

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

May 27, 2021

Rudolph R. Archuleta, P.E.
M-Art Building Co., LLC
P.O. Box 105
Tome, NM 87060

RE: 213 Wells Dr. NE
Grading & Drainage Plan
Engineer's Stamp Date: 05/14/21
Hydrology File: L23D036

Dear Mr. Archuleta:

Based upon the information provided in your resubmittal received 05/19/2021, the Grading and Drainage Plan is approved for Building Permit and Grading Permit. Since this site appears to be relatively flat, a pad certification is not needed for this project.

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

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

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: _____ **Building Permit #:** DL2021-09292 **Hydrology File #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: Lot 2 Block 12 Wells Sandia Manor
City Address: 213 Wells Dr NE
Applicant: M - Art + Building Co, LLC **Contact:** Tony Rivera
Address: P.O. Box 105 Tome, N.M. 87060
Phone#: 505-507-0390 **Fax#:** _____ **E-mail:** tarivera@dsignail.com
Other Contact: M - Art + Bldg Co, LLC **Contact:** Martin Romero
Address: _____
Phone#: 505-610-4778 **Fax#:** _____ **E-mail:** _____

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) ☒ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL? _____ Yes ☒ No

DEPARTMENT _____ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
- ☒ GRADING PLAN
- ☒ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY) _____
- ☐ PRE-DESIGN MEETING?

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
- ☒ GRADING PERMIT APPROVAL
- ☐ SO-19 APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ GRADING/ PAD CERTIFICATION
- ☐ WORK ORDER APPROVAL
- ☐ CLOMR/LOMR
- ☐ FLOODPLAIN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____

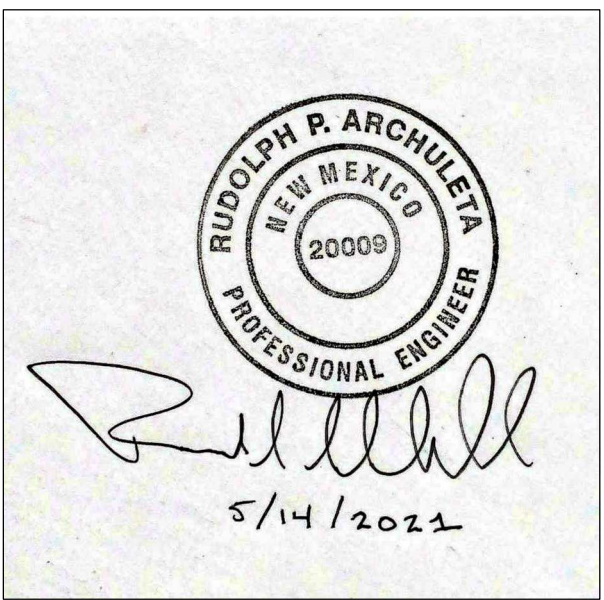
DATE SUBMITTED: 4/26/21 **By:** [Signature]

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

PERMIT SET FOR NEW RESIDENCE
213 WELLS DR, NE
ALBUQUERQUE, NEW MEXICO



INDEX OF DRAWINGS

COV	DESIGN DATA, SITE LOCATION MAP, SITE PLAN, AND INDEX OF DRAWINGS
C11	GRADING AND DRAINAGE CALCS.
A1	FLOOR PLAN WALL TYPES AND SCHEDULES
A2	FOUNDATION PLAN, DETAILS AND PORTAL FRAME DETAIL
A3	ROOF FRAMING AND SECTION DETAILS
A4	ELEVATIONS AND ROOF PLAN
EMP	ELECTRICAL, MECHANICAL, AND PLUMBING FIXTURE LAYOUTS
BW-1	BRACE WALL PLAN
PROJECT DATA	

PROJECT TYPE:	NEW HOUSE
PROJECT LEGAL:	Lot 2 Block 12 Wells Sandia Manor Subdivision
PROJECT LOCATION:	213 WELLS DR. NE ALBUQUERQUE, NEW MEXICO 87123 BERNALILLO COUNTY
PROJECT OWNER:	APRIL BRANNON
OCCUPANCY TYPE:	R-3, SINGLE FAMILY RESIDENTIAL
CONSTRUCTION TYPE:	VN

FLOOR AREAS
HEATED: 2047sf
GARAGE: 480sf
PORCHES: 347sf

TOTAL ROOFED = 2874sf

TECHNICAL DATA

SOIL BEARING:	ELECTRICAL:
CONCRETE FOOTING AND SLABS:	1500 PSF (ASSUMED)
WOOD STUDS:	2500 PSI (Min)
WOOD HEADERS:	CONSTRUCTION GRADE
ENGINEERED JOISTS:	#2 HEM-FIR
MECHANICAL:	PER MANUFACTURES SPECS.
	CENTRAL FURNACE HEATING / COOLING GROUND MOUNTED REFRIGERATED AIR
	200 AMP, 1 PH SERVICE

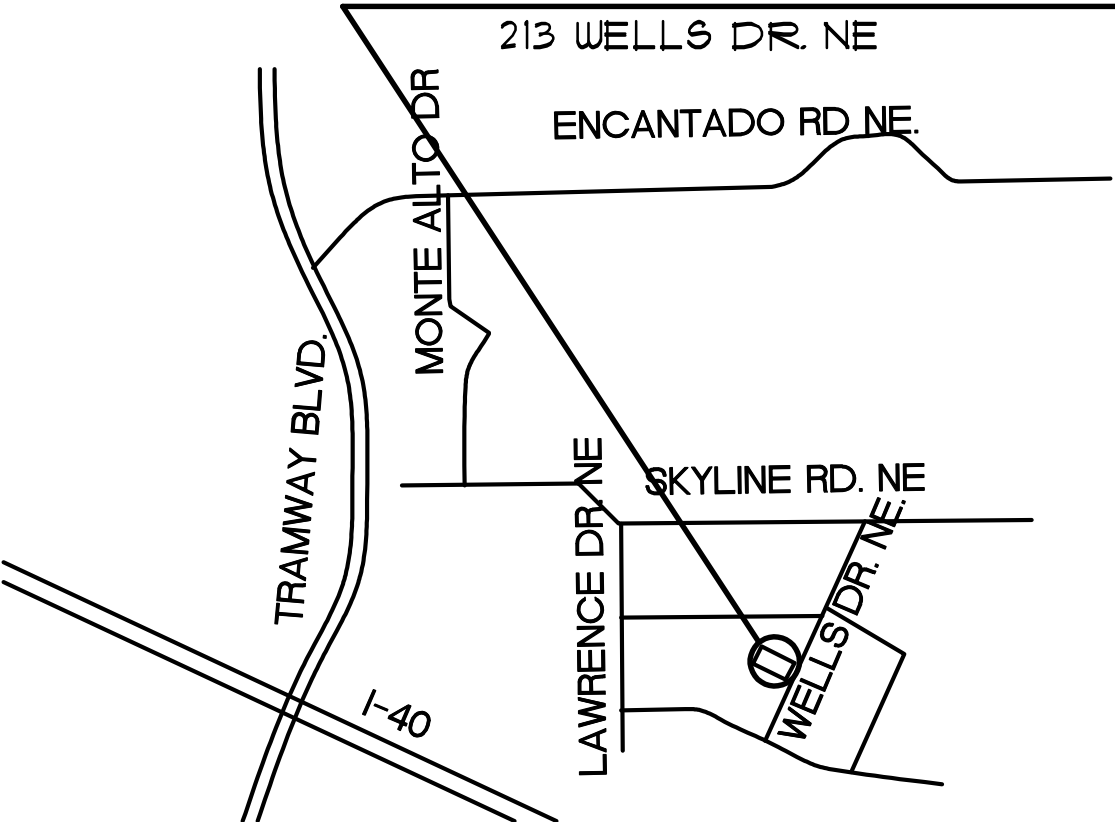
GRADING + DRAINAGE DATA:

NO OFF SITE FLOWS TO OR FROM SITE ALLOWED.

DRAINAGE POND CAPACITY CALCULATIONS:

Roof Area "A" = $776 \text{ sf} \times (3.67/12) = 237 \text{ cu. ft}$ required
(Pond "A" = $252 \text{ s.f.} \times 1 \text{ ft depth} = 252 \text{ cu. ft}$ provided)
Roof + Site Areas "B" = $2018 \text{ sf} \times (3.67/12) = 709 \text{ cu. ft}$ required
(Pond "B" = $796 \text{ s.f.} \times 1 \text{ ft depth} = 796 \text{ cu. ft}$ provided)
Roof Area "C" = $537 \text{ sf} \times (3.67/12) = 165 \text{ cu. ft}$ required
(Pond "C" = $188 \text{ s.f.} \times 1 \text{ ft depth} = 188 \text{ cu. ft}$ provided)

PROJECT SITE



SITE LOCATION MAP

NO SCALE

FLOOD ZONE DESIGNATION FOR PROJECT SITE = "ZONE X"
PURSUANT TO FEMA NFIP FLOOD INSURANCE RATE MAP NO. 35001C0378G / PANEL 0378G /REVISED SEPTEMBER 26, 2008.

LEGEND

- Flow Arrow - GRADE TO DRAIN
- EXISTING SPOT ELEVATION
- NEW SPOT ELEVATION
- SECTION REFERENCE SEE SHEET C1.1

SITE PLAN
1/8" = 1'-0"

GENERAL ZONING NOTES

ALL WINDOWS TO BE RECESSED 2".

M-ART BLDG. CO.
LLC.

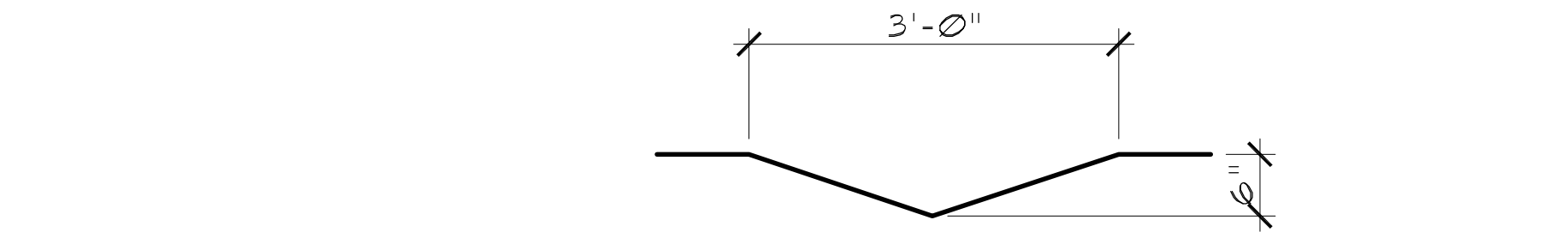
APRIL BRANNON RESIDENCE
213 WELLS DR. NE
ALBUQUERQUE, NEW MEXICO 87123

SITE PLAN, DESIGN DATA, SITE
LOCATION MAP, AND INDEX OF
DRAWINGS

DATE: 2/2021
REVISIONS:
CITY
REVISIONS 5/14/21

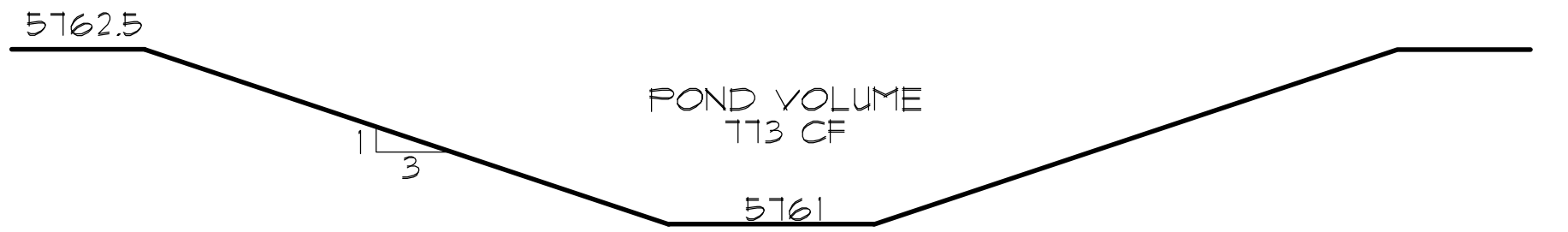
SHEET:

CVR



SWALE DETAIL

3/4" = 1'-0"



POND DETAIL

3/4" = 1'-0"



POND DETAIL

3/4" = 1'-0"

Mr. Tony Rivera
213 Wells Drive NE, Albuquerque NM
17-Mar-21

Reference: Development Process Manual, Section 6-2(A), Procedure for 40-Acre and Smaller Basins
Applicable Bernalillo County Precipitation Zone: 4

Precipitation Depths _{100-Year} [inches]:				
P ₁₀	P ₅₀	P ₁₀₀	P _{10day}	P _{10day}
1.96	2.64	3.6	4.75	6.27

Peak Discharge _{100-Year/10day} [cfs/acre]:			
A	B	C	D
2.09	2.73	3.41	4.78

for t_e = .2 hour
Zone 4 Peak Intensity [in/hr]:
I = 5.31

Proposed Conditions: Roof Area A											
Land Treatment	Area [ft ²]	Area [acre]	% of Total Area	Excess Prec. ₁₀₀₋₅ [in]	Weighted E [in]	Volume ₅₀₀ [acre-ft]	Volume ₅₀₀ [acre-ft]	Volume _{10day} [acre-ft]	Q _{100Year/10day} [cfs]	Rational Method, C	Rational Method, Q
A		0.0000	0.00%	0.76	--	0.0000	--	--	0.0000	0.39	0.0000
B		0.0000	0.00%	0.95	--	0.0000	--	--	0.0000	0.51	0.0000
C		0.0000	0.00%	1.20	--	0.0000	--	--	0.0000	0.64	0.0000
D		0.0178	100.00%	3.34	--	0.0050	--	--	0.0852	0.90	0.0851
Totals	0.0000	0.0178	100.00%	--	3.3400	0.0050	0.0064	0.0103	0.0852	--	0.0851

check: 0.0050
Volume₅₀₀ [CF] = 215.99

Proposed Conditions: Roof Area B and Concrete Parking Area											
Land Treatment	Area [ft ²]	Area [acre]	% of Total Area	Excess Prec. ₁₀₀₋₅ [in]	Weighted E [in]	Volume ₅₀₀ [acre-ft]	Volume ₅₀₀ [acre-ft]	Volume _{10day} [acre-ft]	Q _{100Year/10day} [cfs]	Rational Method, C	Rational Method, Q
A		0.0000	0.00%	0.76	--	0.0000	--	--	0.0000	0.39	0.0000
B		0.0000	0.00%	0.95	--	0.0000	--	--	0.0000	0.51	0.0000
C		0.0000	0.00%	1.20	--	0.0000	--	--	0.0000	0.64	0.0000
D		0.0532	100.00%	3.34	--	0.0148	--	--	0.2544	0.90	0.2543
Totals	0.0000	0.0532	100.00%	--	3.3400	0.0148	0.0191	0.0309	0.2544	--	0.2543

check: 0.0148
Volume₅₀₀ [CF] = 645.18

Proposed Conditions: Roof Area C											
Land Treatment	Area [ft ²]	Area [acre]	% of Total Area	Excess Prec. ₁₀₀₋₅ [in]	Weighted E [in]	Volume ₅₀₀ [acre-ft]	Volume ₅₀₀ [acre-ft]	Volume _{10day} [acre-ft]	Q _{100Year/10day} [cfs]	Rational Method, C	Rational Method, Q
A		0.0000	0.00%	0.76	--	0.0000	--	--	0.0000	0.39	0.0000
B		0.0000	0.00%	0.95	--	0.0000	--	--	0.0000	0.51	0.0000
C		0.0000	0.00%	1.20	--	0.0000	--	--	0.0000	0.64	0.0000
D		0.0123	100.00%	3.34	--	0.0034	--	--	0.0589	0.90	0.0589
Totals	0.0000	0.0123	100.00%	--	3.3400	0.0034	0.0044	0.0072	0.0589	--	0.0589

check: 0.0034
Volume₅₀₀ [CF] = 149.47

Proposed Conditions: Remaining Property											
Land Treatment	Area [ft ²]	Area [acre]	% of Total Area	Excess Prec. ₁₀₀₋₅ [in]	Weighted E [in]	Volume ₅₀₀ [acre-ft]	Volume ₅₀₀ [acre-ft]	Volume _{10day} [acre-ft]	Q _{100Year/10day} [cfs]	Rational Method, C	Rational Method, Q
A		0.0000	0.00%	0.76	--	0.0000	--	--	0.0000	0.39	0.0000
B		0.0000	0.00%	0.95	--	0.0000	--	--	0.0000	0.51	0.0000
C		0.2766	100.00%	1.20	--	0.0277	--	--	0.9434	0.64	0.9401
D		0.0000	0.00%	3.34	--	0.0000	--	--	0.0000	0.9	0.0000
Totals	0.0000	0.2766	100.00%	--	1.2000	0.0277	0.0277	0.0277	0.9434	--	0.9401

check: 0.0277
Volume₅₀₀ [CF] = 1205.06

Total Volume and Flow Entering Pond Volume₅₀₀ [CF] = 2215.7 1.3 CFS

Existing Conditions: Existing conditions											
Land Treatment	Area [ft ²]	Area [acre]	% of Total Area	Excess Prec. ₁₀₀₋₅ [in]	Weighted E [in]	Volume ₅₀₀ [acre-ft]	Volume ₅₀₀ [acre-ft]	Volume _{10day} [acre-ft]	Q _{100Year/10day} [cfs]	Rational Method, C	Rational Method, Q
A		0.0000	0.00%	0.53	--	0.0000	--	--	0.0000	0.31	0.0000
B		0.0000	0.00%	0.78	--	0.0000	--	--	0.0000	0.45	0.0000
C		0.3600	100.00%	1.13	--	0.0339	--	--	1.2276	0.62	1.1852
D		0.0000	0.00%	2.12	--	0.0000	--	--	0.0000	0.93	0.0000
Totals	0.0000	0.3600	100.00%	--	1.1300	0.0339	0.0339	0.0339	1.2276	--	1.1852

check: 0.0339
Volume₅₀₀ [CF] = 1476.68

Results:
2215.7 - 1476.68 = 739.00 CF Increase in runoff volume
1.3 - 1.1852 = 0.15 CFS Increase in peak discharge

M-Art Bldg Co 213 Wells Drive NE Albuquerque NM



GRADING AND DRAINAGE CALCS.



M-ART BLDG. CO.
LLC.

APRIL BRANNON RESIDENCE
213 WELLS DR. NE
ALBUQUERQUE, NEW MEXICO 87123

GRADING AND DRAINAGE CALCS
AND DETAILS

DATE:	2/2021
REVISIONS:	
CITY REVISIONS NEW	
SHEET 5/14/21	
SHEET:	

C1.1