

FIRM MAP PANEL # 358 D

GRADING & DRAINAGE PLAN

THE PROPOSED WAREHOUSE PROJECT IS LOCATED IN THE NORTHEAST AREA OF ALBUQUERQUE ON TEXAS STREET IMMEDIATELY NORTH OF CENTRAL AVENUE. THE GRADING AND DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNALILLO 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

2. PROPOSED IMPROVEMENT: 5400 SF WAREHOUSE BUILDING, ASPHALT DRIVE/PARKING, CONCRETE FLAT WORK, NEW GRADE ELEVATIONS, REFUSE LOCATION, AND LANDSCAPING.

3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
4. QUANTIFICATION OF DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS WHICH CONTRIBUTE TO THE EXISTING FLOWS.

PRESENTLY, THE SITE IS A DIRT, "HARD-PAN" SURFACE WITHOUT VEGETATION. THE SITE IS BOUNDED BY DEVELOPED COMMERCIALLY ZONED FACILITIES. THE SITE FALLS APPROXIMATELY 1% FROM WEST TO EAST.

TEXAS IS A LOCAL STREET WITH 2 LANES, WITH CURB, GUTTER AND ATTACHED SIDEWALKS. SITE RUNOFF WILL BE ALLOWED TO EITHER DRAIN THROUGH THE SITE, OR PONDED IN DEPRESSED LANDSCAPE AREAS. THE SITE HAS HISTORICALLY DRAINED TO THE EAST VIA OVERLAND SHEET FLOW.

HISTORICAL DOWNSTREAM OUTFALL LOCATIONS WILL REMAIN UNCHANGED WITH DEVELOPMENT. FREE DISCHARGE OF SITE RUNOFF IS ACCEPTABLE SINCE DOWNSTREAM CAPACITY EXISTS WITH THE MINIMAL INCREASE DUE TO DEVELOPMENT. A PORTION OF SITE RUNOFF IS ROUTED THROUGH PROPOSED LANDSCAPING.

CALCULATIONS

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: $Q=QPEAK \times AREA$..."Peak Discharge Rates For Small Watersheds" VOLUMETRIC DISCHARGE: VOLUME = EWeighted $\times AREA$ P100 = 2.60 Inches, Zone 3 Time of Concentration, TC = 10 Minutes DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [] = 10 YEAR VALUES

EXISTING CONDITIONS

LOT AREA = 0.31 ACRES, WHERE EXCESS PRECIP. 'C' =1.29 In. [0.62],
PEAK DISCHARGE, Q100 = 1.07 CFS [0.6], WHERE UNIT PEAK DISCHARGE 'C' = 3.45 CFS/AC. [2.0]
THEREFORE: VOLUME 100 = 1452 CF [698]

VOLUME 100 = 2329 CF

DEVELOPED CONDITIONS

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

	AREA	LAND TREATM'T	<u> Ω</u> Peak	<u> </u>
UNDEVELOPED	Ac.	Α	1.87[0.58]	0.66[0.19]
LANDSCAPING -	0.04 Ac.	В	2.60[1.19]	0.92[0.36]
COMPACTED SOIL & Slopes >	0.03 Ac.	С	3.45[2.00]	1.29[0.62]
ROOF - PAVEMENT	0.24 Ac.	D	5.02[3.39]	2.36[1.50]
	0.31 Ac.			
THEREFORE E	7 1- [1 07]	a.		

Q10 = 0.9 CFS VOLUME 10 = 1429 CF

DOWNSTREAM ANALYSIS

MINIMAL. (INCREASE FROM THE EXISTING. (.4±CFS)

THE SITE HISTORICALLY, AND AS DEVELOPED WILL OUTFALL RUN-OFF TO THE NORTH WITHIN TEXAS ST. TO CHICO ROAD.

FREE DISCHARGE IS ACCEPTABLE SINCE THE DOWNSTREAM BASIN HAS CAPACITY. THE PROJECT TIME TO PEAK IS MUCH LESS THAN OVERALL BASIN TIME TO PEAK & INCREASE DUE TO DEVELOPMENT IS

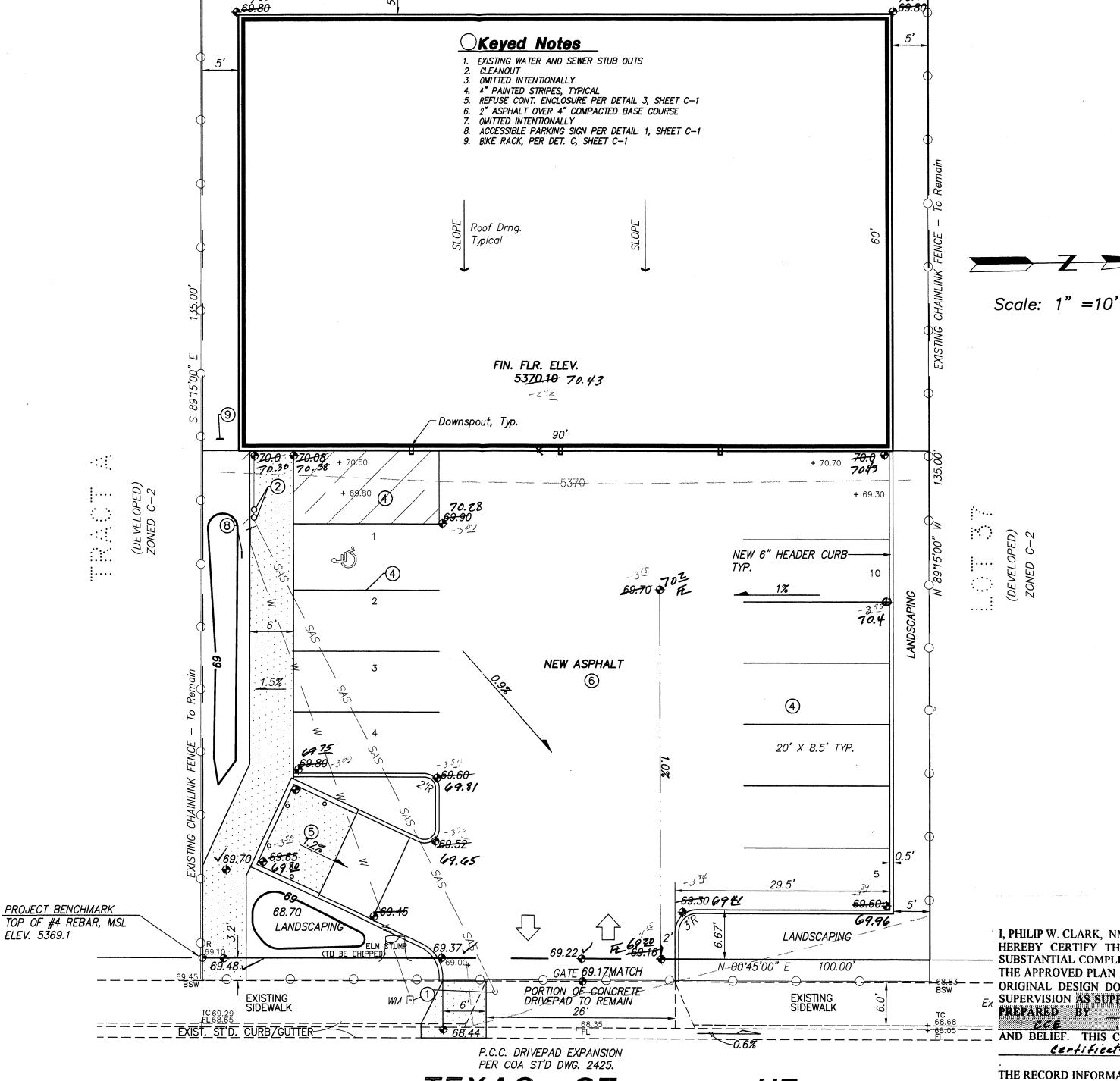
A PORTION OF DEVELOPED RUNOFF WILL BE ROUTED TO AND/OR THROUGH REQUIRED LANDSCAPING.

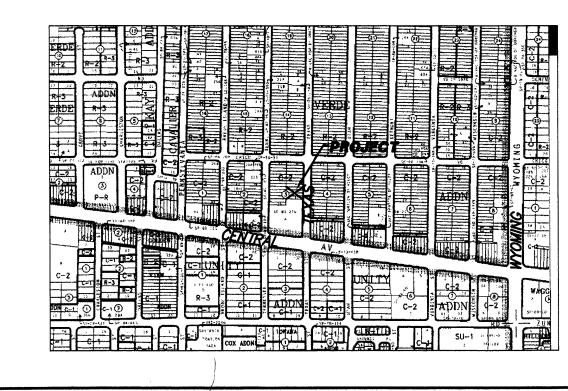
(DEVELOPED)

ZONED C-2

EXIST. WOOD FENCE

_ <u>S 00°45'00" W</u>





VICINITY MAP ZONE K-19 Scale: 1" = 750'

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, 6TH 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. ASPHALT PARKING AREA SHALL DRAIN DIRECTLY TO EXISTING CURB CUT.
- 5. LANDSCAPING IRRIGATION SYSTEM SHALL BE DRIP-TYPE. CONTRACTOR SHALL INSTALL SYSTEM PRIOR TO PLACEMENT OF PAVING (SEE SHEET C-1).
- 6. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION.
- 7. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
- 8. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1. ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.

LEGEND

DRAINAGE CERTIFICATION

TRAFFIC FLOW DIRECTION

I, PHILIP W. CLARK, NMPE 10265, OF 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 4/15/05. 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 NMPSE 10265 OF THE FIRM

AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE
AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR

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 IT FOR ANY OTHER PURPOSE.

Philip W. Clark,, NMPE 10265

1/12/2007

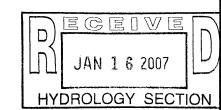
PATE

PROFESSIONAL

PROFESSIONA

certificate of Occupancy





PROJECT DATA

LEGAL DESCRIPTION (Existing Platting)

LOT(s) 38 — 41, BLOCK 3, MESA VERDE ADDITION Albuquerque, Bernalillo County, New Mexico

PROJECT BENCHMARK

Top of Number 4 Rebar at the Project Marked Southeast Property Corner, MSL Elevation = 5369.1 (Tie From ACS 1—L19, Located @ The NNE Curb Return of Zuni and Texas St.)

TOPOGRAPHIC DESIGN SURVEY

Compiled by Clark Consulting Engineers From Design Survey Performed in January 2005.

HYDROLOGY SECTION OF CHARACTERS CONSULTING Engineers

19 Ryan Road
Edgewood, New Mexico 87015
Tele: (505) 281-2444

DATE REVISION
LOTS 38- 41, BLOCK 3, MESA VERDE ADDITION
HIS/05 Charge Site Pt.
-PKg-Regrade
115 TEXAS ST. NE

1/16/07 AS.BLHS OF Grading & Drainage
Plan

DESIGNED BY: PWC DRAWN BY: CCE JOB #: Roper_p

CHECKED BY: PWC DATE: 1/4/05 FILE #: G/D

C2 OF

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

(60' R.O.W., 1—SOUTHBOUND LANE + 1—NORTHBOUND)

ALC.
NIMPE #10265