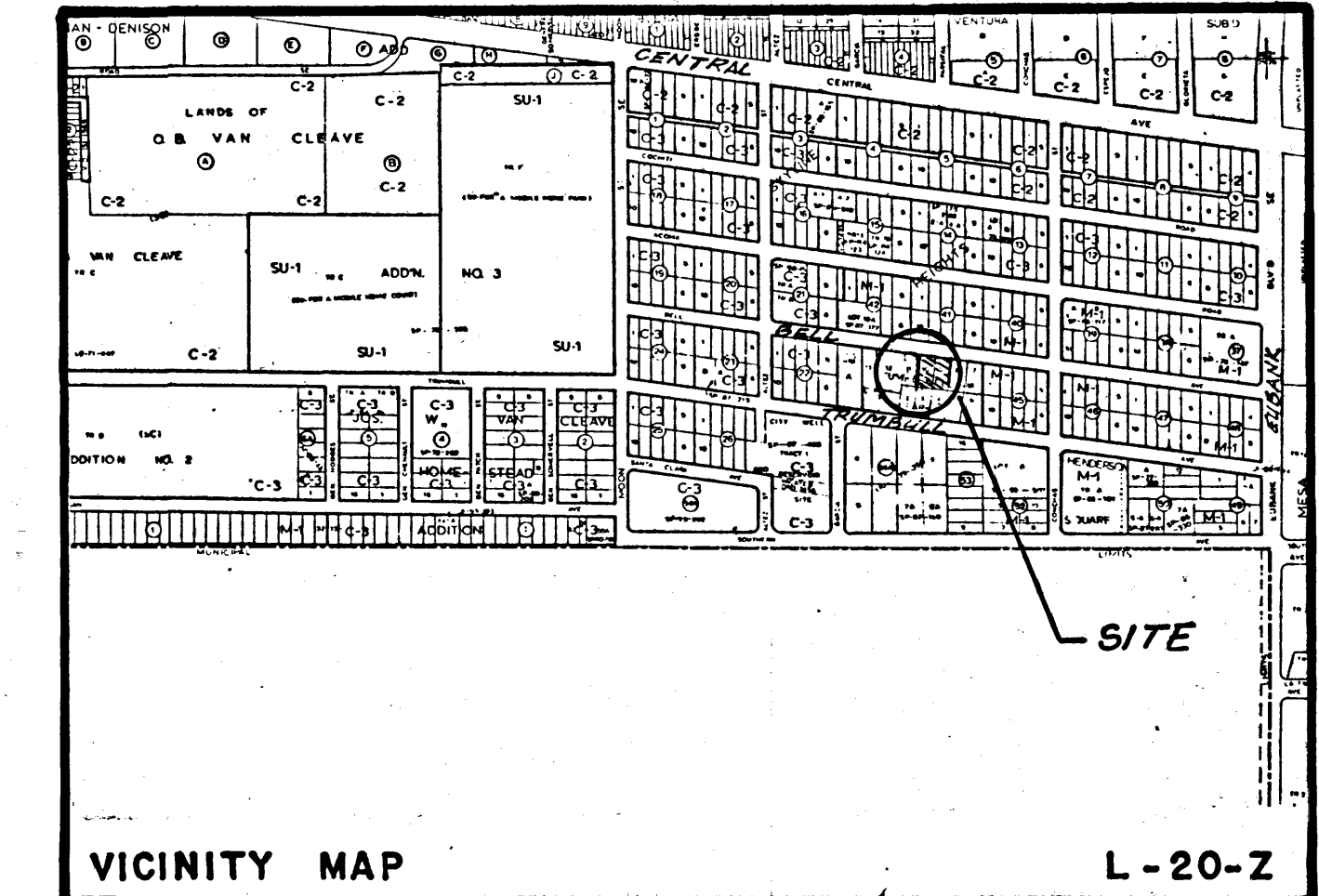
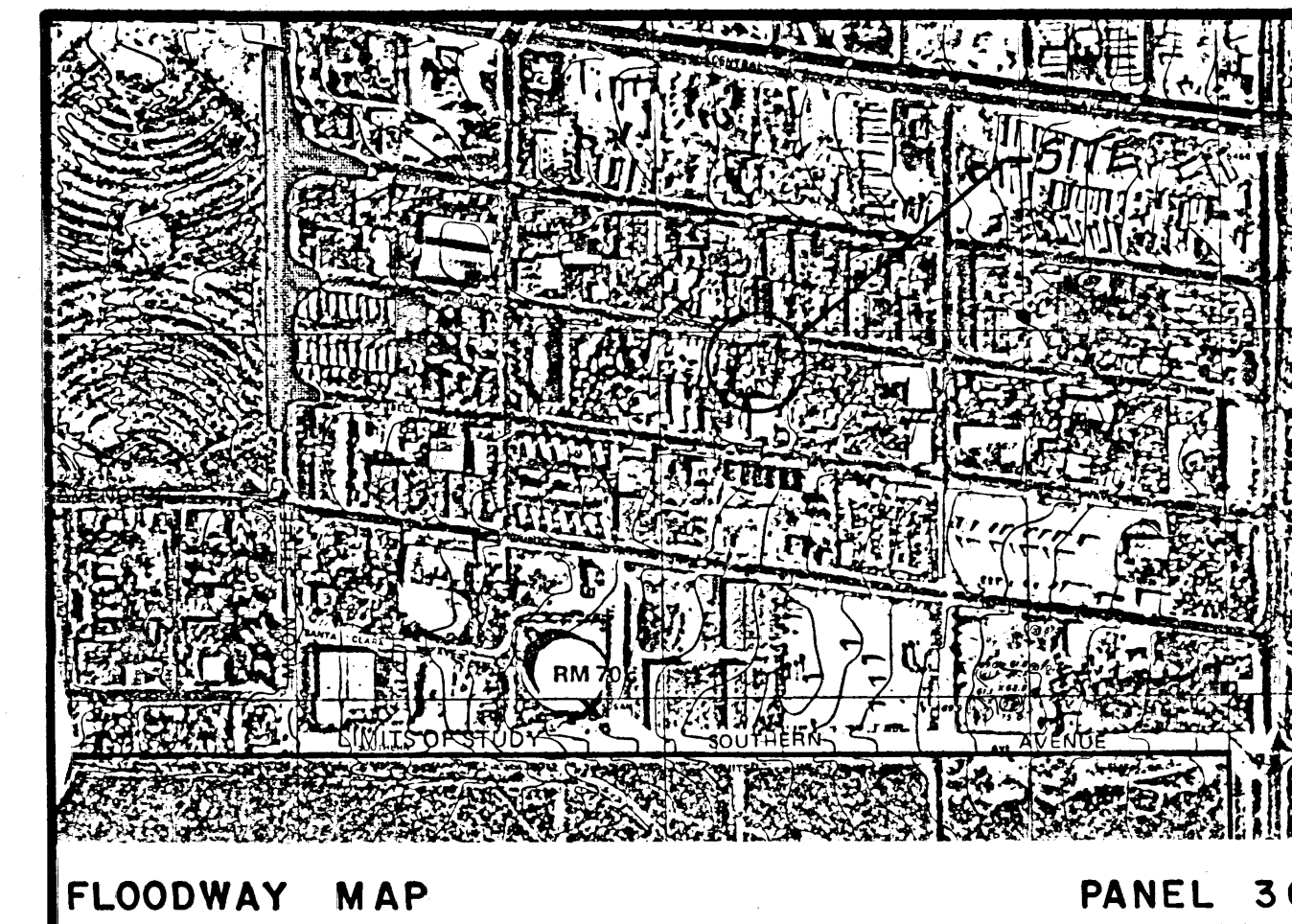
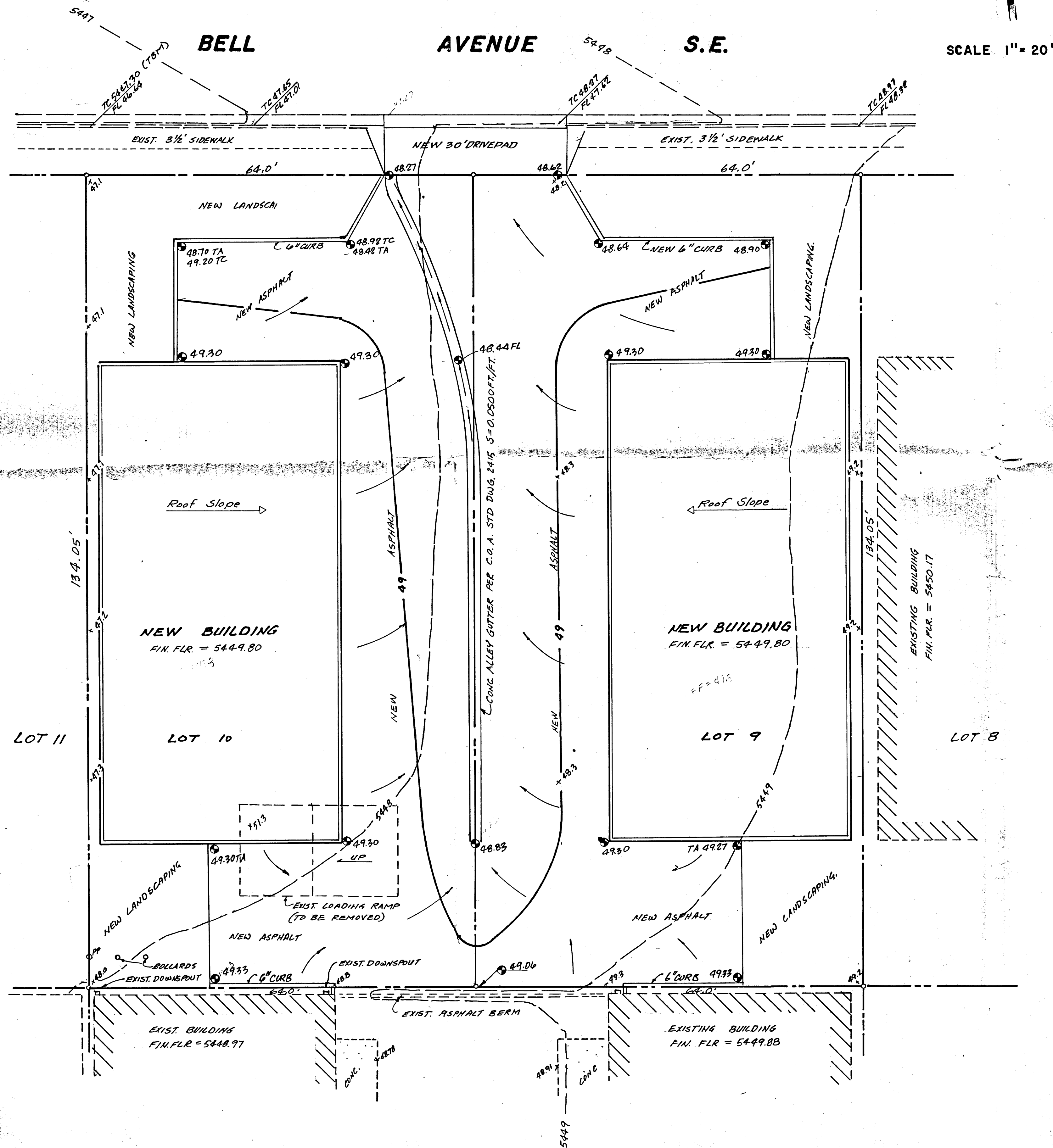




EXISTING CONDITIONS:

The site is located on Bell Avenue SE which is paved and has standard curb and gutter. The site is smoothly graded with a slight east-west and south-north slope. The property west of the site has essentially nothing permanent on it at this time, at least immediately adjacent to the site. South of the site, the property is developed as a commercial warehouse facility which is largely impervious and drains to Trumbull Avenue S.E. except for some roof drainage from existing buildings. There is a flood zone downstream from the site on Wyoming Boulevard S.E. However, there is a storm drainage system extending up Bell Avenue with inlets approximately 40' west of the site. This system should intercept all site runoff before it reaches the flood zone.

DEVELOPED CONDITIONS:

It is proposed to develop the site as a warehouse storage facility. Runoff will be directed to Bell Avenue through the driveway. The site is essentially an infill site, the increase in runoff resulting from development is minimal, and the presence of existing storm inlets approximately 40' west of the site, all support unrestricted discharge for this site.

DRAINAGE CRITERIA:

The calculations shown on this plan were prepared in accordance with Section 22.2, Hydrology, of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque in cooperation with Bernalillo County, New Mexico and the Albuquerque Metropolitan Arroyo Flood Control Authority, January 1993.

PRECIPITATION ZONE:

The site is west of Eubank Boulevard and is, therefore, in Precipitation Zone 3.

LAND TREATMENTS:

The site is presently fully graded and has no original ground cover. The existing site is all treatment C. The developed land treatment areas are shown in the following table:

Land Treatment	100-yr. q	10-yr. q	100-yr. E	10-yr. E	Percent of Site	Area of Site Sq.Ft.	Acres
A	1.87	0.58	0.66	0.19	00.0	0	0.000
B	2.60	1.19	0.92	0.36	16.3	2,800	0.064
C	3.45	2.00	1.29	0.62	1.9	320	0.008
D	5.02	3.39	2.36	1.50	81.8	14,038	0.322
Totals					100.0	17,158	0.394

DRAINAGE

CALCULATIONS

VOLUME, 100-YEAR AND 10-YEAR, 6-HOUR:

Existing Conditions:

V100 = 17158 X (1.29 / 12) = 1844 CF

V10 = 17158 X (0.62 / 12) = 886 CF

Developed Conditions:

V100 = (0.92 X 2800 + 1.29 X 320 + 2.36 X 14038) / 12 = 3010 CF

V10 = (0.36 X 2800 + 0.62 X 320 + 1.50 X 14038) / 12 = 1855 CF

PEAK DISCHARGE, 100-YEAR AND 10-YEAR:

Existing Conditions:

Q100 = 0.394 X 3.45 = 1.36 CFS

Q10 = 0.394 X 2.00 = 0.79 CFS

Developed Conditions:

Q100 = 2.60 X 0.064 + 3.45 X 0.007 + 5.02 X 0.322 = 1.81 CFS

Q10 = 1.19 X 0.064 + 2.00 X 0.007 + 3.39 X 0.322 = 1.18 CFS

OFF-SITE FLOW:

Downspouts from the two buildings south of the site discharge onto the site. The buildings are 40' wide each and the length of the portion of the buildings that drain onto the site is estimated to be approximately 50'. Total area = 4000 sf or 0.092 acre. Q100 = 0.92 X 5.02 = 0.46 cfs. This off-site flow is accepted and will be caused to flow through the site and discharged through the driveway into Bell Avenue.

LEGAL DESCRIPTION:

Lot numbered nine (9) and Lot numbered ten (10), Tumbleweed Park.

BENCH MARK:

A.C.S. station "SUSAN". Station is located 6.5 miles east of downtown Albuquerque, inside of the fenced area of the City-owned reservoir. Station mark is a standard U.S.C. & G.S. brass tablet stamped "SUSAN 1969", set in top of a concrete post flush with the ground. Elevation = 5444.49 Feet.

TEMPORARY BENCH MARK:

A 2' square and letters "TBM" painted with black paint on top of curb at the northwest corner of Lot 10. The 2' square is painted over an "X" chiseled on the top of curb which marks the property line for Lot 10. Elevation = 5447.30.

LEGEND:

EXISTING	NEW	DESCRIPTION
---	---	CONTOUR
+	+	SPOT ELEVATION
---	---	SWALE
---	---	SHEET FLOW
---	---	PROPERTY LINE
TA	TA	TOP OF ASPHALT
TC	TC	TOP OF CURB
FL	FL	FLOW LINE

EROSION CONTROL NOTES:

The contractor shall be responsible for compliance with the following:

- No sediment-bearing water shall be allowed to discharge from the site during construction.
- During grading operations and until the project has been completed, adjacent property, rights-of-ways and easements shall be protected from flooding from runoff from the site.
- Should the contractor fail to prevent sediment-bearing water from entering public right-of-way or adjacent private property, he shall promptly remove all sediment originating from the site.
- Control of sediment-bearing waters will be accomplished by use of a compacted earth berm of adequate height. The berm shall be located along the downstream perimeter of the property.



GRADING & DRAINAGE PLAN
PHASE TWO
TUMBLEWEED INDUSTRIAL PARK
ALBUQUERQUE, NEW MEXICO