

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

January 21, 2021

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

**RE: Thurgood Subdivision
Grading & Drainage Plan
Engineer's Stamp Date: 12/12/20
Hydrology File: F14D078**

Dear Mr. Clark:

Based upon the information provided in your resubmittal received 12/23/2020, the Grading and Drainage Plan is approved for Grading Permit, Work Order and for action by the DRB for Preliminary Plat.

PO Box 1293

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

Albuquerque

NM 87103

Prior to Building Permit (For Information):

www.cabq.gov

Each individual Lot will have to submit a Grading & Drainage Plan to Hydrology for Building Permit approval. These plans must follow the approved Grading & Drainage Plan for the Thurgood Subdivision.

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



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Thurgood Subd. Building Permit #: _____ Hydrology File #: F14D078
 DRB#: 2019-003051 EPC#: _____ Work Order#: _____
 Legal Description: Lot 4 & 5, Freeman Addn
 City Address: 4635-4639 Grande Drvie NW

Applicant: CLARK CONSULTING ENGINEERS Contact: PHIL
 Address: _____
 Phone#: 281-2444 Fax#: xxxxx cell / txt 264.6042 E-mail: CCEal bq@aol.com

Other Contact: _____ Contact: _____
 Address: _____
 Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF DEVELOPMENT: PLAT RESIDENCE DRB SITE ADMIN SITE

Check all that Apply:

DEPARTMENT:

- HYDROLOGY/ DRAINAGE
- TRAFFIC/ TRANSPORTATION

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) _____

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?

IS THIS A RESUBMITTAL?: Yes No

DATE SUBMITTED: 12/01/20 12/14/20 By: Clark Consulting Engrs

COA STAFF: _____

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



FIRM MAP

GRADING & DRAINAGE PLAN

THE 4-LOT R-1 PROJECT IS LOCATED IN LOS 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, 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 TWO RESIDENCES AND EXISTING FLATWORK.
- PROPOSED IMPROVEMENTS: 4 NEWLY CONFIGURED LOTS, NEW ASPHALT DRIVE AND PRIVATE ACCESS EASEMENT, NEW GRADE ELEVATIONS, WALLS, FLATWORK AND LANDSCAPING.
- CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
- QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF-SITE FLOWS WHICH CONTRIBUTE TO THE DEVELOPED FLOWS GENERATED 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, NORTH AND THE WEST BY RESIDENCES. GRANDE DRIVE NW, A LOCAL STREET PER THE LRMSF IS PAVED WITH CURB, GUTTER AND 4' SIDEWALK, AND IS MAINTAINED BY THE CITY OF ALBUQUERQUE. THE SITE CURRENTLY HAS SLOPES AT 0 TO 1% BUT IS GENERALLY FLAT.

HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED. SINCE GRANDE DRIVE IS IMPROVED ONLY MINIMAL GRADING (ACCESS RECONSTRUCTION) IS PROPOSED WITHIN THE CITY R.O.W. 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/TWO THE PROPOSED LANDSCAPE AREAS.

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

"Flat North Valley Grading Scheme"

PER SECTION 6-5 (D), OF THE DPM

CALCULATIONS

DESIGN CRITERIA

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: $VOLUME = E \times WEIGHTED \times AREA$
 $P100-6 \text{ Hr} = 2.29 \text{ in.}$, Zone 2, $P100-24 \text{ Hr} = 2.59 \text{ in.}$, $P100-10 \text{ Day} = 3.6 \text{ in.}$ TC = 12 Min.
 DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [] = 10 YEAR VALUES

EXISTING CONDITIONS

TOTAL AREA = 0.97 ACRES, WHERE EXCESS PRECIP. "W" = 1.15 in. [0.6]
 PEAK DISCHARGE, $Q100 = 2.88 \text{ CFS}$ [1.2] WHERE UNIT PEAK DISCHARGE "W" = 2.9 CFS/AC. [1.6]
 THEREFORE: $VOLUME 100 = 4014 \text{ CF}$ [XXXX]

DEVELOPED CONDITIONS

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

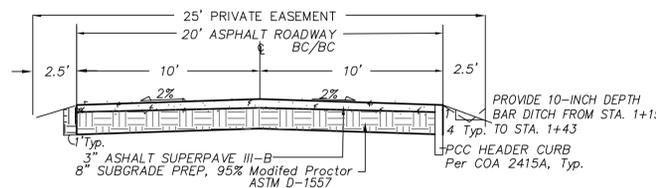
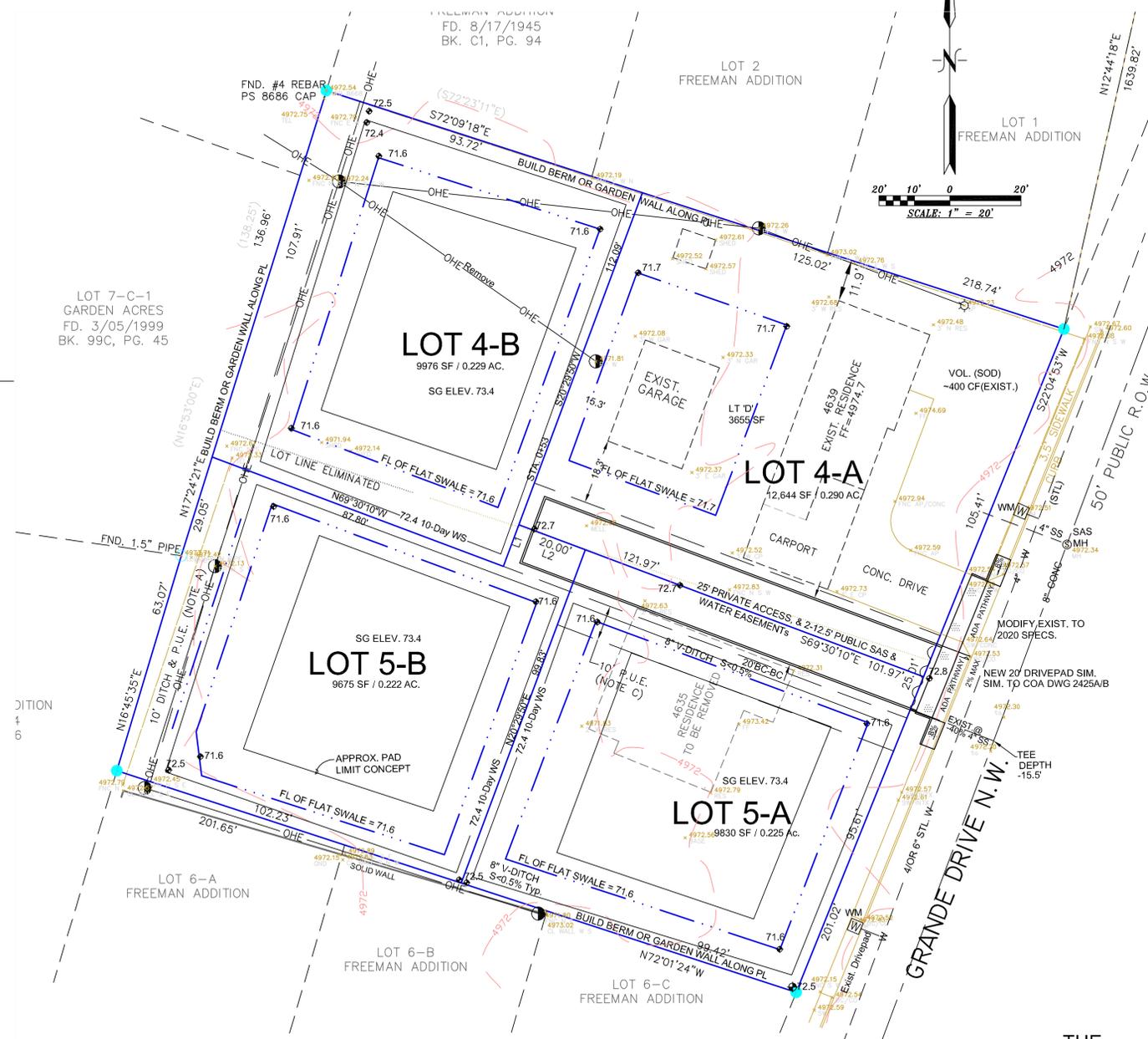
AREA	LAND TREATMENT	Q _{Peak}	E
UNDEVELOPED	---	1.71[0.41]	0.62[0.15]
LANDSCAPING, Native, <10%	B	2.36[0.95]	0.80[0.30]
GRAVEL & COMPACTED SOIL	C	3.05[1.59]	1.03[0.48]
ROOF - PAVEMENT	D	4.34[2.71]	2.33[1.51]

THEREFORE: $E_{Weighted} = 1.45 \text{ in.}$ & $VOLUME 100 = 5105 \text{ CF}$
 $Q100 = 3.2 \text{ CFS}$ "Valley Flat Grading Scheme"
 INCREASE OF 0.3 CFS Per Old Policy 0.38 Ac (43560) x 3.67/12 = 5062 CF Harvested ON SITE
 $V 10 \text{ DAYS} = V360 + AD * (P10 \text{ DAYS} - P360) / 12 \text{ in/ft}$
 $= 5105 + 0.38 (1.31/12 * 43560 - 8912 \text{ CF})$ THEREFORE, (STORE ~ 1728 CF PER LOT)
 VOL. PROV. PER LOT, AREA BETWEEN 10-DAY W.S. AND 3600 SF PAD / 2 x Depth (10 inches)
 TYPICAL, LOT 5-A = 7500 - 3500 / 2 X 0.83" = 1660 CF

RECOMMEND : ROUTE DEVELOPED RUNOFF THROUGH UPGRADED SOFT LANDSCAPING

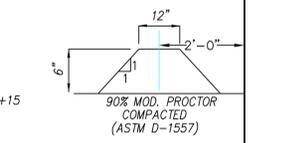
- SET SG HOUSE PADS 12-INCHES ABOVE 10-DAY DURATION STORM
- CONSTRUCT 12" COMPACTED DIRT BERM AROUND PROPERTY IF PERIMETER GARDEN WALLS NOT CONSTRUCTED
- STORMWATER MUST BE ALLOWED TO EQUALIZE TO SAME LEVEL BETWEEN FRONT AND BACK YARDS (NO DAMS, BARRIERS, ETC. AND FREE FROM DEBRIS)

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 NO EARTHWORK OF ANY KIND, NOR ANY DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.



PRIVATE ROADWAY SECTION

NOT TO SCALE LOOKING BK STATION



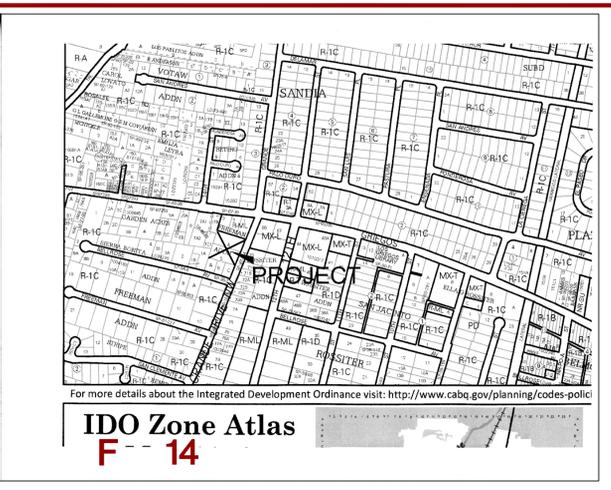
BERM SECTION

NTS OPTION, IN-LIEU OF 5'-TALL GARDEN WALL

THE THURGOOD DEVELOPMENT

En "El Valle Del Norte"

DECEMBER 2020



IDO Zone Atlas F-14

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

LEGEND

- EXIST. SPOT ELEVATION +4924.0
- EXIST. CONTOUR 10
- NEW SPOT ELEVATION (FINISH) 24.0
- NEW CONTOUR -12
- NEW SWALE -
- DRAINAGE DIRECTION, EXISTING ->
- NEW CONCRETE CURB (0.5' HEIGHT) -
- NEW P.C.C., CONCRETE [Pattern]
- TOP OF CURB, EXISTING TC
- TOP OF ASPHALT TA
- FLOWLINE FL
- EXISTING POWER POLE o P.P.
- FACE OF CURB/FACE OF CURB F-F
- WATER BLOCK [Symbol]

PROJECT DATA

LEGAL DESCRIPTION, OWNER & ADDRESS
 UPC: 101406110704930178
 Owner: THURGOOD SCOT L & JEANNINE TRUSTEES THURGOOD RVT
 Situs Address: 4635 GRANDE DR NW ALBUQUERQUE NM 87107
 Legal Description: "005 FREEMAN ADD"

PROJECT BENCHMARK

TOP OF EXISTING NORTH RIM OF SANITARY SEWER RING LOCATED IN GRANDE DRIVE MSL ELEVATION = 4972.34, AS TIED FROM COA 3-1/4" DIAMETER ALUM DISK, "DOUGLAS", MSL, NAVD 88, 4975.08.

TOPOGRAPHIC DESIGN SURVEY

PROVIDED BY ALPHA PRO SURVEYING, LLC, SEPTEMBER 2019 AND FIELD SUPPLEMENTED BY CLARK CONSULTING ENGINEERS.

Clark Consulting Engineers
 Edgewood, New Mexico 87015
 Tel: (505) 281-2444 CELL: (505) 264-6042

DATE	REVISION	LOT 4 AND 5, FREEMAN ADDITION
12/12/20	ADDR HYDRO (R.B.) DPM FLAT GRADG	ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO 4635-4639 GRANDE DR NW

SITE, GRADING & DRAINAGE PLAN

DESIGNED BY: PWC	DRAWN BY: CCE	JOB #: Thurgood	GD-1
CHECKED BY: PWC	DATE: AUG 2019	FILE #: G/D	