CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



July 20, 2023

Phillip W. Clark, P.E. Clark Consulting Engineers 19 Ryan Rd Edgewood, NM 87015

RE: Lot 5 – 3141 Bridge St. SW Grading and Drainage Plan Engineer's Stamp Date: 05/16/23

Hydrology File: L11D067E

Dear Mr. Clark:

PO Box 1293

Based upon the information provided in your submittal received 7/12/2023, the Grading and Drainage Plan is approved for Building Permit and Grading Permit. Since this site has already been disturbed and graded, 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.

Albuquerque

PRIOR TO CERTIFICATE OF OCCUPANCY:

NM 87103

1. Engineer's Certification, per the DPM Part 6-14 (F): Engineer's Certification Checklist For Non-Subdivision is required.

www.cabq.gov

2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for \$25 made out to "Bernalillo County" for the stormwater quality ponds per Article 6-15(C) of the DPM to Hydrology for review. Once the review is done, Hydrology will send back an email stating our approval/comments.

If you have any questions, please contact me at 924-3695 or tchen@cabq.gov.

Sincerely,

Tiequan Chen, P.E.

Principal Engineer, Hydrology

Planning Department, Development Review Services



City of Albuquerque

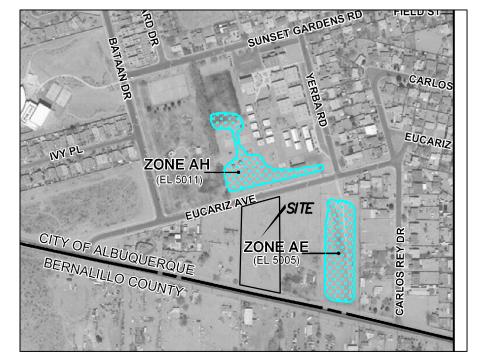
Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Lopez WEST Reside	ntial Building Po	BP-2023-08724 ermit #: BP-2023-04561	Hvdrolo	gy File #:	L11/D0067
DRB#:					
Legal Description: Lot 5 Plat of Lope	ez West /I OT :	316A UNIT 3 TOWN	OF ATRI	SCO GRA	ANT
City Address: 3141, 3151 Bric			01 / (11 (1	000 014	<u></u>
City Address: 3141, 3131 Bitc	ige of over	01 100	-		
Applicant: CLARK CONSULTING	ENGINEERS	3	Contact:	PHIL	
Address:					
Phone#: 281-2444	xpxxxxxx cell	/ txt 264.6042	E-mail:	CCEalbq@	gaol.com
Other Contact: Francisco Lo	pez		Contact:		
Address:			-		
Phone#:			E-mail:		
TYPE OF DEVELOPMENT: PL					
Check all that Apply:					
DEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICA PAD CERTIFICATION CONCEPTUAL G & D PLAN	TION	TYPE OF APPROV BUILDING PER CERTIFICATE PRELIMINARY SITE PLAN FO SITE PLAN FO	RMIT APPRO OF OCCUP. PLAT APP R SUB'D A	OVAL ANCY PROVAL PPROVAL	
GRADING PLAN DRAINAGE REPORT		FINAL PLAT A	APPROVAL		
DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT PERM ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (** TRAFFIC IMPACT STUDY (TIS) STREET LIGHT LAYOUT OTHER (SPECIFY)	TCL)	SIA/ RELEASE FOUNDATION GRADING PER SO-19 APPROV PAVING PERM GRADING/ PAI WORK ORDER CLOMR/LOMR FLOODPLAIN	PERMIT A RMIT APPROVAL MIT APPROV D CERTIFIC APPROVAL	PPROVAL OVAL VAL CATION	
PRE-DESIGN MEETING? IS THIS A RESUBMITTAL?: X Yes	No	OTHER (SPEC			
		THE engineer			
COA STAFF:	FI FCTRONI	IC SUBMITTAL RECEIVED:			

FEE PAID:_



FIRM MAP PANEL # 329

GRADING & DRAINAGE PLAN

THE 6-LOT RESIDENTIAL SUBDIVISION IS LOCATED IN THE SOUTHWEST AREA OF ALBUQUERQUE APPROXIMATELY 3 MILES SOUTHWEST OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERN-ALILLO COUNTY FLOOD HAZARD ORDINANCE, NO.88-46, AND THE CITY STORM DRAINAGE ORDINANCE. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

- 1. EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND EXISTING IMPROVEMENTS: INCLUDING VACANT LOT
- 2. PROPOSED IMPROVEMENTS: 6-2600 SF TOTAL SUB-GRADE PAD AREA(S), NEW CONCRETE DRIVEPADS AND ON-SITE PARKING, NEW GRADE ELEVATIONS, WALLS, FLATWORK AND LANDSCAPING.
- 3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS. 4. QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF-SITE FLOWS WHICH CONTRIBUTE TO THE DEVELOPED FLOWS GEN-ERATED BY THE IMPROVEMENTS.

THE PURPOSE OF THE PLAN IS TO ESTABLISH CRITERIA FOR CON-TROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE EAST AND WEST BY RESIDENTIAL USE. BRIDGE AND EUCARIZ DR. ON THE SOUTH AND NORTH ARE PAVED. EUCARIZ AVE. ON THE NORTH, HAS EXISTING CURB, GUTTER AND SIDEWALK, WHILE BOTH EUCARIZ AND BRIDGE ARE MAINTAINED BY THE CITY OF ALBUQUERQUE. THE SITE CURRENTLY DOES NOT DRAIN OR DISCHARGE RUNOFF.

HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED. SINCE BOTH STREETS ARE IMPROVED ONLY MINIMAL GRADING (DRIVEPAD RECONSTR~N) IS PROPOSED WITHIN THE CITY R.O.W. THE "FIRST BLUSH" 1/2—INCH RAINSTORM IS RETAINED ON—SITE SINCE RUNOFF IS NOT DISCHARGED TO THE ADJACENT STREETS. ADDITIONALLY, RUNOFF IS ROUTED TO LANDSCAPING AND WATER HARVESTING IS RECOMMENDED.

CALCULATIONS

AS REVISED PER VALLEY GRADING SCHEME 6-5(D) (2020 DPM)

THE SITE IS NOT IMPACTED ADVERSELY BY ANY OFF-SITE DRAINAGE FLOWS.

DESIGN CRITERIA HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE ADOPTED BY THE COUNTY OF BERNALILLO DISCHARGE RATE: Q=QPEAK x AREA.."Peak Discharge Rates For Small Watersheds" $VOLUMETRIC\ DISCHARGE:\ VOLUME = EWeighted\ x\ AREA$ $P100 = 2.20\ Inches,\ Zone\ 1$ Time of Concentration, $TC = 10\ Minutes$

DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [] = 10 YEAR VALUES

EXISTING CONDITIONS

TOTAL AREA = 2.09 ACRES, WHERE EXCESS PRECIP. 'A' = 0.49 In. [0.08] PEAK DISCHARGE, Q100 = 2.7 CFS [0.51], WHERE UNIT PEAK DISCHARGE 'A' = 1.29 CFS/AC. [0.24] THEREFORE: VOLUME 100 = 3717 CF [607]

DEVELOPED CONDITIONS

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

FOR STODI AREA		<u>AREA</u>	<u>LAND TREATM'T</u>	<u>Q</u> Peak	<u>E</u>
UNDEVEL. /HARVES	STPond (0.84 Ac.(40%)	Α	1.29[0.24]	0.49[0.08]
LANDSCAPING	(D.42 Ac.(20%)	В	2.03[0.76]	0.67[0.22]
GRAVEL & COMPA	ACTED SOIL	0.48 Ac.(23%)	C	2.87[1.49]	0.99[0.44]
ROOF - PAVEMEN	IT <u>(</u>	0.36 Ac.(17%)	D	4.40[2.90]	1.97[1.24]
	2	2.09 Ac.			

THEREFORE: $E_{Weighted} = 0.89 \text{ In.}[0.38] &$ Q100 = 4.89 CFS

Q10 = 2.28 CFS

VOLUME 100 = 6752 CFVOLUME 10 = 2883 CF

RECOMMEND: ROUTE DEVELOPED RUNOFF THROUGH EXISTING/UPGRADED SOFT LANDSCAPING INCLUDING DEPRESSED LANDSCAPING IN THE NEW REAR YARDS AS SHOWN

> PART 6-5(D) RESIDENTIAL SUBDIVISION DEVELOPMENT AND ADDITIONS

FOR LOTS LESS THAN 1 ACRE, WATER HARVESTING ON THE LOT IS REQUIRED. THE WATER HARVESTING VOLUME GOAL IS TO CAPTURE 1/2 INCH OF RUNOFF FROM IMPERVIOUS AREAS ON THE SITE. THEREFORE: 4400 SF X 0.5/12 = 183 CF PER LOT

1. ROOF FLOWS SHOULD BE DIRECTED TO THE WATER HARVESTING AREA(s).

2. RUNOFF SHOULD NOT ADVERSELY IMPACT ADJACENT PROPERTIES.

3. THE FINISHED PAD ELEVATION IS RECOMMENDED TO BE A MINIMUM OF 12 INCHES ABOVE THE EDGE OF PAVEMENT OR ROADWAY. 4. STORMWATER MUST BE ALLOWED TO EQUALIZE TO SAME LEVEL BETWEEN FRONT AND BACK YARDS (NO DAMS, BARRIERS, ETC. AND FREE FROM DEBRIS) ✓ V-10DAYS = V360 + AD * (P10DAYS - P360) / 12 in/ft TYPICAL PER LOT

 $= 1125 + 0.10(1.31)/12 \times 43560 = 1600 CF$

LOT(s) COMPLETELY WALLED IN ASSUME @/Or Above 10-yr. Approx. 0.1 Ac., LT. 'D' per Lot THEREFORE:

\PER LOT 3641/6 ~ 607 CF, OK LOT VOL. PROVIDED, 0.22 AC./2 X 0.7' (43560) = 3300 CF THIS IS EXCLUDING THE 600 CF HARVEST AREAS PREVIOUSLY BUILT/ (SEE 4.11.22 CERTIFIED)

Planning Department velopment Review Services **HYDROLOGY SECTION APPROVED** 7/20/2023

HydroTrans # L11D067E/F

-14'-7"-0.33 AC. 5012.01

TYPICAL 1' DEPTH —

EARTHEN SWALE BUILT

5

LOT 1 2.2' DEPTH &

−W.S.11.4 —

HARVEST AREA= 1500 SF

LOT 5

ົ^ທ1' Deep Ditches

Built To Ponds.

Sideslopes To Be Layed Back @ 3·1

TYPICAL 3-Locations

-HOUSE FOOTPRINT

FIN.FLR. 13.15 SG PAD 12.75

ELEV. 5012.0

0.35 AC.

LOT VOL. = 1600 CF

HARVEST AREA= 1500 SF

/LOT VOL. = 1600 CF

LOT 6

FIN.FLR. 13.60/

SG PAD 13.15

DEDICATED BY PREVIOUS PLAT

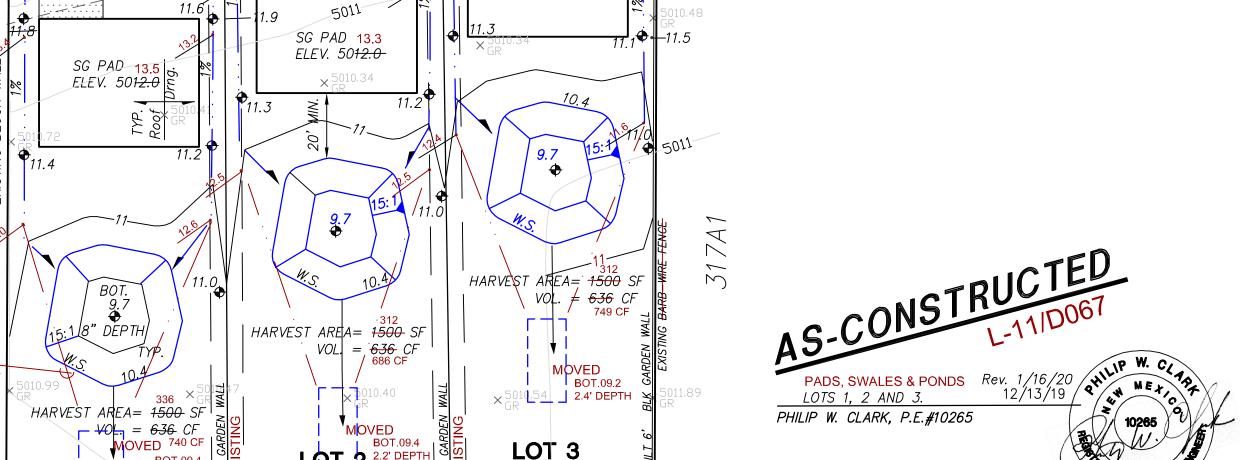
ELEV. 5013.0

REARYARD HARVEST CALC. (TYP.)

LOT 6 PLOT PLAN

ALL DEVELOPED RUNOFF IS DIRECTED TO THE REAR YARD HARVESTING AREAS WITH THE EXCEPTION OF THE EAST SIDEYARD / SWALE ON LOT 4. THE REAR YARDS ARE CALCED AS FOLLOWS:

(1500 SF + 341 SF) /2 X 0.68' = 626 CF $(1495 \text{ SF} + 405 \text{ SF}) / 2 \times 0.67' = 636 \text{ CF}$ CHECK 1st 1/2" RETAINED $2.09 \ AC \times 43560 \ SF \times 0.04' = 3641 \ CF$



SG PAD 13.0 ELEV.5012.0

RIK GARDEN WALL

HARVEST AREA= 1500 SF

LOT VOL. = 1600 CF

HOUSE FOOTPRINT

FIN.FLR. 12.80 SG PAD 12.3

ELEV. 5011.5

690SF+140SF/2

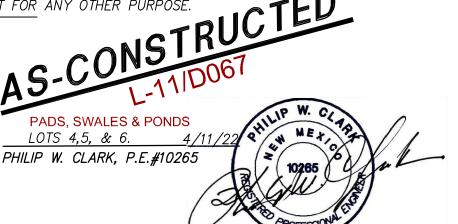
 $X18" = 626 CF \pm$

RETENTION

I, PHILIP W CLARK, NMPE 10265, OF THE FIRM CLARK CONSULTING ENGINEERS, 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 9/25/12. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AS SUPPLEMENTAL DATA TO THE ORIGINAL TOPOGRAPHIC SURVEY PREPARED BY TONY HARRIS NMPS, OF THE FIRM HARRIS SURVEYING, INC, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR BUILDING PERMIT.

DRAINAGE CERTIFICATION

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





TOWN OF ATRISCO

I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT MINOR EARTHWORK (BUT NO MAJOR DISTURBANCE) OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE THAT WOULD ADVERSELY AFFECT THE DRAINAGE CONCEPTS APPROVED OR DETERMINED.



ZONE L−1

VICINITY MAP

NOTES

- 1. ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 8TH EDITION W/ UPDATES.
- 2. AN EXCAVATION/CONSTRUCTION PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R.O.W. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION
- 3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 4. ALL LANDSCAPING AREA SHALL BE SOFT-LINED WITH NATIVE VEGETATION AND/OR GRAVEL.
- 5. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION.
- 6. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
- 7. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1. ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.

LEGEND

AS-BUILT SPOT ELEVATION EXIST. SPÔT ELÊVATION ____10 -EXIST. CONTOUR NEW SPOT ELEVATION **←** ,**♦** 24.0 NEW CONTOUR NEW SWALE DRAINAGE DIRECTION, EXISTING

NEW P.C.C., CONCRETE TOP OF CURB, EXISTING FLOWLINE EXISTING POWER POLE FACE OF CURB/FACE OF CURB

HIGH POINT WATER SURFACE W. S.

PROJECT DATA

LEGAL DESCRIPTION (CONCURRENT PLATTING)

LOTS 1-6, LOPEZ WEST SUBDIVISION ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

CHECKED BY: PWC DATE 7/2012

PROJECT BENCHMARK

TOP OF REBAR/CAP AT THE PROJECT SOUTHEAST CORNER MSL ELEVATION = 5010.54, AS TIED FROM COA 3-1/4" DIAMETER ALUM DISK, 8_L10, NAVD 88, MSL ELEV. 5069.58, LOCATED AT THE NE INTERSECTION OF 75TH ST. AND BRIDGE BLVD.

TOPOGRAPHIC DESIGN SURVEY

PROVIDED BY THE SURVEY OFFICE UNDER THE DIRECTION OF ANTHONY HARRIS, N.M.P.S., DATED JULY 2012.



FILE #: G/D

PHILIP W. CLARK NMPE #10265