# CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

March 22, 2023

Mike Walla, P.E. Walla Engineering 6501 Americas Pwky NE, Suite 301 Albuquerque, NM 87110

RE: 210 Clayton St. SW Permanent C.O. – Accepted Engineer's Certification Date: 03/16/23 Engineer's Stamp Date: 06/02/21 Hydrology File: J13D103

Dear Mr. Walla:

PO Box 1293 Based on the Certification received 03/16/2023 and site visit on 03/21/2023, 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 <u>rbrissette@cabq.gov</u>.

Sincerely,

NM 87103

Renée C. Brissette

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 (REV 6/2018)

Project Title: FIERRO RESIDENCE	Building Permit #:	Hydrology File #:	
DRB#:	EPC#:	Work Order#:	
DRB#:LOT 12-B, BLOCK 1, WEST P/	ARK ADDITION, CITY OF ALBUQUERQUE, BE	RNALILLO COUNTY, NEW MEXICO	
City Address: 210 CLAYTON ST. SW, ALBUQUERQ	UE, NEW MEXICO		
Applicant: WALLA ENGINEERING		Contact: MIKE WALLA	
Address: 6501 AMERICAS PARKWAY NE, SUITE 301	I, ALBUQUERQUE, NM 87110		
Phone#: 505-881-3008	Fax#: 505-881-4025	E-mail:	
Other Contact:ECO TERRA DEVELOPMENT		Contact: CATHERINE MARSHALL	
Address: 8100 WYOMING BLVD. NE, ALBUQUERQU	E, NM 87103		
Phone#: 505-934-7639	Fax#:	E-mail: kaye@ecoterrallc.com	
TYPE OF DEVELOPMENT: PLAT (#			
IS THIS A RESUBMITTAL? Yes	X No		
DEPARTMENT TRANSPORTATION	X HYDROLOGY/DRAINAGE		
Check all that Apply: <b>TYPE OF SUBMITTAL:</b> X ENGINEER/ARCHITECT CERTIFICATION PAD CERTIFICATION CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN	TYPE OF APPROVAL/ACCEPTANCE SOUGHT:		
FLOODPLAIN DEVELOPMENT PERMIT A ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) TRAFFIC IMPACT STUDY (TIS) STREET LIGHT LAYOUT OTHER (SPECIFY) PRE-DESIGN MEETING?	SIA/ RELEASE FOUNDATION GRADING PER SO-19 APPROV PAVING PERM GRADING/ PAI WORK ORDER CLOMR/LOMR FLOODPLAIN	<ul> <li>SIA/ RELEASE OF FINANCIAL GUARANTEE</li> <li>FOUNDATION PERMIT APPROVAL</li> <li>GRADING PERMIT APPROVAL</li> <li>SO-19 APPROVAL</li> <li>PAVING PERMIT APPROVAL</li> <li>GRADING/ PAD CERTIFICATION</li> <li>WORK ORDER APPROVAL</li> <li>CLOMR/LOMR</li> <li>FLOODPLAIN DEVELOPMENT PERMIT</li> <li>OTHER (SPECIFY)</li> </ul>	
DATE SUBMITTED: 3-16-23			
COA STAFF:	ELECTRONIC SUBMITTAL RECEIVED:		

## HYDROLOGY CALCULATIONS

210 CLAYTON - SITE AREA = 0.106 ACRES

DESIGN CRITERIA: CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL - JUNE 2020 CHAPTER 6 DRAINAGE, FLOOD CONTROL, AND EROSION CONTROL PROCEDURE FOR 40-ACRE AND SMALLER BASINS

VALLEY DRAINAGE CRITERIA, ARTICLE 6-5 OF THE DPM

PRECIPITATION ZONE 2 PER SECTION 6-2(A)(1), TABLE 6.2.7 AND FIGURE 6.2.3

EXCESS PRECIPITATION, E, PER TABLE 6.2.13

PEAK DISCHARGE FOR SMALL WATERSHEDS: PER TABLE 6.2.14

### PREDEVELOPED CONDITIONS

LAND TREATMENT AREA (AC) EXCESS PRECIP. 'E" (IN) PEAK Q (CFS/AC) COEFFICIENT C 0.106 1.71 0.36 0.55 0.000 0.73 2.36 0.49 0.63 0.000 0.95 3.05

3.41

0.90

0.000 2.24 D WEIGHTED E: = 0.55 IN V360 = 0.55 X 0.106 X 43560/12 = 211 CF

TOTAL QP = (0.106 X 1.71) = 0.181 CFS

#### DEVELOPED CONDITIONS

LAND TREATMENT AREA (AC) EXCESS PRECIP. 'E" (IN) PEAK Q (CFS/AC) COEFFICIENT C

А	0.000	0.55	1.71	0.36
В	0.050	0.73	2.36	0.49
С	0.000	0.95	3.05	0.63
D	0.056	2.24	3.41	0.90
VEIGHTED E: [	(0.056 x 0.73) + (0.056	6 x 2.24) ]/0.106 = 1.5	28 IN	

V360 = 1.528 X 0.106 x 43560/12 = 588 CF

TOTAL QP = (0.056 x 2.36) + (0.056 x 3.41) = 0.309 CFS

RATIONAL METHOD CHECK: 12-MINUTE PEAK INTENSITY, I = 4.58 IN/HR  $Q = CIA = (0.49 \times 4.58 \times 0.050) + (0.9 \times 4.58 \times 0.056) = 0.343 \text{ CFS} \text{ OK}$ 

WATER HARVESTING VOLUME REQUIRED: 0.5" x 2447 SF (IMPERVIOUS AREA) = 102 CF

WATER HARVESTING POND VOLUME: NORTH POND

AREA	VOLUME			
288 SF				
144 SF	65 CF			
39 SF	<u>46 CF</u>			
TOT	AL 111 CF			
SOUTH POND:				
AREA	VOLUME			
143 SF				
28 SF	43 CF			
TOTAL VOLUME 43 CF				
	144 SF 39 SF TOT/ ND: AREA 143 SF 28 SF			

TOTAL WATER HARVESTING VOLUME = 154 CF > 102 CF OK

## **GRADING & DRAINAGE DESIGN NARRATIVE**

SUBJECT PROPERTY: 210 CLAYTON STREET SW, LOT 12B, BLOCK 1, WEST PARK ADDITION, CITY OF ALBUQUERQUE DEVELOPED SITE AREA: 4,600 SF OR 0.106 ACRE

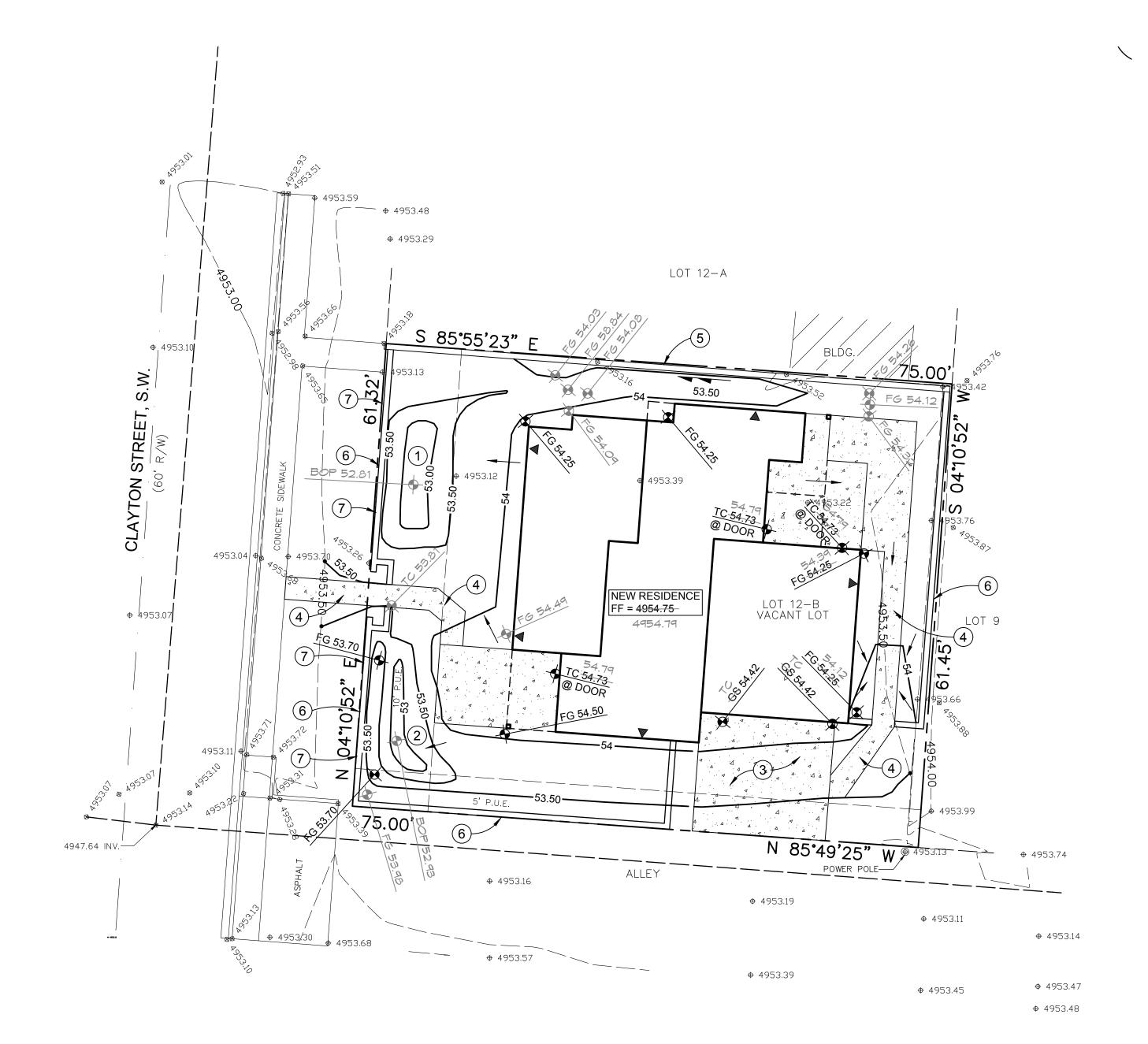
**REFERENCE:** CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM), JUNE 2020

METHODOLOGY: VALLEY DRAINAGE CRITERIA, ARTICLE 6-5 OF THE DPM **PROJECT DESCRIPTION:** LOT 12B IS AN APPROXIMATELY 0.106 ACRE, UNDEVELOPED LOT IN ALBUQUERQUE'S NEAR SOUTH VALLEY. THIS PROJECT WILL INCLUDE A NEW SINGLE FAMILY, TWO STORY RESIDENCE BUILT WITHIN THE CONFINES OF AN EXISTING SHORT PERIMETER WALL AROUND THE PROPERTY BORDER. THE RESIDENCE WILL HAVE SMALL COVERED PATIOS AT THE FRONT AND REAR OF THE HOME.

**UNDEVELOPED CONDITIONS:** THE SUBJECT SITE IS QUITE FLAT WITH BASICALLY NO SLOPE IN ANY DIRECTION. CURRENT FINISHED GRADE ELEVATION IS NO MORE THAN A FOOT ABOVE ADJACENT STREET PAVING.

**DEVELOPED RUNOFF: THE NEW FINISHED FLOOR ELEVATION WILL BE** SET AT LEAST 18" ABOVE THE HIGHEST ADJACENT PAVED STREET SURFACE IN ORDER TO COMPLY WITH THE DPM VALLEY DRAINAGE CRITERIA. SITE WATER HARVESTING IS DESIGNED TO CAPTURE 1/2" DEEP STORM RUNOFF VOLUME FROM THE PROPOSED IMPERVIOUS SURFACES OF AS RECOMMENDED IN THE DPM. THIS WILL BE ACCOMPLISHED WITH ONSITE PONDING AREAS AS DESCRIBED ON THE PLAN. SWALES WILL BE CONSTRUCTED TO DIRECT ROOF RUNOFF TO THE PONDS. THE SITE GRADING WILL PREVENT ANY STORM RUNOFF IMPACT TO ADJACENT PROPERTIES.

I, MIKE WALLA, NMPE 11030, OF THE FIRM WALLA ENGINEERING, LTD., 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 6-2-2021. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED FROM CHRISTOPHER A. MEDINA, NMPS 15702. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 3-15-2023 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF THE 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. THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THE PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.





# DRAINAGE CERTIFICATION



