

# CITY OF ALBUQUERQUE

*Planning Department*  
Alan Varela, Director



*Mayor Timothy M. Keller*

August 11, 2023

Genny Donart, P.E.  
Isaacson & Arfman, P.A.  
128 Monroe St. N.E  
Albuquerque, NM 87108

**RE: 5504 Escondina Lane NW**  
**Permanent C.O. – Accepted**  
**Engineer's Certification Date: 08/08/23**  
**Engineer's Stamp Date: 12/07/22**  
**Hydrology File: F14D076E**

Dear Ms. Donart:

PO Box 1293

Based on the Certification received 08/09/2023 and site visit on 08/11/2023, this letter serves as a "green tag" from Hydrology Section for a Permanent Certificate of Occupancy to be issued by the Building and Safety Division.

Albuquerque

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov).

Sincerely,

NM 87103

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

Renée C. Brissette, P.E. CFM  
Senior Engineer, Hydrology  
Planning Department



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

**Project Title:** 5504 Escondida Lane **Building Permit #** \_\_\_\_\_ **Hydrology File #** F14076E

**DRB#** \_\_\_\_\_ **EPC#** \_\_\_\_\_

**Legal Description:** Lot 7, Bosque Escondido **City Address OR Parcel** Escondida Lane NW

**Applicant/Agent:** Isaacson & Arfman, Inc. **Contact:** Genny Donart or Bryan J. Bobrick

**Address:** 128 Monroe Street NE **Phone:** (505) 268-8828

**Email:** gennyd@iacivil.com  
byranb@iacivil.com

**Applicant/Owner:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **Phone:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**TYPE OF DEVELOPMENT:** PLAT (#of lots) RESIDENCE X **DRB SITE** \_\_\_\_\_ **ADMIN SITE:** \_\_\_\_\_

**RE-SUBMITTAL:** \_\_\_\_\_ **YES** X **NO**

**DEPARTMENT:** \_\_\_\_\_ **TRANSPORTATION** X **HYDROLOGY/DRAINAGE**

Check all that apply:

### TYPE OF SUBMITTAL:

- X ENGINEER/ARCHITECT CERTIFICATION
- \_\_\_ PAD CERTIFICATION
- \_\_\_ CONCEPTUAL G&D PLAN
- \_\_\_ GRADING PLAN
- \_\_\_ DRAINAGE REPORT
- \_\_\_ DRAINAGE MASTER PLAN
- \_\_\_ FLOOD PLAN DEVELOPMENT PERMIT APP.
- \_\_\_ ELEVATION CERTIFICATE
- \_\_\_ CLOMR/LOMR
- \_\_\_ TRAFFIC CIRCULATION LAYOUT (TCL)
- \_\_\_ ADMINISTRATIVE
- \_\_\_ TRAFFIC CIRCULATION LAYOUT FOR DRB APPROVAL
- \_\_\_ TRAFFIC IMPACT STUDY (TIS)
- \_\_\_ STREET LIGHT LAYOUT
- \_\_\_ OTHER (SPECIFY)
- \_\_\_ PRE-DESIGN MEETING?

### TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- \_\_\_ BUILDING PERMIT APPROVAL
- X CERTIFICATE OF OCCUPANCY
- \_\_\_ CONCEPTUAL TCL DRB APPROVAL
- \_\_\_ 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
- \_\_\_ FLOOD PLAN DEVELOPMENT PERMIT
- \_\_\_ OTHER (SPECIFY) \_\_\_\_\_

**DATE SUBMITTED:** 08/08/23





Easement Notes

- EXISTING 7' P.U.E. (1/7/2000, 2000C-7)
- EXISTING PRIVATE ACCESS EASEMENT FOR THE BENEFIT OF LOT 6-A-1 (1/7/2000, 2000C-7) SHOWN HEREON AS
- EXISTING 10' PNM JOINT ELECTRIC AND GAS EASEMENT (9/25/2002, PG. 2644, DOC. NO. 2002122989)
- PRIVATE 5' IRRIGATION LINE EASEMENT, BENEFITING LOTS 1-8 AND MAINTAINED BY THE UNDERLYING OWNER GRANTED WITH THE FILING OF THIS PLAT
- WATER METER EASEMENT GRANTED TO ABCWJA WITH THE FILING OF THIS PLAT
- FIRE HYDRANT EASEMENT GRANTED TO ABCWJA WITH THE FILING OF THIS PLAT
- PRIVATE ACCESS EASEMENT, BENEFITING LOTS 1-8 AND MAINTAINED BY THE UNDERLYING OWNER GRANTED WITH THE FILING OF THIS PLAT
- PUBLIC WATER AND SEWER EASEMENT GRANTED TO ABCWJA WITH THE FILING OF THIS PLAT
- 10' P.U.E. GRANTED WITH THE FILING OF THIS PLAT
- 20' PUBLIC WATERLINE EASEMENT GRANTED TO ABCWJA WITH THE FILING OF THIS PLAT

LEGEND

- 77 PROPOSED CONTOUR
- 76.6 PROPOSED SPOT ELEVATION
- Flow Direction
- FINISH FLOOR ELEVATION
- PAD GRADE ELEVATION
- RETENTION POND LIMITS

IMPERVIOUS AREA



HYDROLOGY CALCULATIONS

CALCULATIONS: Lot 7, Bosque Escondido : May 11, 2022			
Based on City of Albuquerque DMP, Article 6-2 Hydrology dated June 26, 2020			
100-YEAR, 6-HOUR CALCULATIONS			
AREA OF SITE:	10210 SF	=	0.2344 ACRE
DEVELOPED FLOWS:			
Area A	=	0	0%
Area B	=	4145	41%
Area C	=	1021	10%
Area D	=	5044	49%
Total Area	=	10210	100.0%
On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)			
Weighted E =	$E_a A_a + E_b A_b + E_c A_c + E_d A_d$		
	$A_a + A_b + A_c + A_d$		
Developed E	=	1.58 in.	
On-Site Volume of Runoff: V <sub>360</sub> =			
	$E^* A / 12$		
On-Site Peak Discharge Rate: Q <sub>p</sub> =	$Q_{pA} A_a + Q_{pB} A_b + Q_{pC} A_c + Q_{pD} A_d / 43,560$		
For Precipitation Zone: 2			
Q <sub>pA</sub>	=	1.71	Q <sub>pC</sub> = 3.05
Q <sub>pB</sub>	=	2.36	Q <sub>pD</sub> = 4.34
Developed Q <sub>p</sub>	=	0.8 CFS	
100-year 10-day Storm Volume			
V <sub>160</sub> (from previous calculation)	=	1343	
Area Treatment D (SF)	=	5044	
Zone	=	2	
For 100-year 10-Day Storms:			
V <sub>160</sub>	=	1343	
A <sub>D</sub> (SF)	=	5044	
Zone	=	2	
P <sub>10day</sub>	=	3.62	
P <sub>160</sub>	=	2.29	
V <sub>160</sub>	=	1343	
+ imp. area	=	559	
Total Volume (V <sub>160</sub> )	=	1902	

NEW PROPERTY LINE WALLS

SCALE: N.T.S.

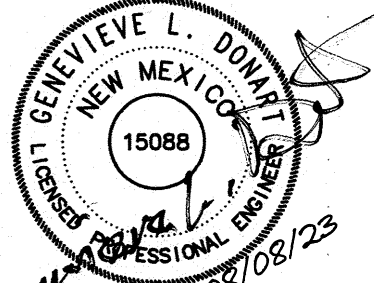
DRAINAGE CERTIFICATION

I, GENEVIEVE L. DONART, NMPE, OF THE FIRM ISAACSON & ARFMAN, 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 12/07/2022. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY BRIAN J. MARTINEZ, OF THE FIRM CSI-CARTESIAN SURVEYS, INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 08/07/2023 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 WITH THE FOLLOWING EXCEPTIONS:

- THE FLOODWALL ON NORTH SIDE WAS REPLACED WITH A BERM
- THE FOOTING OF THE FLOODWALL ON THE EAST SIDE IS HIGHER THAN PER THE PLAN, THEREFORE EARTH WAS BERMED AGAINST IT. TO MAKE UP FOR THIS LOST VOLUME, PONDING ON THE SOUTH SIDE WAS EXPANDED.

THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY.

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.



GENEVIEVE L. DONART NMPE #15088

GENERAL NOTES

- PROPOSED SPOT AND CONTOUR ELEVATIONS SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF PAVEMENT, TOP OF LANDSCAPING, ETC.). CONTRACTOR SHALL GRADE AND COMPACT SUBGRADE BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.
- POND DESIGN PARAMETERS AND STORMWATER CONTROL MEASURES SHOWN ON THIS PLAN SHALL BE STRICTLY ADHERED TO FOR CERTIFICATION PURPOSES
- POST-CONSTRUCTION MAINTENANCE FOR PRIVATE STORMWATER FACILITIES WILL BE THE RESPONSIBILITY OF THE FACILITIES OWNER. ENGINEER RECOMMENDS THAT OWNER INSPECT THE SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY AREAS OF EROSION. ADD ADDITIONAL EROSION PROTECTION AS NEEDED.
- CONTRACTOR SHALL PROTECT THE ON-SITE INFILTRATION TRENCHES (IT').
- PER THE SUBDIVISION GRADING AND DRAINAGE PLAN, THE PROPOSED RESIDENCE SHALL POND STORMWATER WITHIN 10' OF THE RESIDENCE. OWNER SHALL COORDINATE WITH STRUCTURAL DESIGNER WITH REGARDS TO THE BUILDING & FOUNDATION REQUIREMENTS RELATING TO THE ADJACENT PONDING.
- FOR ENGINEER'S CERTIFICATION OF SUBSTANTIAL COMPLIANCE, CONTRACTOR SHALL PROVIDE AN AUTOCAD FORMAT AS-BUILT SURVEY PREPARED BY A LICENSED SURVEYOR WHICH INCLUDES THE FOLLOWING AS-BUILT INFORMATION:
  - FINISH FLOOR ELEVATION
  - SPOT ELEVATIONS AT EACH SPOT ELEVATION SHOWN ON THE APPROVED PLAN
  - TOP AND TOE LIMITS AND ELEVATIONS FOR PONDS TO ENSURE REQUIRED CAPACITY IS PROVIDED. NOTE: POND ELEVATIONS PROVIDED ON THIS PLAN ARE BASED ON FINISHED LANDSCAPE CONDITION. CONTRACTOR TO GRADE SITE TO ELEVATIONS SHOWN MINUS MATERIAL THICKNESSES.

KEYED NOTES

- NOT USED.
- NEW PRIVACY WALL. FINAL GRADES SHOWN AT BASE OF WALL ARE REQUIRED TO PROVIDE THE NECESSARY POND VOLUME AND TO PERMIT ON-SITE PONDING TO EQUALIZE. SEE SECTION THIS SHEET.
- ROOF DRAIN DISCHARGE: INSTALL EROSION PROTECTION (3" DIA ROCK SPLASHPAD, PRECAST CONCRETE SPLASHPAD, OR EQUAL) AT ALL CONCENTRATED ROOF DRAIN LOCATIONS.
  - ENGINEER RECOMMENDS INSTALLING 2" WIDE X 8" THICK 4" AVG. DIA. ANGULAR ROCK SWALES TO PASS CONCENTRATED ROOF FLOW FROM SPLASHPADS TO POND BOTTOMS (OWNER'S OPTION). COORDINATE WITH LANDSCAPERS.
- EXTENDED STEMWALL TO ACHIEVE GRADES THIS AREA.
- TURNED DOWN CONCRETE EDGE TO ACHIEVE GRADES THIS AREA. COORDINATE WITH OWNER FOR GUARDRAIL (OWNER'S OPTION).
- GRADE DRIVEWAY PER PLAN TO DRAIN AS SHOWN. 1/10TH-FOOT CONTOURS SHOWN DASHED.
- GARDEN RETAINING WALL (RETAINING < 2.0') TO ACHIEVE GRADES SHOWN.
- ROOF DRAIN PIPED THROUGH CONCRETE WALK. INSTALL EROSION PROTECTION (3' X 1.5') SPLASHPAD, OR EQUAL.

BUILDING DESIGN NOTE

THE BUILDING PAD AREA SHALL BE PREPARED AND COMPACTED PER THE GEOTECHNICAL REPORT.

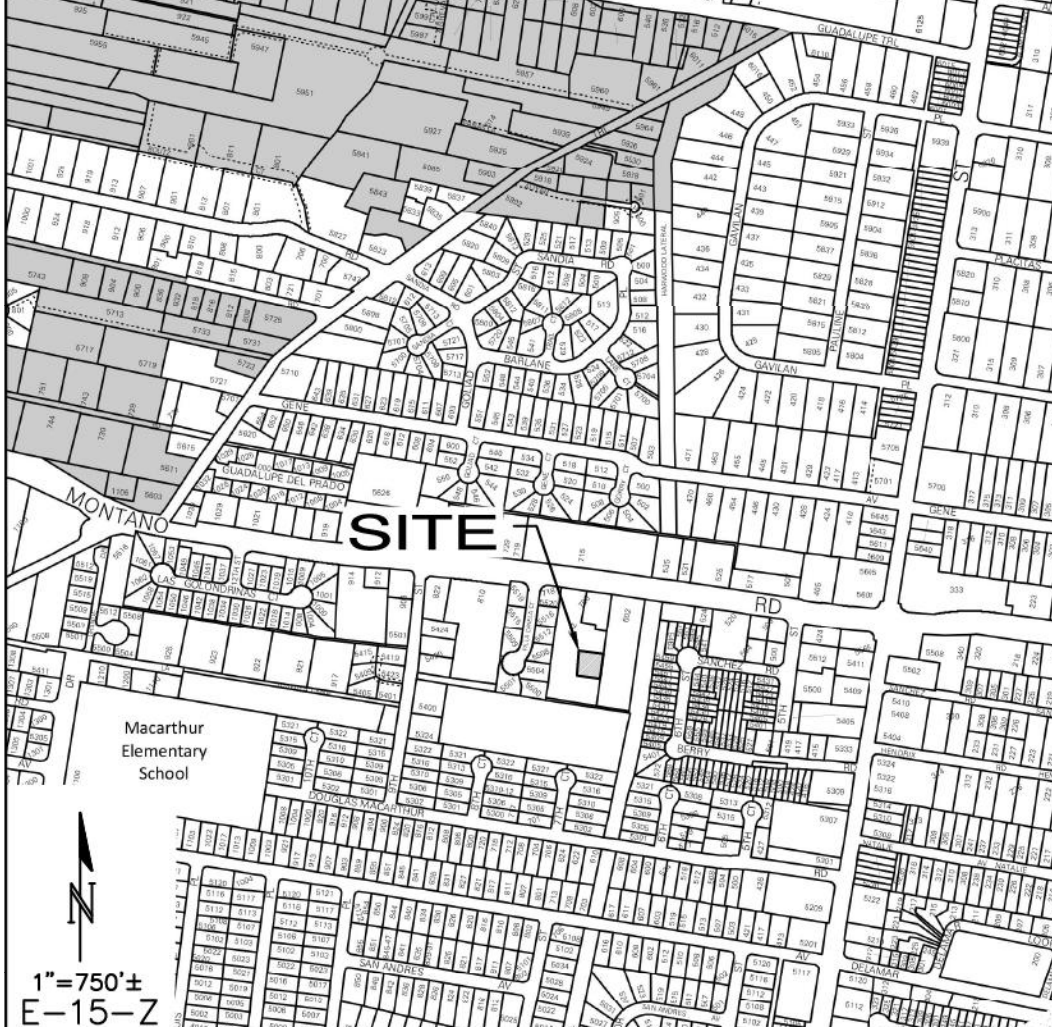
THE BUILDING AND SITE IMPROVEMENT DESIGN SHALL INCLUDE MEASURES TO ADDRESS PONDED STORM WATER WITHIN TEN FEET.

POND VOLUME CALCULATIONS

SITE SURFACE PONDING		
Contour	Area	Volume
76.7	2270	
76.0	1228	1224 CF
75.2	505	693 CF
POND VOLUME =		1918 CF

Volume of 100-yr, 10-day ponding required = 1,868 CF  
TOTAL VOLUME PROVIDED = 1918 CF

VICINITY MAP F-14



PROJECT INFORMATION:

PROPERTY: THE SITE IS AN UNDEVELOPED RESIDENTIAL LOT AND IS BOUNDED TO THE WEST BY AN ACCESS ROAD, THE EAST BY A DEVELOPED RESIDENTIAL LOT, AND TO THE NORTH AND SOUTH BY AN UNDEVELOPED RESIDENTIAL LOT.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE A SINGLE FAMILY RESIDENCE WITH ACCESS DRIVE AND ASSOCIATED LANDSCAPING AND PONDING.

LEGAL: LOT 7 OF BOSQUE ESCONDIDO, BERNALILLO COUNTY, NM

AREA: 0.2344 ACRES

BENCHMARK: ACS MONUMENT DOUGLAS". ELEVATION = 4975.078 (NAVD 1988)

OFF-SITE: NO OFF-SITE DRAINAGE AFFECTS THIS PROPERTY.

FLOOD HAZARD: PER FEMA FIRM MAP #35001C0119G, EFFECTIVE DATE 09/26/2008, THE SITE IS LOCATED WITHIN FLOODZONE 'X' SHADED WHICH IS DEFINED AS AREAS WITH REDUCED FLOOD RISK DUE TO LEVEE.

DRAINAGE PLAN CONCEPT:

THE SITE IS PART OF THE BOSQUE ESCONDIDO SUBDIVISION APPROVED BY HYDROLOGY WITH A FLAT GRADING SCHEME AS FOLLOWS:

- PAD GRADE = 4977.7 (MIN). OVERFLOW ELEVATION 4976.67.
- EACH LOT IS REQUIRED TO STORE THE 100-YEAR 10-DAY VOLUME.
- ALL ROOF FLOW WILL BE DIRECTED TO THE STORMWATER RETENTION PONDS.
- WALLS WILL BE CONSTRUCTED ON THE PROPERTY LINES TO CONTAIN THE 100-YEAR 10-DAY MAXIMUM RETENTION VOLUME.
- SINCE ALL STORMWATER IS RETAINED ON THE PROPERTY, NO SEPARATE STORM WATER QUALITY VOLUME IS REQUIRED.

PROPOSED IMPERVIOUS AREA

THE PROPOSED IMPERVIOUS AREA (SHOWN SHADED) = 5,044 SF INCLUDING PATIOS, WALKS, AND DRIVEWAY. THE STREET IS PERVIOUS WITH AGGREGATE BASE COURSE PAVING.

THE PROPOSED IMPERVIOUS AREA IS APPROXIMATELY 49% OF THE TOTAL PROPERTY AREA.

MASTER DRAINAGE PLAN CALCULATED 100-YEAR 10-DAY VOLUME FOR THIS LOT = 1,815 CF (BASED ON IMPERVIOUS AREA OF 4,595 SF).

THE REQUIRED 100-YEAR 10-DAY VOLUME INCREASES TO 1,902 CF BASED ON THE PROPOSED IMPERVIOUS AREA.

SEE POND VOLUME CALCULATIONS AT LEFT.

Isaacson & Arfman, Inc.  
Civil Engineering Consultants



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Engineer

5504 Escondida Lane  
Albuquerque NM, 87107

ISSUE: DESIGN REVIEW	
PROJECT NUMBER: IA 2496	
FILE:	
DRAWN BY: BJB/ANW	
CHECKED BY: ANW	
DATE: 04-2022	

Description	No	Date

SHEET TITLE

Grading & Drainage Plan

SHEET NUMBER

CG-101