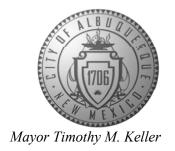
CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



May 5, 2023

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

RE: 1998 Cherokee Rd NW

Grading and Drainage Plan Engineer's Stamp Date: 04/26/23

Hydrology File: F13D034

Dear Mr.Clark:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 04/26/2023, the Grading & Drainage Plan **is not** approved for Grading Permit. The following comments need to be addressed for approval of the above referenced project:

1. As stated, this site follows Article 6-5 Valley Drainage Criteria of the DPM and the required retention volume is 1675 CF. There are two retention ponds shown on the plans. One to the northeast of the proposed house that will provide 358 cubic feet of volume and one to the southwest of the proposed house that will provide 1500 cubic feet of volume. Based on my measurements, the southwest pond has a top of pond area of 628 square feet. With a typical 3 to 1 side slope and a depth of 1 foot, the bottom of pond area is about 148 square feet. The volume that can be obtained in this pond is only about 388 cubic feet. Combined with the first pond, the provided volume is only 746 cubic feet. This site is short 929 cubic feet of required retention volume. This may have to be placed in an underground storage system. There are may products on the market that can

be used. Please pick one and show that the required retention volume can be provided.

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

Renée C. Brissette



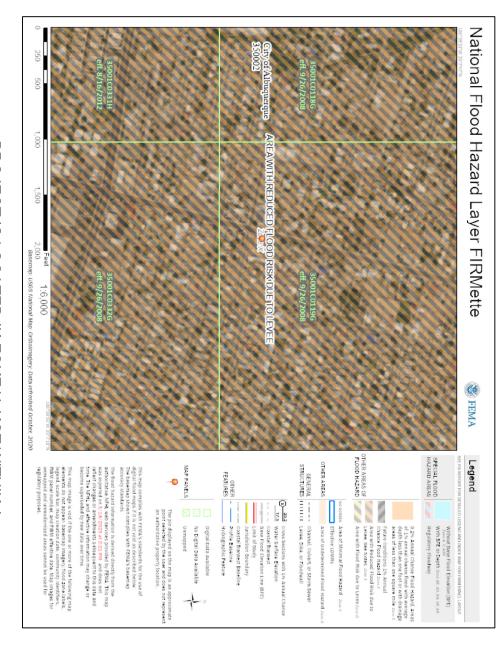
City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

DRB#	g Permit # EPC#	Hydrology File #_F13/ D
Legal Description: LOT 2A1, LAND OF BETTY SKOG	EPC# EN City Address	S OR Parcel 1998 Cherokee N
Applicant/Agent: Clark Consulting Engineers Address: 19 Ryan Rd, Edgewood, NM 870 Email: CCEalbg@aol.com		
Applicant/Owner:Address:Email:		
TYPE OF DEVELOPMENT:PLAT (#of lots) X_R RE-SUBMITTAL:YES _x_ NO	ESIDENCED	RB SITE ADMIN SITE:
SECTION: TRANSPORTATION X Check all that apply:	_ HYDROLOGY	//DRAINAGE
TYPE OF SUBMITTAL: TYP	E OF APPROV	AL/ACCEPTANCE SOUGHT:
ENGINEER/ARCHITECT CERTIFICATION	X_BUILDING	PERMIT APPROVAL
PAD CERTIFICATION	CERTIFICATE OF OCCUPANCY	
CONCEPTUAL G&D PLAN	CONCEPTUAL TCL DRB APPROVAL	
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PROJECT IS LOCATED IN ZONE X, NOT WITHIN A SPECIAL FLOOD HAZARD AREA

FIRM MAP REF: * C0118

9

GRADING DRAINAGE P AZ

THE SINGLE LOT R-A PROJECT IS LOCATED IN THE GRIEGOS SECTION OF ALBUQUERQUE'S NORTH VALLEY APPROXIMATELY 3 MILES NORTH OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE CITY OF ALBUQ. DEVELOPMENT PROCESS MANUAL (DPM), CH. 6, ORIGINALLY SIGNED 6/8/20 — DRAINAGE, FLOOD AND EROSION CONTROL. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

- EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND EXISTING IMPROVEMENTS: INCLUDING 1 RESIDENCE AND EXISTING FLATWORK.
 PROPOSED IMPROVEMENTS: SINGLE—FAMILY RESIDENCE,
 NEW CONCRETE PAD / GRADE ELEVATIONS, BERMS OR BARRIERS AND SWALES.
 CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
 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 CONTROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE SOUTH, EAST AND THE WEST BY RESIDENCES. THE ACCESS ROAD, A PRIVATE STREET IS PRIVATELY MAINTAINED AND CONSISTS OF GRAVEL SURFACING. THE SITE CURRENTLY HAS SLOPES AT 0 TO 1% BUT IS GENERALLY FLAT.

HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED. SINCE CHEROKEE RD AND PRIVATE WAY ARE IMPROVED ONLY MINIMAL GRADING IS PROPOSED WITHIN THE EASEMENT. FREE DISCHARGE OF DEVELOPED FLOW IS ACCEPTABLE, HOWEVER THE SITE IS FLAT THEREFORE A FLAT NW VALLEY GRADING SCHEME IS EMPLOYED. THIS PLAN ROUTES DEVELOPED RUNOFF THROUGH/TO THE PROPOSED LANDSCAPE AREAS.

" Valley Drainage Criteria" PER SECTION 6-5 (A), OF THE DPM - SINGLE-LOT DEVELOPME DEVELOPMENT

CALCULATIONS

HYDROLOGIC METHODS PER CHAPTER 6, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) 2020 EDITION FOR CITY OF ALBUQUERQUE. DISCHARGE RATE: $Q=QPEAK \times AREA$. "Peak Discharge Rates For Small Watersheds" VOLUMETRIC DISCHARGE: VOLUME = EWeighted \times AREA P100-6 Hr= 2.29 ln., Zone 2, P100-24 Hr.=2.59 ln., P100-10 Day=3.6 ln. TC = 12 Min. PAR-100-6 Hr= 2.29 ln., Zone 2, P100-24 Hr.=2.59 ln., P100-10 Day=3.6 ln. TC = 10 YEAR VALUES DEVI

TOTAL AREA = 0.25 ACRES, WHERE EXCESS PRECIP. 'W' =1.01 In. PEAK DISCHARGE, Q100 = 0.75 CFS, WHERE UNIT PEAK DISCHARGE = 3.0 CFS/AC. THEREFORE: VOLUME 100 = 916 CF EXISTING CONDITIONS

DEVELOPED CONDITIONS. DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE DETERMINE LAND FOR STUDY AREA TREATM'T 11 Q P_{eak} E 1.71[0.41] 0.62[0.15] 2.36[0.95] 0.80[0.30] 3.05[1.59] 1.03[0.48] 4.34[2.71] 2.33[1.51]

UNDEVELOPED LANDSCAPING, Native, <10% GRAVEL & COMPACTED SOIL ROOF — PAVEMENT THEREFORE: E E Weighted = 1.→ ...
 Q100 = 0.82 CFS
 ✓ V 10DAYS = V360 + AD * (P10DAYS - P360) / 12 in/ft = 1271 + 0.085(1.31)/12 x 43560 = 1675 CF 0.00 Ac. (0%) 0.08 Ac. (33%) E 0.08 Ac. (33%) C 0.09 Ac. (34%) D 0.25 Ac. 0002

PART 6-5(A) SINGLE-LOT RESIDENTIAL DEVELOPMENT AND ADDITIONS

FOR LOTS LESS THAN 1 ACRE, WATER HARVESTING ON THE LOT IS REQUIRED. THE WATER HARVESTING VOLUME GOAL IS TO CAPTURE ½ INCH OF RUNOFF FROM IMPERVIOUS AREAS ON THE SITE. THEREFORE: 3726 SF X 0.5/12 = 155 CF

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)

LO. PRIVATE ACCESS E LANDS OF BETTY SKOGEN MRCCO MAD 3, 1-4-2 SON FLAT SWALE. BUILD BLK. LAMOS OF BETT 1500 CF 71.67 CH (A) OPESSED AS A 54.52

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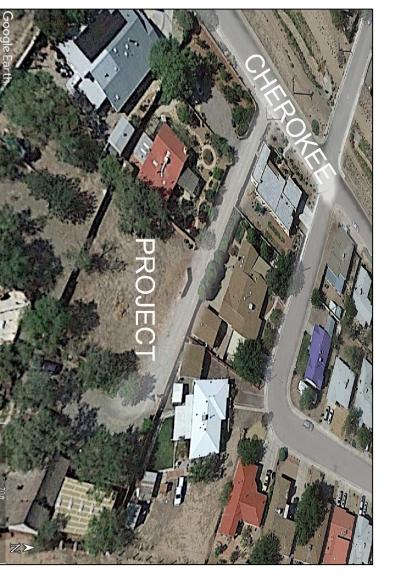
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OOKING NORTHWES



EXISTING

CB - CONCRETE CURB

DC - DRIVEWAY CUT

EA - EDGE OF ASPHALT

EC - EDGE OF CONCRETE

FF - FINISH FLOOR

FL - FLOW LINE

G - GROUND

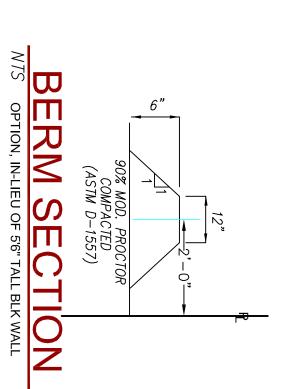
SASMH - SAS MAN HOLE

TA - TOP OF ASPHALT

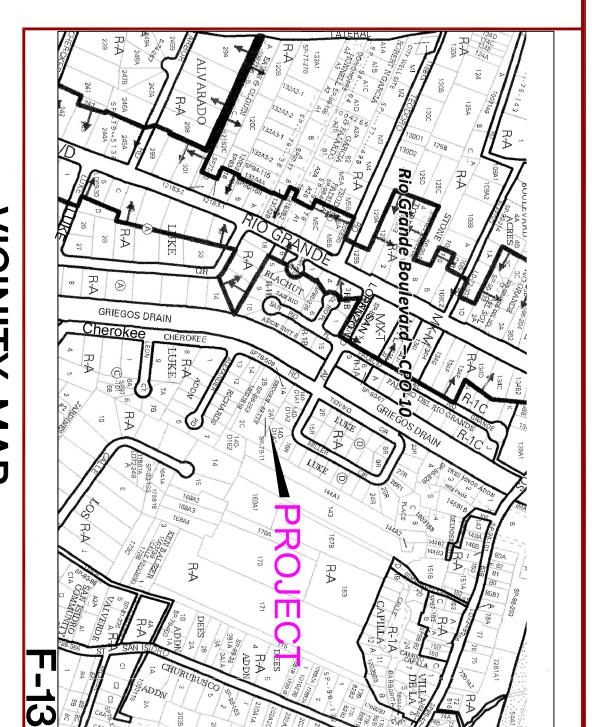
TC - TOP OF CONCRETE

WM - WATER METER

PHILIP F NEW I ILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE EW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS N REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO SIGNIFICANT EARTHWORK MAJOR DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE







VICINITY MAP

NOTES

ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 2020 EDITION.

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.

 $\dot{\mathcal{N}}$

- 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.
 ALL LANDSCAPING AREA SHALL BE SOFT—LINED WITH NATIVE VEGETATION AND/OR GRAVEL.
- REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION.
- MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 2 HORIZONTAL TO 1 VERTICAL, 2:1, <3' TALL. ALL DIMENSIONS FACE OF CURB, UNLESS NOTED OTHERWISE.

LEGEND

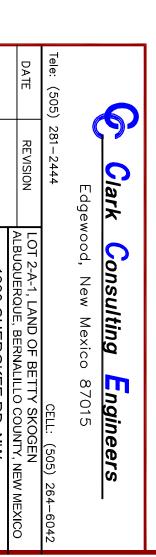
TOP OF CURB, EXISTING TOP OF ASPHALT FLOWLINE NEW CONCRETE CURB (0.5, HEIGHT) EXISTING POWER POLE NEW P.C.C., CONCRETE NEW SPOT ELEVATION (FINISH)
NEW CONTOUR NEW SWALE -- DRAINAGE DIRECTION, EXISTING CONTOUR SP OT ELEVATION ♦ 24.012 0 P.P. 10

PROJEC DATA

EGAL DESCRIPTION.

PROJECT BENCHMARK LOT 2-A-1, LAND OF BETTY SKOGEN ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

TOPOGRAPHIC DESIGN SURVEY COMPILED BY CCE PROVIDED BY 2018 AGIS ORTHOPHOTOGRAPHY, AND COMMUNITY SCIENCES TOPO SURVEY, DATED 4/17/23. TOP OF 1/2-INCH REBAR AT THE NW CORNER
MSL ELEVATION = 4971.72, AS TIED FROM COA 3-1/4" DIAMETER ALUM
DISK, "23_G14, NAVD 88, 4969.30.



PWC DRAWN BY: CCE JOB #: 1998 Cherokee
PWC DATE: APR. '23 FILE #: G/D REVISION **GRADING &** 1998 CHEROKEE RD, NW DRAINAGE PLAN

GD-1