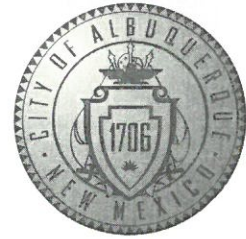


# CITY OF ALBUQUERQUE



February 3, 2017

David Thompson, P.E.  
Thompson Engineering Consultants, Inc.  
PO Box 65760  
Albuquerque, New Mexico 87193

**Re: Lot 5, Lands of Simpatico  
5124 Guadalupe NW  
Request for Permanent C.O. - Accepted  
Engineer's Stamp dated: 1-25-12 (F14D065)  
Certification dated: 2-1-17**

Dear Mr. Thompson,

Based on the Certification received 2/2/2017 the above referenced, is acceptable for permanent release of Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3999 or Totten Elliott at 924-3982.

PO Box 1293

Sincerely,

Albuquerque

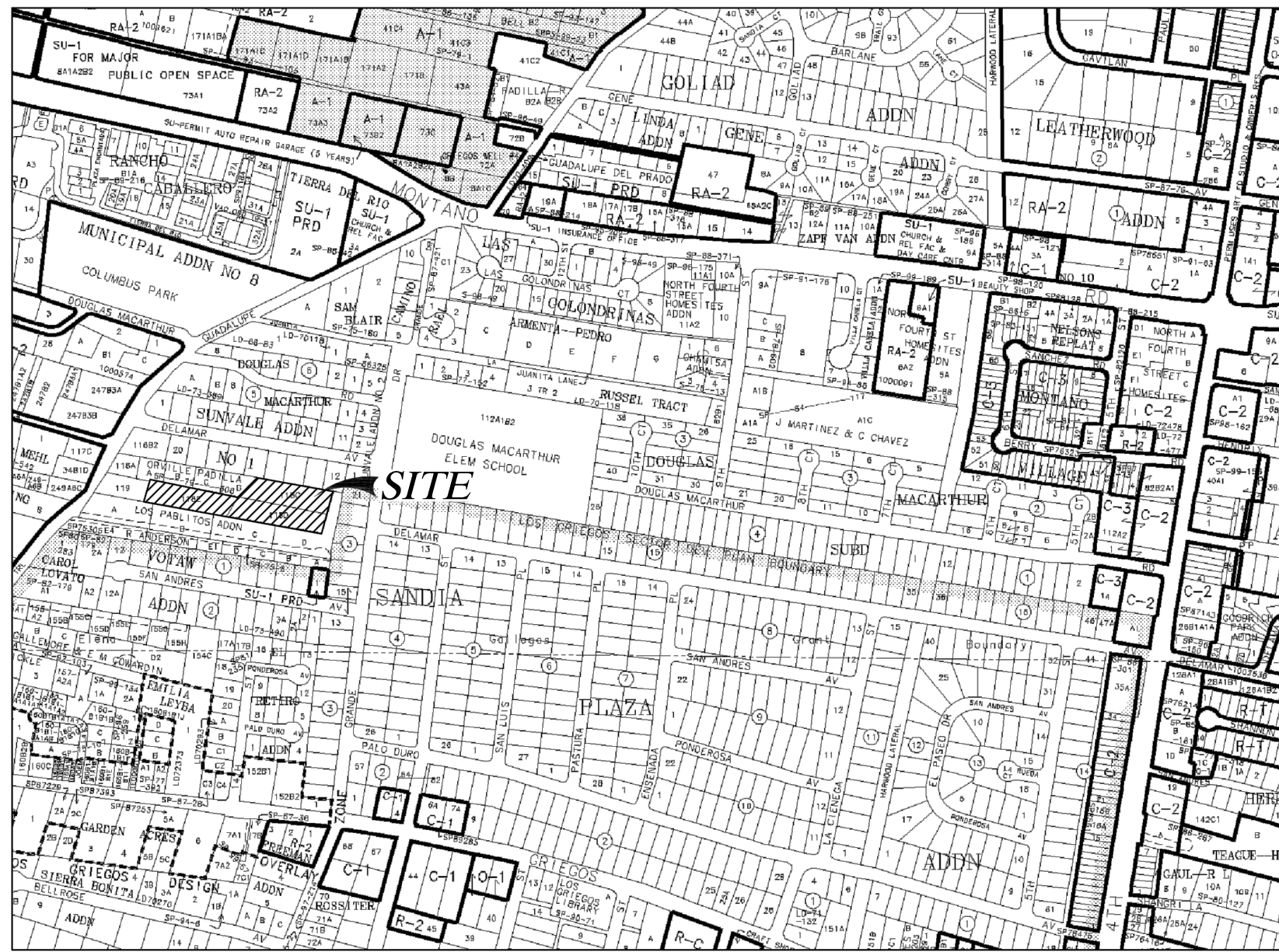
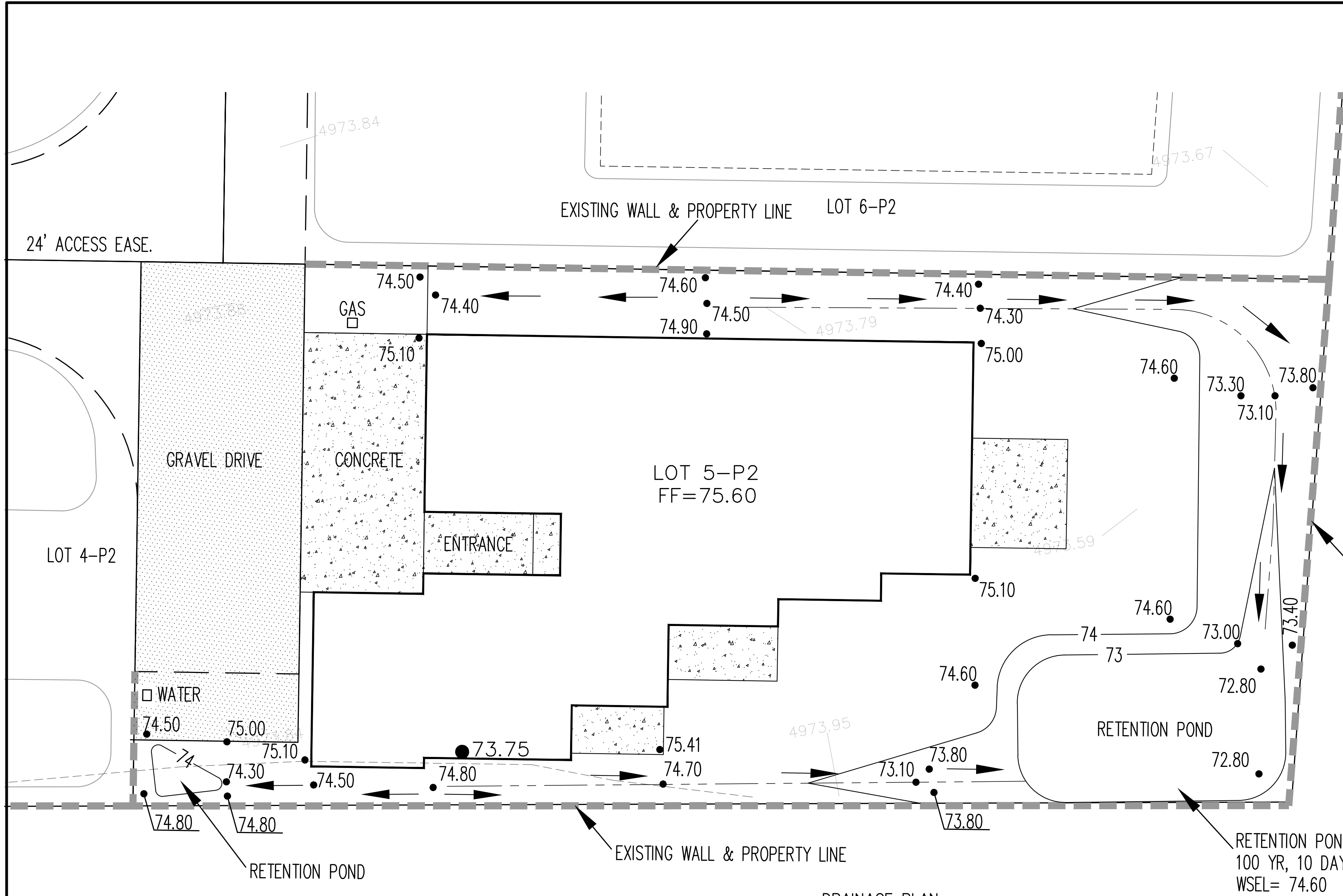
New Mexico 87103

Shahab Biazar, P.E.  
City Engineer, Planning Dept.  
Development Review Services

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

TE/SB

C: email, Cordova, Camille; Miranda, Rachel; Sandoval, Darlene M.; Blocker,  
Lois



LEGEND	
FP=70.20	FINISHED PAD SITE ELEVATION
73.00	SPOT ELEVATIONS
TW=74.80	TOP OF WALL ELEVATION
(dashed line)	EXIST. MAJOR CONTOURS
(solid line)	EXIST. MINOR CONTOURS
(arrow)	FLOW DIRECTION
(dashed line)	PROPOSED EASEMENT
(solid line)	BOUNDARY
(dashed line)	PROPOSED BASIN BOUNDARY
(B-2)	DRAINAGE BASIN NUMBER
(dashed line)	PROPOSED BOUNDARY WALL
(dashed line)	PROPOSED PONDING AREA

**DRAINAGE PLAN:**

LEGAL DESCRIPTION: LOT 5, LANDS OF SIMPATICO SUBDIVISION

SITE AREA: 0.3079 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED JULY 18, 2008 (PANEL NO. 35043C0119 G) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA PROTECTED BY LEVEES FROM THE 1% ANNUAL CHANCE FLOOD.

EXISTING DRAINAGE CONDITIONS:

THIS PROJECT INVOLVES THE SUBDIVISION OF THREE EXISTING LOTS INTO SEVEN RESIDENTIAL LOTS TO BE CALLED LOTS 1-7, LANDS OF SIMPATICO. THERE IS ONE HOUSE THAT EXISTS ON PROPOSED LOT 3. THE SUBDIVISION IS LOCATED ON A CUL-DE-SAC EXTENSION OF GUADALUPE TRAIL. THE SUBDIVISION IS VIRTUALLY FLAT. THERE ARE NO OFFSITE FLOWS REACHING THE SITE. ALL RUNOFF CURRENTLY PONDS ON SITE, AND THEREFORE PONDING AREAS WILL BE PLACED ON THE LOT TO CONTAIN THE 100-YEAR, 24-HOUR STORM RUNOFF AND ALLOW FOR PERCOLATION OR INFILTRATION INTO THE SOIL.

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH SETION 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, 10-DAY STORM EVENT FOR RUNOFF VOLUME COMPUTATIONS. THE SITE IS LOCATED IN ZONE 2 SO THE 100-YEAR, 10-DAY STORM EVENT IS 3.95 INCHES. UNDER EXISTING CONDITIONS THE LOTS INCLUDE LAND TREATMENTS A, B, C, & D.

DEVELOPED DRAINAGE CONDITIONS:

EACH LOT WILL BE A DRAINAGE BASIN SINCE THERE WILL BE SOLID WALLS AT THE PROPERTY LINES TO KEEP ALL RUNOFF ON EACH LOT. THE BUILDING PADS AND THE GRAVEL ROAD WILL BE RAISED ABOVE THE EXISTING GROUND TO ALLOW FOR PONDING OF RUNOFF ON THE LOTS AROUND THE HOMES.

THE RUNOFF FROM LOT 5 WILL POND ON THE LOT. THE PAD ELEVATION FOR EACH HOME WILL BE 1 FOOT ABOVE THE 100-YEAR, 10-DAY PONDING DEPTH. A SOLID WALL IS CONSTRUCTED ALONG EACH LOT LINE TO KEEP THE RUNOFF WITHIN EACH LOT. THERE ARE NO OBSTRUCTIONS BETWEEN THE FRONT AND BACK PART OF THE LOT TO ALLOW FOR EQUALIZATION OF THE PONDED WATER ON THE LOT. DURING A 100-YEAR, 10-DAY STORM THE RUNOFF FROM LOT 5 IS 2,190 CUBIC-FEET. LOT 5 HAS A MAXIMUM POND DEPTH OF 1.50 FEET.

**DRAINAGE CERTIFICATION**

I, DAVID B. THOMPSON, NMPE 9677, OF THE FIRM THOMPSON ENGINEERING CONSULTANTS, INC., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 1-25-12. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY CHRIS DEHLOR, NMPS 7923, OF THE FIRM CARTESIAN SURVEYS INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 1-27-17 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY.

EXCEPTIONS AS NOTED:

- HYDROLOGIC CALCULATIONS HAVE BEEN REVISED SHOWING AN INCREASE IN LAND TREATMENT TYPE D WHICH INCREASED THE 10 DAY-100 YEAR VOLUME FROM 2,061 CF TO 2,190 CF.
- WEST SIDE OF LOT HAS A GRAVEL-LINED SWALE FROM THE FRONT TO THE BACK PONDING AREA
- THE 10-DAY, 100 YEAR WSEL IS 4974.60

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

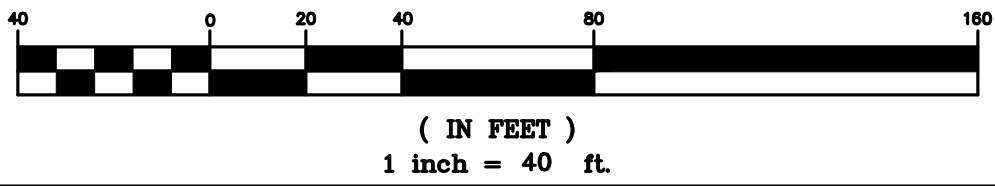
*David B. Thompson*  
2-1-17

DAVID B. THOMPSON, NMPE 9677

DATE



**GRAPHIC SCALE**



**100-YEAR HYDROLOGIC CALCULATIONS**

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(10 day) (acre-ft)	V(10 day) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
5	0.3079	100.00	0.00	0.00	0.00	0.53	0.01	592	0.01	592	0.48
TOTAL RUNOFF	0.31						0.01	592	0.01	592	0.48
PROPOSED CONDITIONS											
5	0.3079	0.00	52.00	9.00	39.00	1.33	0.03	1,491	0.05	2,189	1.02
TOTAL RUNOFF	0.31						0.03	1491	0.05	2189	1.02
EXCESS PRECIP		0.53	0.78	1.13	2.12	E <sub>i</sub> (in)					
PEAK DISCHARGE		1.56	2.28	3.14	4.7	Q <sub>6h</sub> (cfs)					

WEIGHTED E (in) = (E<sub>A</sub>)(%A) + (E<sub>B</sub>)(%B) + (E<sub>C</sub>)(%C) + (E<sub>D</sub>)(%D)

V<sub>6hr</sub> (acre-ft) = (WEIGHTED E)(AREA)/12

V<sub>10day</sub> (acre-ft) = V<sub>6hr</sub> + (A<sub>0</sub>)(P<sub>10day</sub> - P<sub>6hr</sub>)/12

Q (cfs) = (Q<sub>6h</sub>)(A<sub>0</sub>) + (Q<sub>10h</sub>)(A<sub>0</sub>) + (Q<sub>12h</sub>)(A<sub>0</sub>) + (Q<sub>18h</sub>)(A<sub>0</sub>)

ZONE = 2

P<sub>6hr</sub> (in.) = 2.35

P<sub>10hr</sub> (in.) = 2.75

P<sub>10day</sub> (in.) = 3.95