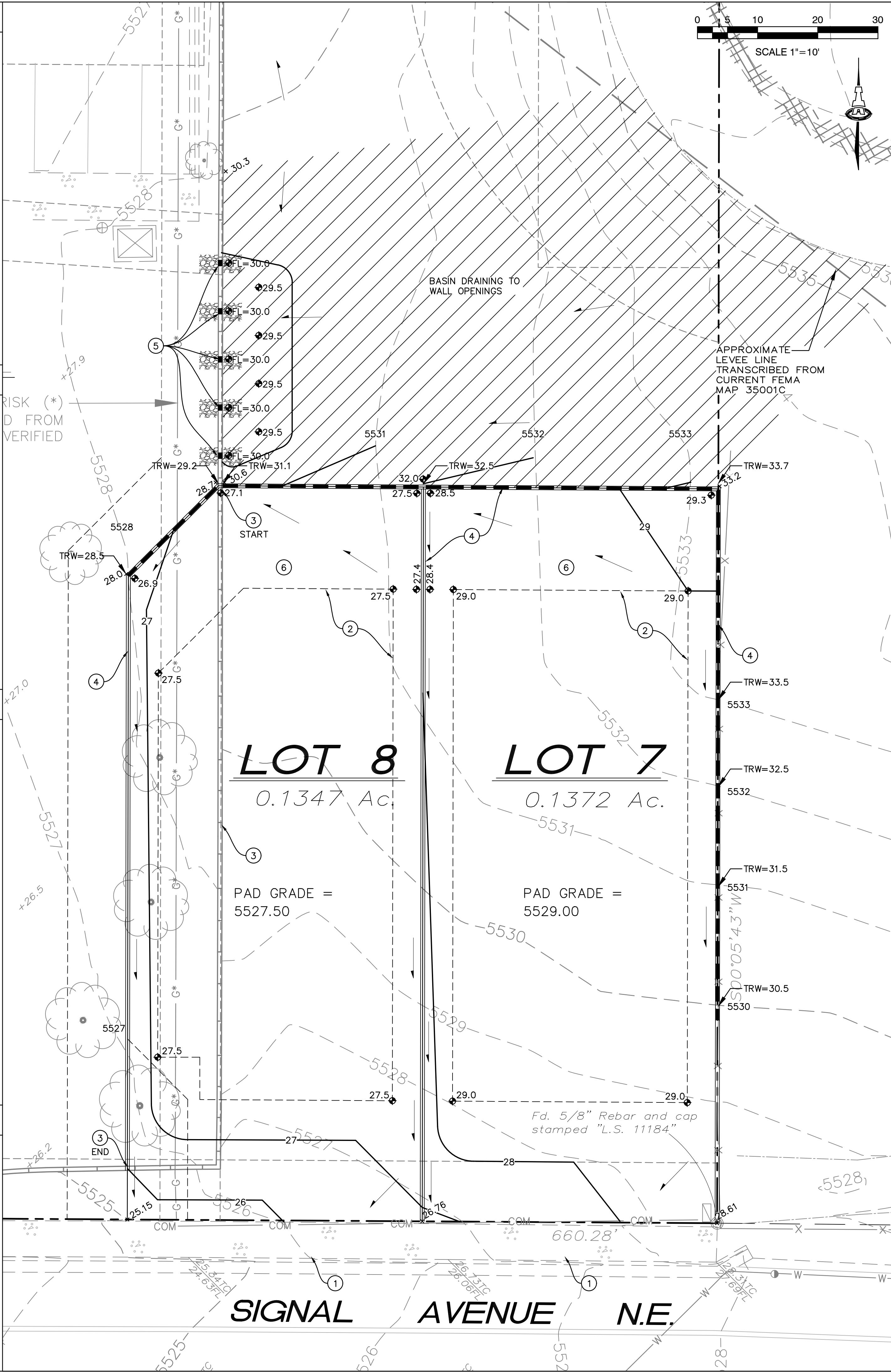
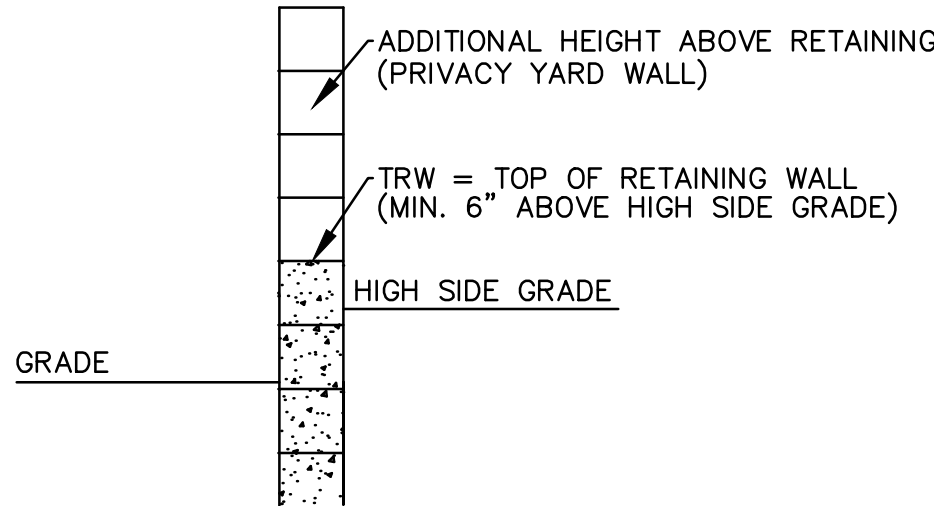
FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP #C5001, THE SITE IS LOCATED WITHIN FLOODZONE "X" DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.

DRAINAGE PLAN CONCEPT:

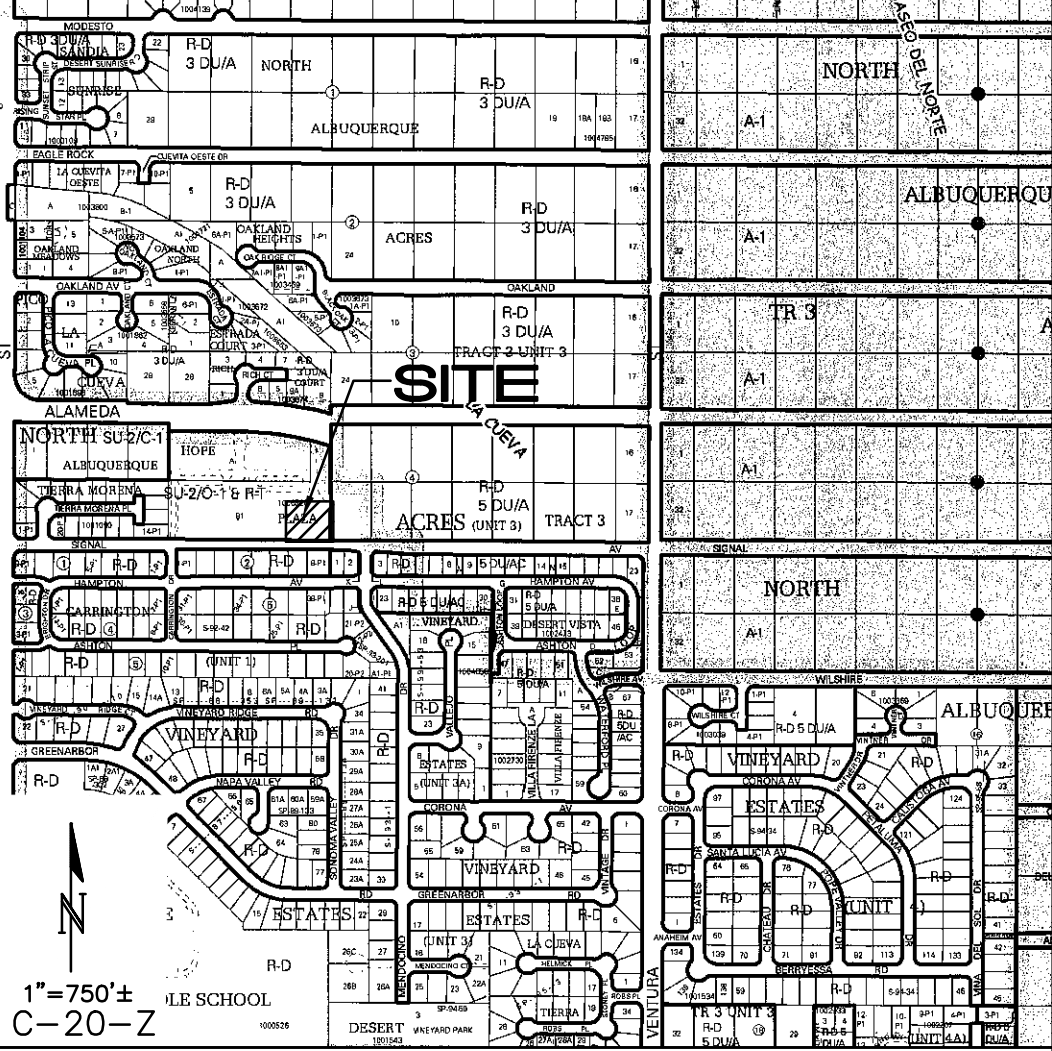
PER THE APPROVED AMENDED PRELIMINARY GRADING PLAN (REVISION 2) WITH REVISIONS DATED MAY 01, 2018:

"THE PROPOSED RESIDENTIAL SITE DRAINAGE WILL FREE DISCHARGE TO SIGNAL AVE. VIA THE SITE DRIVES. BASED ON THE 100-YEAR 5-HOUR CALCULATIONS, THE DEVELOPED SITE WILL GENERATE APPROXIMATELY 1.1 CFS (AN INCREASE OF 0.4 CFS)." SEE CALCULATIONS THIS SHEET.

RETAINING WALL



VICINITY MAP



KEYED NOTES

- FUTURE CONCRETE DRIVEPAD LOCATION TO BE FINALIZED AS PART OF BUILDING PERMIT PLANS.
- LIMITS OF BUILDING PAD.
- DEMO AND REMOVE EXISTING CHURCH PERIMETER WALL TO EXTENTS SHOWN.
- CONSTRUCT SITE RETAINING WALL / PRIVACY WALL ALONG WEST, NORTH AND EAST PROPERTY LINES. TOP OF RETAINING PORTION TO BE 6" ABOVE HIGH SIDE GRADE TYPICAL. DESIGN OF WALL FOOTINGS, REINFORCEMENT, WEEP HOLES, ETC. TO BE PROVIDED BY WALL CONTRACTOR.
- MINOR DRAINAGE BASIN IMPACTED BY THIS DEVELOPMENT SHOWN HATCHED (SAME OWNER). INSTALL FIVE 6" DIA. PIPES THROUGH WALL AT FLOWLINE ELEVATION SHOWN TO PASS MINOR DISCHARGE TO CHURCH PROPERTY FOR LANDSCAPING AND ROUTING. INSTALL 3'X3'X12" DEEP COBBLE EROSION PROTECTION TO DEFINE AND PROTECT OPENINGS (BOTH SIDES). SEE BASIN CALCULATIONS THIS SHEET.
- YARD GRADING IS SHOWN CONCEPTUALLY. PROVIDE POSITIVE DRAINAGE AWAY FROM RESIDENCE AND INSTALL EROSION PROTECTION AS REQUIRED.

LEGEND

- PROPERTY LINE
- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED CONTOUR
- SURFACE FLOW DIRECTION
- EROSION CONTROL
- PERIMETER RETAINING WALL (>12" RETAINING)
- PERIMETER WALL (<12" RETAINING)

ISAACSON & ARFMAN, P.A.

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Aug 01, 2018

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LOTS 7 AND 8 HOPE PLAZA

HOPE IN THE DESERT EPISCOPAL CHURCH

GRADING AND DRAINAGE PLAN

Date:	Revision:	Date:	Job No.
07-30-18			2274
Drawn By:			CG101
BJB			
Ckd By:			SH. OF
FCA			