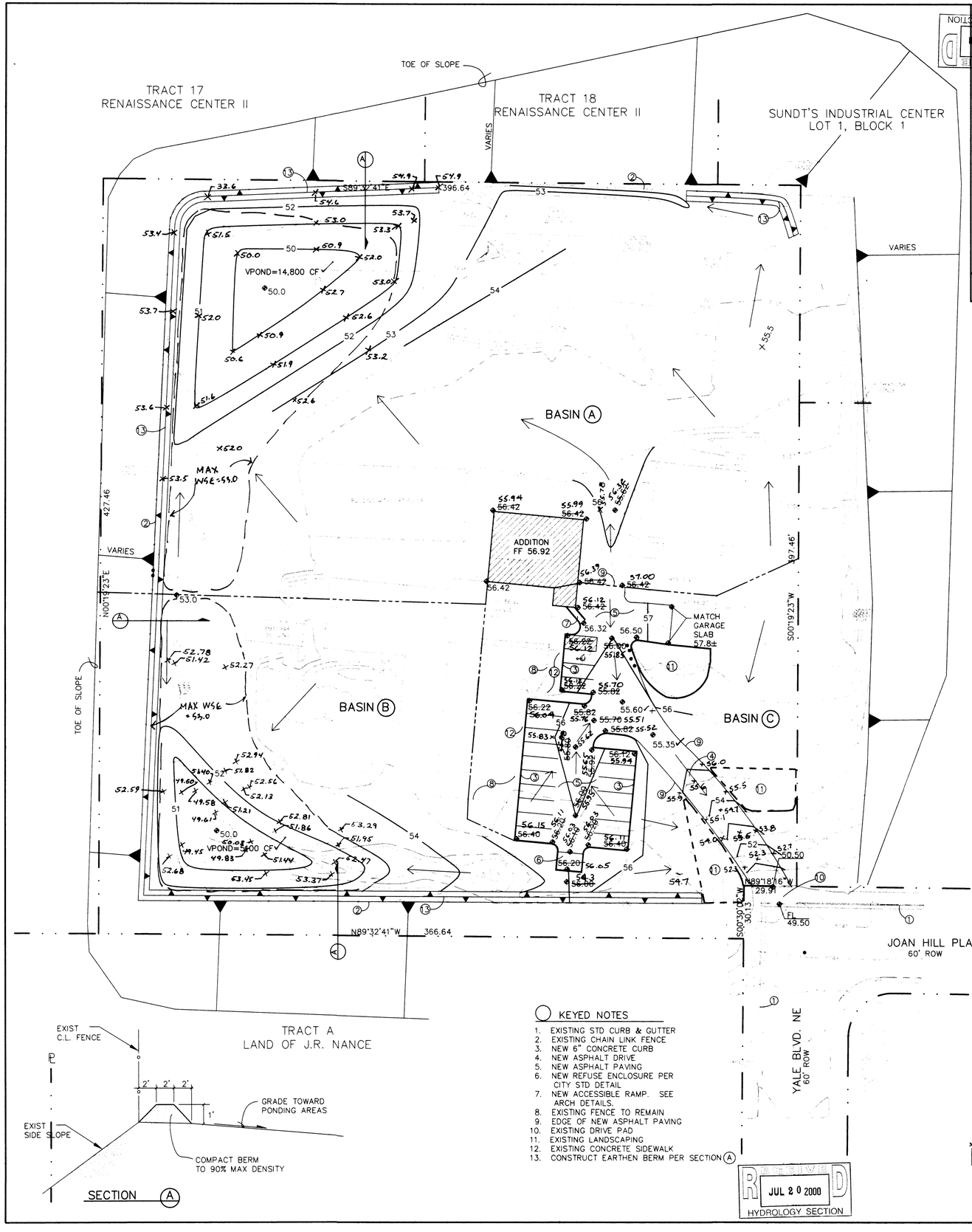
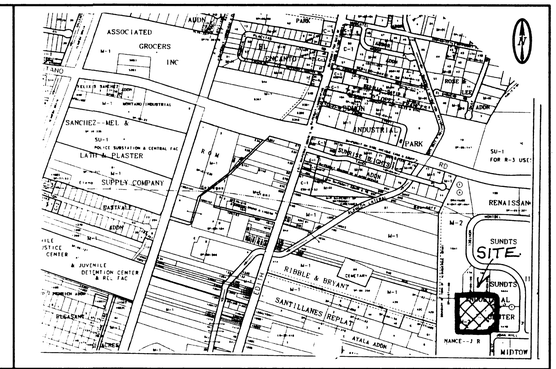




FIRM MAP NUMBER 35001C0138 D 1" = 500'

F – 15 LOCATION MAP 1" = 800'

RECEIVED JUL 20 2000 HYDROLOGY SECTION

GRADING AND DRAINAGE PLAN

PURPOSE AND SCOPE:

Pursuant to the established Drainage Ordinance for the City of Albuquerque and the Development Process Manual, this Grading and Drainage Plan outlines the drainage management criteria for controlling developed runoff from the project site. The property is presently developed as the New Mexican Kennels. The project consists of the construction of a 2080 sf building addition, with associated improvements.

EXISTING CONDITIONS:

The project site is approximately 4.14 acres in size and is located at 4401 Yale NE. The site is bounded by developed commercial properties on all sides. Presently the site is fully developed as a kennel, pet training and grooming business. The site is a remnant of the AGP gravel mining operations. As a result the site is located approximately 20 feet higher than the surrounding properties. In an effort to minimize erosion of the side slopes at the property perimeter, the owner has managed on–site runoff over the years (40) by maintaining retention ponding. Presently no flows exit the property other than from the side slopes. No off–site flows enter the property.

As shown by the attached FIRM Panel, this site is not located within a designated flood hazard zone.

DEVELOPED CONDITIONS:

As shown by the Plan, the project consists of the construction of a 2080 square foot building addition. To facilitate construction of the addition the existing parking lot will be paved and drainage improvements constructed. Sidewalks and accessible walkways will be provided. The remainder of the site will remain basically unchanged. Historical drainage patterns will not be altered. The bulk of the site, Basins A and B, will continue to drain to on–site ponding areas. The ponding areas will be re–graded to provide the 10–day storage volumes. The southeastern portion of the site, Basin C, will free discharge into Yale Blvd. By maintaining the existing on–site ponding, sediment from the dirt/gravel yard will remain on–site. The free discharging basin will be relatively sediment free as the basin consists of the buildings and newly paved parking lot. Runoff from Basin C will flow south down Yale Blvd to an existing drop inlet and public storm drain system located approximately 500 feet south of the site. The resulting discharge from the property is 4.1 cfs, or 1.0 cfs/acre.

CALCULATIONS:

The calculations shown hereon define the 100 year/6 hour design storm falling with the project area under existing and developed conditions. The Hydrology is per " Development Process Manual, Vol 2, Chapter 22," July 1997 Revision.

LEGEND

6001	EXISTING CONTOUR ELEVATION
02.5 ×	EXISTING SPOT ELEVATION
01	PROPOSED CONTOUR ELEVATION
	PROPERTY LINE
01.5 ✥	PROPOSED SPOT ELEVATION
	DIRECTION OF FLOW
	DRAINAGE SWALE
	DRAINAGE BASIN DIVIDE

RECEIVED JUL 20 2000 HYDROLOGY SECTION

HYDROLOGY –HYMO

Precipitation Zone 4 — P360 = 2.90 in

Basin	Basin area(Ac)	Land Treatment (acre) A	B	C	D	Ew (in)	Q100 (cfs)	V100 (af)	V 10DAY (af)
Existing Conditions									
Site	4.14		0.07	3.58	0.49	1.24	13.7	0.4282	
Developed Conditions									
Site	4.14		0.07	3.33	0.74	1.30	14.1	0.4489	
A	2.10			1.78	0.32	1.28	7.1	0.2240	0.2667
B	0.90			0.83	0.07	1.21	2.9	0.0908	0.1001
C	1.14		0.07	0.72	0.35	1.42	4.1	0.1349	

PROPERTY ADDRESS

4401 Yale Blvd. NE

LEGAL DESCRIPTION

Parcel 1, Burr Hill Subdivision

PROJECT BENCHMARK

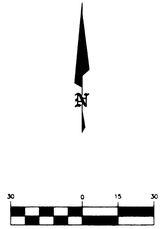
COA BM 7–F15. A square cut on the northeast corner of the concrete base of a fire hydrant on the north side of Nikanda Rd. in front of house No. 801. Elevation 5021.14

SURVEY

Topographic field measurements by Brasher & Lorenz, Inc. October 1999.

KEYED NOTES

1. EXISTING STD CURB & GUTTER
2. EXISTING CHAIN LINK FENCE
3. NEW 6" CONCRETE CURB
4. NEW ASPHALT DRIVE
5. NEW ASPHALT PAVING
6. NEW REFUSE ENCLOSURE PER CITY STD DETAIL
7. NEW ACCESSIBLE RAMP. SEE ARCH DETAILS.
8. EXISTING FENCE TO REMAIN
9. EDGE OF NEW ASPHALT PAVING
10. EXISTING DRIVE PAD
11. EXISTING LANDSCAPING
12. EXISTING CONCRETE SIDEWALK
13. CONSTRUCT EARTHEN BERM PER SECTION (A)



RECEIVED JUL 20 2000 HYDROLOGY SECTION

DRAINAGE PLAN NOTES

1. BLI recommends that the Owner obtain a Geotechnical Evaluation of the on–site soils prior to foundation/structural design.
2. This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.
3. Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure could cause settlement.
4. This Plan is prepared to establish on–site drainage and grading criteria only. BLI assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.
5. Local codes may require all footings to be placed in natural undisturbed soil. If the Contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer will be required. If the contractor wishes BLI to prepare the Certification, we must be notified PRIOR to placement of the fill.
6. BLI recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
7. The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to construction.

ENGINEER'S CERTIFICATION

I, the undersigned, being a Professional Engineer in the State of New Mexico, do hereby certify that the as-built information shown hereon is based on actual field measurements and visual inspections performed by Brasher & Lorenz, Inc. I further certify that the as-built condition of the site as of July 19, 2000 is in substantial compliance with the approved Grading and Drainage Plan prepared by Brasher & Lorenz, Inc. dated November 2, 1999.

This certification is limited to on-site grading and drainage improvements and does not extend to the structural integrity of the materials used nor the workmanship of the contractor. Any future modifications to the site improvements shall render this certification null and void.

DENNIS A. LORENZ NEW MEXICO 9647 REGISTERED PROFESSIONAL ENGINEER

7.19.00

Dennis A. Lorenz, N.M.P.E. 9647 Date

RECEIVED JUL 20 2000 HYDROLOGY SECTION

NEW MEXICAN KENNELS

GRADING & DRAINAGE PLAN

DENNIS A. LORENZ NEW MEXICO 9647 REGISTERED PROFESSIONAL ENGINEER 11-2-99

BRASHER & LORENZ, INC.
Consulting Engineers
2201 San Pedro NE Building 1 Suite 210
Albuquerque, New Mexico 87110
Ph: 505–888–6088 Fax: 505–888–6188

DRAWN BY: M.D.T.	DATE: NOVEMBER, 1999
CHECKED BY: D.A.L.	SHEET 1 OF 1
FILE: 99581G–D.DWG	