City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: WADE RESIDENCE Building Permit #: 2015092276 City Drainage #: L17D02

DRB#: EPC#: Work Order#:

Legal Description: LOT 10A PARKLAND HILLS ADDITION BLOCK 38

City Address: 920 GRANDVIEW S.E.

Engineering Firm: THOMPSON ENG Contact: DAVE THOMPSON

Address: P.O. BOX 65760 ALB N.M.

Phone#: 271-2169 Fax#: E-mail:

Owner: KAY WADE Contact:

Address: 610 PARK VIEW SE

Phone#: Fax#: E-mail:

Architect: Contact:

Address:

Phone#: Fax#: E-mail:

Other Contact: PAUL KENDRADINE Contact: PAUL

Address:

Phone#: 249-2495 Fax#: E-mail:

Check all that Apply:

DEPARTMENT:

- X HYDROLOGY/ DRAINAGE
- ____ TRAFFIC/ TRANSPORTATION
- ____ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

- ____ ENGINEER/ ARCHITECT CERTIFICATION
- ____ CONCEPTUAL G & D PLAN
- X 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
- X 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 X No

DATE SUBMITTED: 9-11-15 By:

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: ___

RECEIVED
SEP 11 2015
LAND DEVELOPMENT SECTION

THOMPSON Engineering Consultants, Inc.

September 10, 2015

Mr. Shahab Biazar, P.E.
City Engineer
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

Re: RETENTION POND CALCULATION FOR LOT 10-A, BLOCK 38, PARKLAND HILLS ADDITION

Dear Mr. Biazar:

We have completed hydrologic calculations to determine the required retention pond volume for a 100-year, 10-day storm for Lot 10-A, Block 38, Parkland Hills Addition located at the corner of Parkland Circle and Grandview Drive in southeast Albuquerque. The hydrologic criteria in Section 22 of the City of Albuquerque Development Process Manual (DPM), entitled "Drainage, Flood Control, and Erosion Control," was followed to perform the runoff calculations for the site. The design storm used for both the existing undeveloped and developed conditions of Lot 10-A is the 100-year, 10-day storm event for peak volume computations. The property is located in Zone 2, which has a 100-year, 10-day storm event of 3.95 inches. The property was assigned land treatment values in accordance with Tables A-4 and A-5 of the DPM's section 22.2.

The area of the lot is 0.2534 acre. The total impervious area of the proposed home and driveway to be constructed on the lot is 4,483 square feet. The spreadsheet attached to this letter calculates the 100-year, 10-day volume for proposed conditions to be 1,911 cubic feet. Therefore, the required ponding volume on the property shall be at least 1,911 cubic feet.

If you should have any questions about this calculation, please call me at 271-2199.

Sincerely,

David B. Thompson, P.E.

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT A (%)	B (%)	C (%)	D (%)	WEIGHTED E (in)	100-YEAR PRECIPITATION V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(10 day) (acre-ft)	V(10 day) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
1	0.2534	100.00	0.00	0.00	0.00	0.53	0.01	488	0.01	488	0.40
TOTAL RUNOFF	0.25						0.01	488	0.01	488	0.40
PROPOSED CONDITIONS											
1	0.2534	0.00	29.70	29.70	40.60	1.43	0.03	1,314	0.04	1,911	0.89
TOTAL RUNOFF	0.25						0.03	1,314	0.04	1,911	0.89
EXCESS PRECIP.		0.53	0.78	1.13	2.12	E_i (in)					
PEAK DISCHARGE		1.56	2.28	3.14	4.7	Q_{Pi} (cfs)					

WEIGHTED E (in) = $(E_A)(\%A) + (E_B)(\%B) + (E_C)(\%C) + (E_D)(\%D)$

$V_{6\text{-HR}}$ (acre-ft) = (WEIGHTED E)(AREA)/12

V_{10DAY} (acre-ft) = $V_{6\text{-HR}} + (A_D)(P_{10DAY} - P_{6\text{-HR}})/12$

Q (cfs) = $(Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)$

ZONE = 2

$P_{6\text{-HR}}$ (in.) = 2.35

$P_{24\text{-HR}}$ (in.) = 2.75

P_{10DAY} (in.) = 3.95