

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

December 11, 2020

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

**RE: Thurgood Subdivision
Grading & Drainage Plan
Engineer's Stamp Date: 08/16/20
Hydrology File: F14D078**

Dear Mr. Clark:

Based upon the information provided in your submittal received 12/01/2020, the Grading and Drainage Plan **is not** approved for Grading Permit and for action by the DRB for Preliminary Plat. The following comments need to be addressed for approval of the above referenced project:

1. Please remove the reference to being compliance with the "Bernalillo County Flood Hazard Ordinance, 2009". Please replace this with "City of Albuquerque Development Process Manual (DPM) (signed 06/08/20) Chapter 6 - Drainage, Flood Control, and Erosion Control".

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 BERNALILLO COUNTY FLOOD HAZARD ORDINANCE, 2009, AND THE CITY STORM DRAINAGE ORDINANCE. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

2. Since this site is in the Valley region, please follow Article 6-5 Valley Drainage Criteria of the DPM. Please refer to the update wording in the DPM. Also, please insure that the following conditions are be applied to the site some of these were not noted especially the location of each lots retention pond:
 - The maximum percent impervious of the lot and the contributing area may not be greater than 45%.
 - Pad elevation shall be a minimum of one (1) foot above the 100-year 10-day stormwater surface elevation.
 - The flow between the front yard and back yard cannot be obstructed. The stormwater must be allowed to equalize to the same level between the front yard and back yard.

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- A permanent perimeter wall or barrier around the development is required to contain the 100-year 24-hour storm developed runoff.
- The high point of the street should be four inches above the 100 year 10-day stormwater surface elevation.
- Please show the required retention pond on each Lot along with the provided volume.

HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED. SINCE GRANDE DRIVE IS IMPROVED ONLY MINIMAL GRADING (ACCESS RECONSTR~N) 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/TO THE PROPOSED LANDSCAPE AREAS.

3. Please refer to the new DPM and please use the procedure for 40 acre and smaller basins as outlined in Development Process Manual (DPM) (signed 06/08/20) Article 6-2(a). All of your calculations need to be revised per these updated procedures.

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: $Q=Q_{PEAK} \times AREA$.. "Peak Discharge Rates For Small Watersheds"
VOLUMETRIC DISCHARGE: $VOLUME = E_{Weighted} \times AREA$
 $P_{100} = 2.35$ Inches, Zone 2 Time of Concentration, $TC = 10$ Minutes
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [] = 10 YEAR VALUES*

4. 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.

5. Standard review fee of \$175 (for DRB Site) will be required at the time of resubmittal.

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

Sincerely,

Renée C. Brissette

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.**

DRB#: 2019-003051 **Building Permit #:** _____ **Hydrology File #:** F14

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#:** xxx cell / txt 264.6042 **E-mail:** CCEalbq@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

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?

☒ 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) _____

IS THIS A RESUBMITTAL?: Yes ☐ No ☒

DATE SUBMITTED: 11/13/20

By: Clark Consulting Engrs

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



FIRM MAP

GRADING & DRAINAGE PLAN

THE 4-LOT #1 PROJECT IS LOCATED IN LOS GRIEOS SECTION OF ALBUQUERQUE'S NORTH VALLEY APPROXIMATELY 3 MILES NORTH OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRAVING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNALLO COUNTY DRAINAGE HAZARD ORDINANCE, 2009, 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 CONDITIONS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS, AND EXISTING IMPROVEMENTS, INCLUDING TWO RESIDENCES AND EXISTING FLATWATER.
2. PROPOSED IMPROVEMENTS: 4 NEWLY CONFIGURED LOTS, NEW ASPHALT DRIVE AND PRIVATE ACCESS EASEMENT, NEW GRADE ELEVATIONS, WALLS, FLATWATER, AND LANDSCAPING.
3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
4. 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 CRITICAL FLATS FOR CONTROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLATS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE SOUTH, NORTH AND THE WEST BY RESIDENCES, GRAND DRIVE N.W., A LOCAL STREET PER THE CITY OF ALBUQUERQUE, AND A SIDEWALK, AND IS MAINTAINED BY THE CITY OF ALBUQUERQUE. THE SITE CURRENTLY HAS SLOPES RATIO 0 TO 1% BUT IS GENERALLY FLAT.

THE SITE IS NOT IMPACTED ADVERSELY BY ANY OFF-SITE DRAINAGE FLOW. HISTORICAL DRAINAGE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED SINCE GRANITE DRIVE IS IMPROVED ONLY. MINIMAL GRADING (ACCESS RECONSTRUCTION) IS PROPOSED WITHIN THE CITY BLOCK. FREE DISCHARGE OF DEVELOPED FLOW IS ACCEPTABLE. HOWEVER THE SITE IS FLAT THEREFORE A FLAT NEW VALLEY GRADING SCHEME IS EMPLOYED. THIS PLAN ROUTES DEVELOPED RUNOFF THROUGH THE PROPOSED LANDSCAPE AREAS.

CALCULATIONS

DESIGN CRITERIA

HYDROLOGIC METHODS FOR SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM), REISED JANUARY 1993 FOR CITY OF ALBUQUERQUE ADOPTED BY THE COUNTY OF BERNALILLO
DISCHARGE RATE: $Q = QPEAK \times AREA$, Peak Discharge Rates For Small Watersheds*
VOLUME DISCHARGE: $VOLUME = EWeighted \times AREA$
 $P100 = 2.55$ inches, Zone 2 Time of Concentration, $TC = 10$ Minutes
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [] = 10 YEAR VALUES

EXISTING CONDITIONS

101AL AREA = 0.9 / ACRES, WHERE EXCESS PRECIP. $W' = 1.14$ in. [0.6]
PEAK DISCHARGE, Q100 = 2.8 CFS [1.2], WHERE UNIT PEAK DISCHARGE $W' = 2.9$ CFS/AC. [1.6]
THEREFORE: VOLUME 100 = 4014 CF [XXX]

DEVELOPED CONDITIONS

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

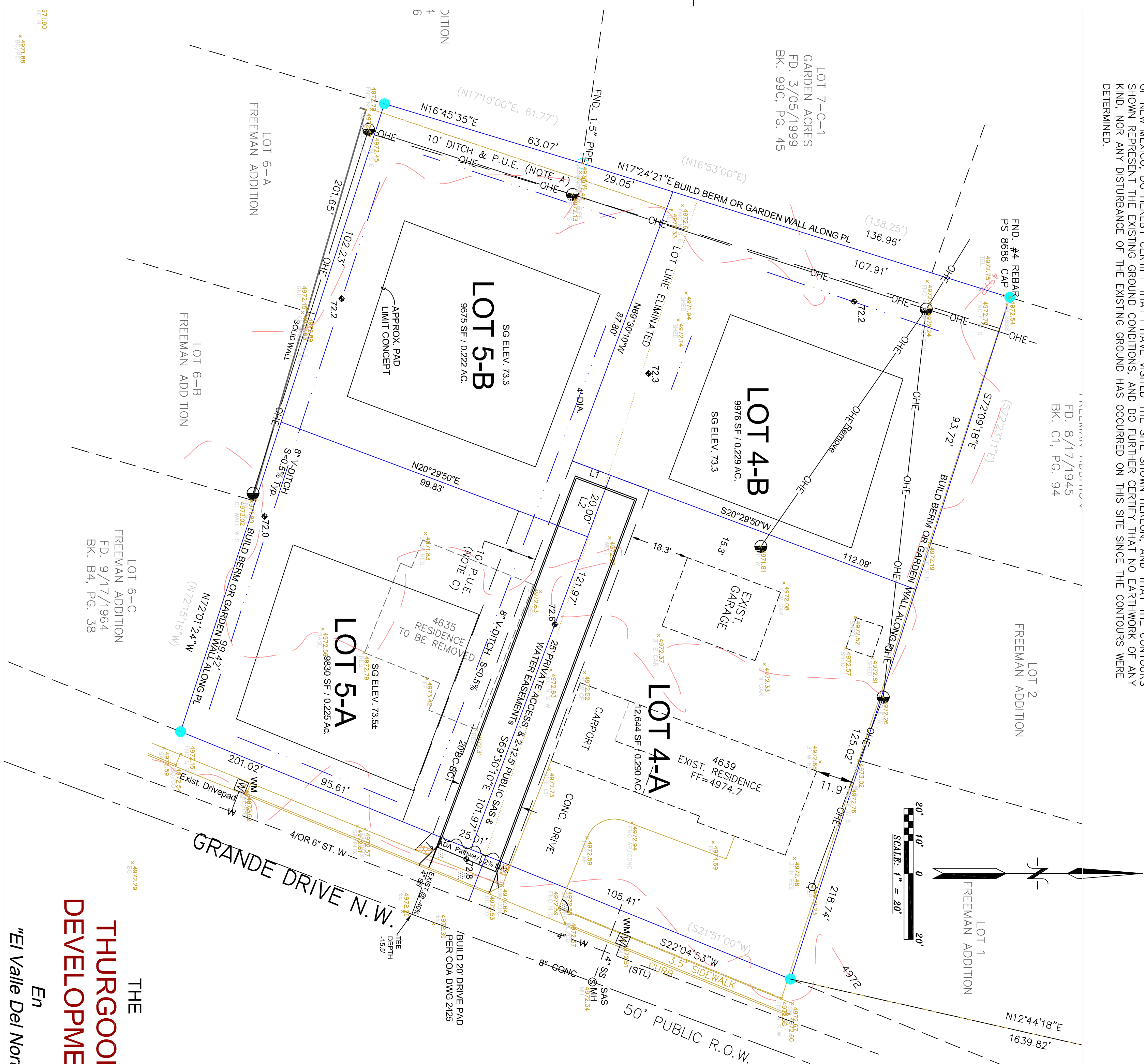
	AREA	LAND TREATMENT	Q _{Peak}	E
UNDEVELOPED	-- Ac.	A	1.56(0.36)	0.53(0.13)
LANDSCAPING/POND	0.32 Ac. (3.3%)	B	2.28(0.95)	0.78(0.38)
GRAVEL & COMPACTED SOIL	0.20 Ac. (2.0%)	C	3.14(1.71)	1.13(0.52)
ROOF - PAVEMENT	0.45 Ac. (4.7%)	D	4.70(3.14)	2.12(1.34)
	0.97 Ac.			

E	Weighted	= 1.48 in. &	VOLUME	100 = 5211 CF
Q100	=3.46 CFS		"Valley Flat Grading Scheme"	
INCREASE	OF 0.6 CFS		Per Policy 3500, $5 \times 3.67/12 = 5352$ CF Harvested ON SITE	

RECOMMEND : ROUTE DEVELOPED RUNOFF THROUGH UPGRADED SOFT LANDSCAPING

1. LIFT 36 THOSE PAVS 6-INCHES ABOVE EXISTING GRADE
2. CONSTRUCT 12" COMPACTED DIRT BERM AROUND PROPERTY IF PERIMETER GARDEN WALLS NOT CONSTRUCTED

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.

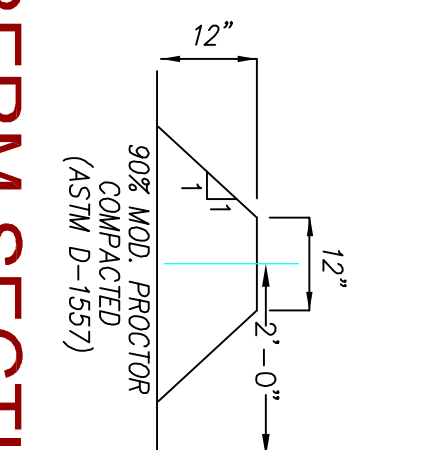
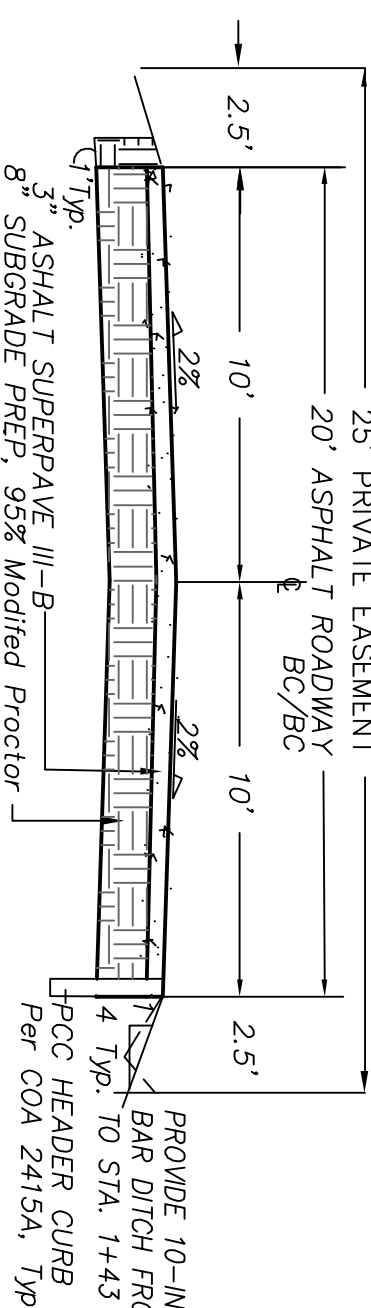


BERM SECTION

NTS OPTION, IN-LIEU OF 5'6" TALL GARDEN WALL

PRIVATE ROADWAY SECTION

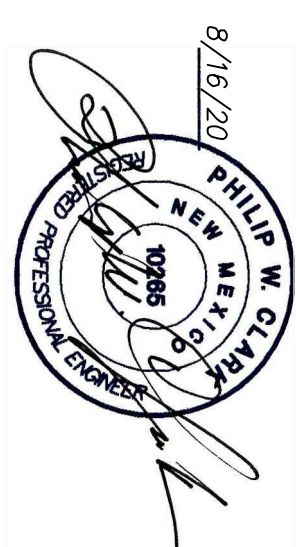
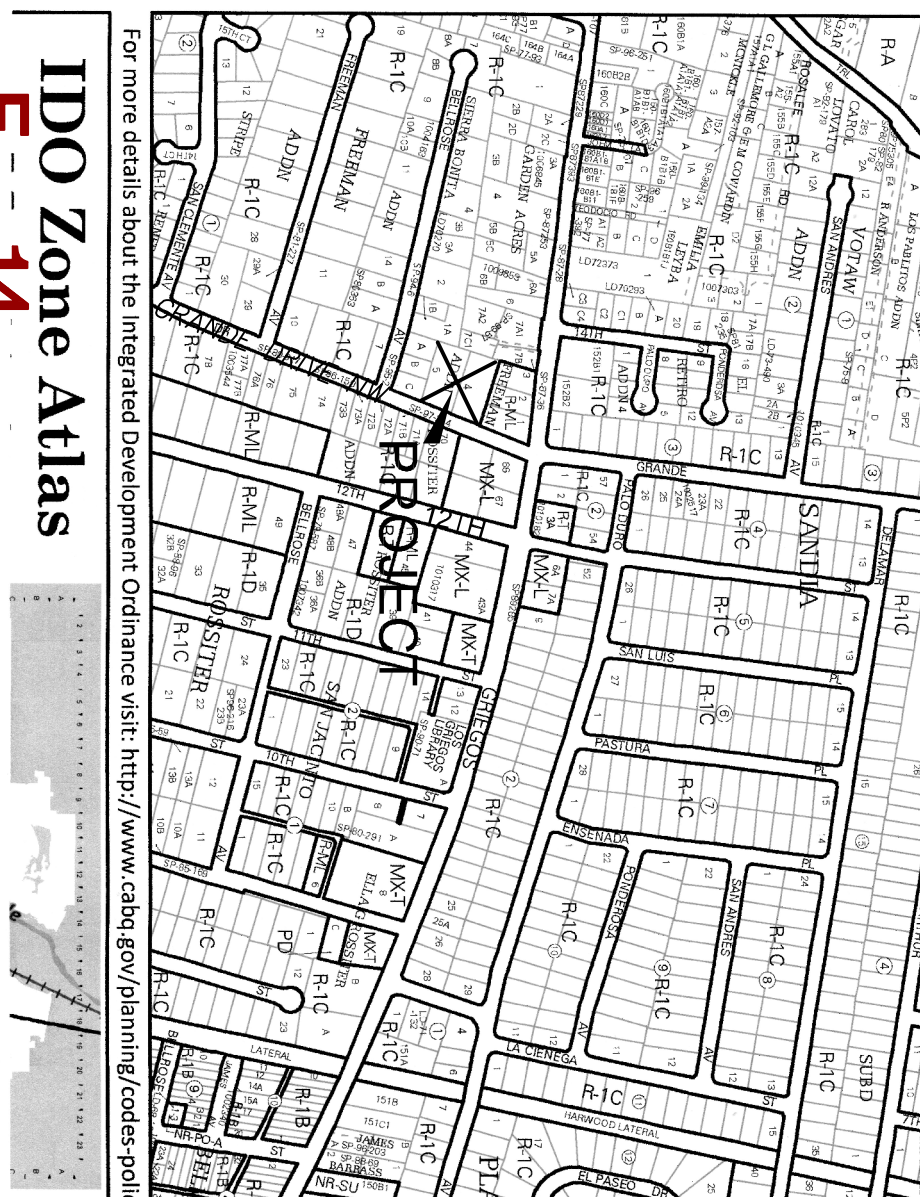
NOT TO SCALE LOOKING BK STATION



THE
THURGOOD
DEVELOPMENT

*En
"El Valle Del Norte"*

AUGUST 2020

IDO Zone Atlas
F-14

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, 9TH UPDATE W/ AMENDS.
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: 3:1 HORIZONTAL TO 1 VERTICAL, 3:1 ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.

LEGEND

EXIST. SPOT ELEVATION	+022.0
EXIST. CONTOUR	10
NEW SPOT ELEVATION (FINISH)	24.0
NEW CONTOUR	12
NEW SMALL DRAINAGE DIRECTION, EXISTING NEW CONCRETE CURB (0.5' HEIGHT)	
NEW P.C.C., CONCRETE	
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	

PROJECT DATA

LEGAL DESCRIPTION, OWNER & ADDRESS

Owner: THURGOOD SCOT L & JEANNINE TRUSTEES THURGOOD RYAN
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 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



Edgewood, New Mexico 87015

Tele: (505) 281-2444	CEL
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DATE	REVISION	ALU STANDARD & FREEMAN ASSOCIATES LABORER/ROSE, BENJAMIN COLONY, NEW MEXICO
		4639-4639 GRANDE DR NW
		SITE, GRADING &
		DRAINAGE PLAN
DESIGNED BY: PMC	DRAWN BY: CCE	
CHECKED BY: PMC	DATE: AUG 2019	
	JOB #: Thurgood	
	FILE # 5/1D	
		GD-1