

CITY OF ALBUQUERQUE



Timothy M. Keller, Mayor

March 5, 2018

David Thompson, PE
Thompson Engineering Consultants, Inc.
PO Box 65760
Albuquerque, NM, 87193

**RE: Mountainside Church Addition
Grading and Drainage Plan
Engineer's Stamp Date: 01/30/18
Hydrology File: J22D068**

Dear Mr. Thompson:

PO Box 1293

Based upon the information provided in your resubmittal received 02/28/2018, the Grading and Drainage Plan is approved for Building Permit.

Albuquerque

Please attach a copy of this approved plan in the construction sets for Building Permit processing. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

NM 87103

Please provide a Private Facility Drainage Covenant per Chapter 17 of the DPM for detention pond prior to Certificate of Occupancy. I have attached a word document of this for your use. Please submit this on the 4th floor where you drop off the DRC plans. A \$25 fee will be required.

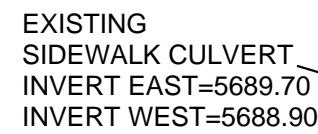
www.cabq.gov

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



DETENTION POND
100-YEAR, 24-HOUR VOL=650 CUBIC-FEET
100-YEAR WSEL=5690.00
FIRST FLUSH VOL= 85 CUBIC-FEET

BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	100-YEAR PRECIPITATION				
		A (%)	B (%)	C (%)	D (%)		V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(24-hr) (acre-ft)	V(24-hr) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
ADDITION ONLY	0.0527	0.00	41.30	41.30	17.40	1.51	0.01	289	0.01	314	0.19
TOTAL RUNOFF	0.05						0.01	289	0.01	314	0.19
PROPOSED CONDITIONS											
ADDITION ONLY	0.0527	0.00	0.00	0.00	100.00	2.64	0.01	505	0.01	649	0.28
TOTAL RUNOFF	0.05						0.01	505	0.01	649	0.28
EXCESS PRECIP.		0.8	1.08	1.46	2.64	E _i (in)					
PEAK DISCHARGE		2.2	2.92	3.73	5.25	Q _{pi} (cfs)					

ZONE = 4

P_{6hr} (in.) = 2.90

P_{24hr} (in.) = 3.65

P_{10day} (in.) = 5.95

DRAINAGE PLAN

LEGAL DESCRIPTION: TRACT A, CHELWOOD HEIGHTS

SITE AREA: 4.1948 ACRES (TOTAL SITE), 0.0527 ACRE (ADDITION ONLY)

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0357H) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THE ADDITION TO THE CHURCH BUILDING IS IN ACCORDANCE WITH SECTION 22 OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM), ENTITLED "DRAINAGE, FLOOD CONTROL, AND EROSION CONTROL." THE DESIGN STORM USED FOR BOTH UNDEVELOPED AND DEVELOPED CONDITIONS IS THE 100-YEAR, 24-HOUR STORM EVENT FOR RUNOFF. THE SITE IS LOCATED IN ZONE 4 SO THE 100-YEAR, 24-HOUR STORM EVENT IS 3.65 INCHES.

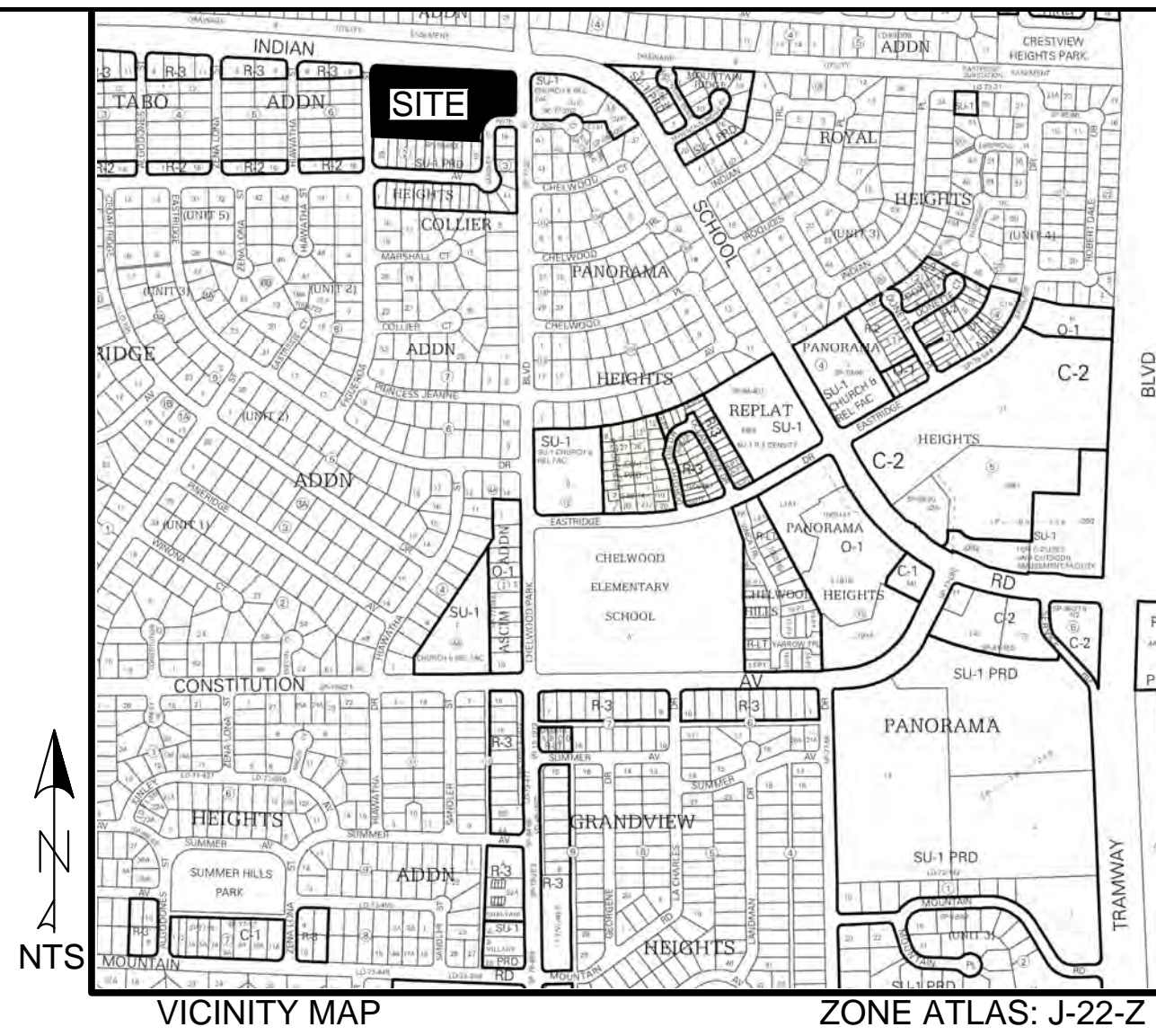
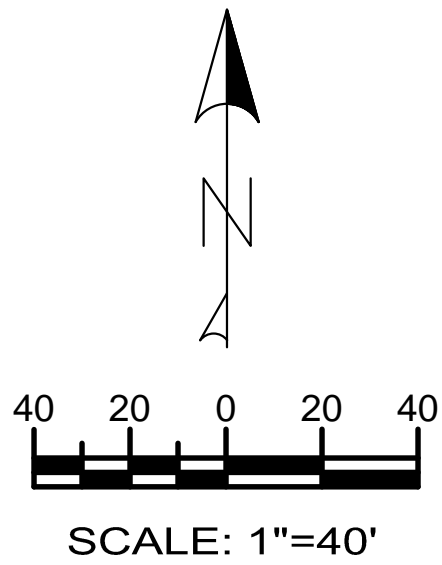
TRACT A IS LOCATED IN NORTHEAST ALBUQUERQUE, AT THE SOUTHWEST CORNER OF THE INDIAN SCHOOL ROAD/CHELLWOOD PARK BOULEVARD INTERSECTION. CURRENTLY THE SITE HAS A CHURCH, BUILDING, PARKING AREAS, AND LANDSCAPING. THE PROPERTY DRAINS FROM EAST TO WEST TO FIGUEROA DRIVE THROUGH A SIDEWALK CULVERT. THE AREA OF THE PLANNED ADDITION ALSO DRAINS FROM EAST TO WEST. THE EXISTING PEAK RUNOFF FROM THE BUILDING ADDITION UNDER EXISTING CONDITIONS IS 0.19 CFS AND 314 CUBIC FEET OF RUNOFF VOLUME DURING A 100-YEAR, 24-HOUR STORM. THERE ARE NO OFF-SITE FLOWS THAT REACH THE PROPERTY.

DEVELOPED DRAINAGE CONDITIONS:

THIS PROJECT INVOLVES THE CONSTRUCTION OF AN ADDITION IN THE SOUTHEAST CORNER OF AN EXISTING CHURCH BUILDING ON THE SITE. THE ADDITION WILL HAVE 100% IMPERVIOUS AREA. RUNOFF FROM THE ADDITION WILL DRAIN FROM EAST TO WEST VIA ASPHALT SWALES TO THE FIRST FLOOR OVERFLOW SIDEWALK CULVERT. THE LINE AND FLUSH VOLUME FOR THIS ADDITION IS 650 CUBIC FEET. THE ADDITION WILL BE LOCATED AT THE UPSTREAM END OF THE SIDEWALK CULVERT. THE DETENTION POND WILL BE LARGE ENOUGH TO HOLD THE ADDITIONAL RUNOFF FROM THE ADDITION (650 CUBIC-FEET). THE DETENTION POND WILL BE LOCATED AT THE DOWNSTREAM END OF THE SIDEWALK CULVERT. THE ADDITION THROUGH THE EXISTING OVERFLOW SIDEWALK CULVERT TO FIGUEROA DRIVE. THE MAXIMUM DEPTH OF THE DETENTION POND FROM THE RUNOFF FROM THE BUILDING ADDITION WILL BE 1.0 FOOT.



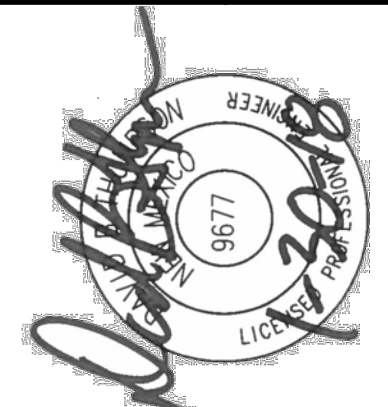
-
- MINOR CONTOUR
MAJOR CONTOUR
EXISTING BUILDING
BUILDING ADDITION
FLOW ARROW



Thompson
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PHONE: (505) 271-2199
FAX: (505) 830-9248

[illegible]MOUNTAIN
SIDE
CHURCH
ADDITION

GRADING AND DRAINAGE PLAN

CITY/COUNTY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MGMT. DIV.		
WATER SERVICES		
SUBDIVISION ENG.		
STREETS		
TRAFFIC		
FOR CITY/COUNTY USE ONLY		

SHEET No.

1 OF 1