

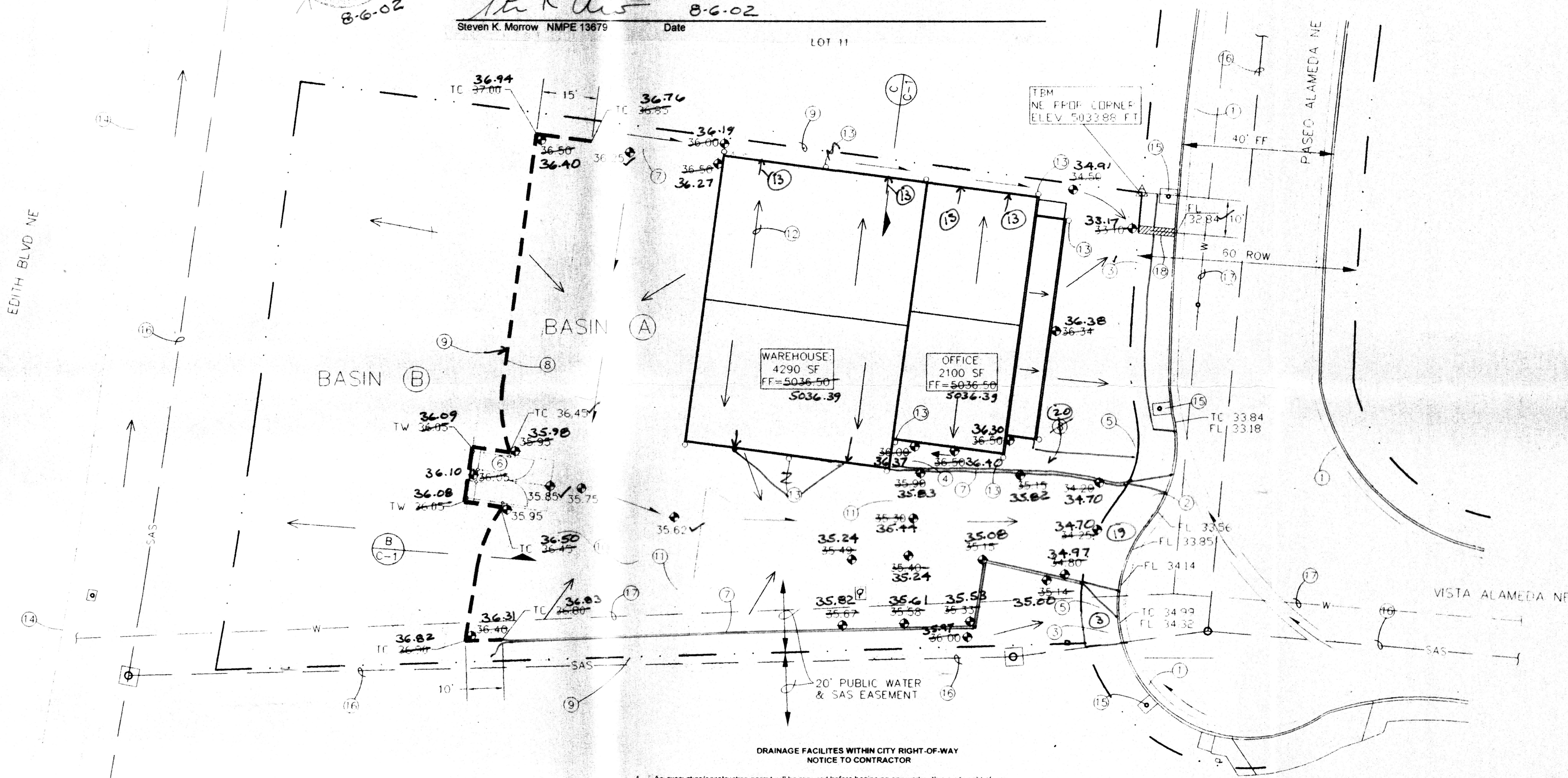
### ENGINEER'S CERTIFICATION (HYDROLOGY)

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 and Lorenz, Inc. I further certify that the as-built condition of the site as of August 6, 2002 is in substantial compliance with the approved Grading and Drainage Plan prepared by Brasher & Lorenz, Inc., dated July 2, 2001. This certification is limited to on-site grading and drainage improvements and does not extend to the structural integrity of the materials used or the workmanship of the contractor. Any future modifications to the site improvements shall render this certification null and void.

Steven K. Morrow NMPE 13679

8-6-02

LOT 11



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2  
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1. An excavation/construction permit will be required before beginning any work within a city right of way.
2. All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with the "City of Albuquerque Interim Standard Specifications for Public Works Construction," 1985.
3. Two working days prior to any excavation, the contractor must contact Line Locating Service, 765-1234, for location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all constructions. Should a conflict exist, the contractor shall notify the Engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to traffic/road use.
6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
7. Work on arterial streets shall be performed on a 24-hour basis.

APPROVALS		NAME	DATE			
INSPECTOR	CARLSON [Signature]		9/23/02			
HYDROLOGY - HYMO						
Precipitation Zone 2			P360 = 2.35 in			
Basin	Basin	Land Treatment (acre)		Ew	V100	Q100
	area (Ac)	A	B	C	D	(in) (of) (cfs)
Existing Conditions						
SITE	0.76	0	0	0.76	0	1.13 0.0716 2.4
A	0.53	0	0	0.53	0	1.13 0.0499 1.7
B	0.23	0	0	0.23	0	1.13 0.0217 0.7
Developed Conditions						
SITE	0.76	0	0.04	0.27	0.45	1.29 0.0818 3.0
A	0.53	0	0.04	0.04	0.45	1.36 0.0601 2.3
B	0.23	0	0	0.23	0	1.13 0.0217 0.7

### KEYED NOTES

1. EXISTING STD CURB & GUTTER
2. REMOVE EX STD C & G. CONSTRUCT VALLEY GUTTER PER COA STD DWG 2420 (DELETED FROM PROJECT)
3. CONSTRUCT 4" SIDEWALK
4. CONSTRUCT HANDICAP RAMP. SEE SITE PLAN
5. CONSTRUCT HANDICAP RAMP PER COA STD DWG 2426 (DELETED)
6. CONSTRUCT REFUSE ENCLOSURE. SEE SITE PLAN
7. CONSTRUCT 6" CONCRETE CURB
8. CONSTRUCT RETAINING CURB. SEE SITE PLAN
9. INSTALL 6" HIGH CHAIN LINK FENCE
10. CONSTRUCT ASPHALT PAVEMENT. SEE SITE PLAN
11. PAINTED STRIPING PER COA CRITERIA
12. DIRECTION OF ROOF DRAINAGE
13. ROOF DRAINS
14. EXISTING EDGE OF PAVEMENT
15. EXISTING WATER SERVICE
16. EXISTING PUBLIC SANITARY SEWER
17. EXISTING PUBLIC WATER
18. CONSTRUCT 12" SIDEWALK CULVERT PER COA STD DWG 2236
19. BUILT 30" STANDARD COA DRIVEWAY
20. BUILT 5" FF SIDEWALK

### 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 project consists of the construction of Baker Office/Warehouse located at 8501 Paseo Alameda NE. Proposed site improvements include paving, landscaping, utility, grading, and drainage improvements.

#### EXISTING CONDITIONS

The project site is approximately 0.76 acres in size and is located at 8501 Paseo Alameda NE, just north of Vista Alameda. The project site is particularly described as Lot 12, Alameda Business Park. The site is bounded by industrial properties on the north and south, Paseo Alameda on the east, and Edith Blvd on the west. Site topography slopes east and west from a ridge line located in the rear portion of the property. The eastern portion (Basin A) slopes eastward to Paseo Alameda. The western portion (Basin B) is a 3:1 fill slope that slopes to the west. All on-site runoff drains to improvements provided by Alameda Business Park Masterplan drainage improvements constructed for the development convey all runoff to an existing retention pond located to the north on Tract A. The retention pond drains by a sump pump to the AMAFCA North Diversion Channel.

As shown by the attached FIRM Panel, this site is not located in a Flood Hazard Zone.

#### PROPOSED CONDITIONS

As shown by the Plan, the project consists of the construction of the Baker Office/Warehouse with associated site improvements. The Plan shows the contours and elevations required to properly grade and construct the proposed paving and drainage improvements. Flow arrows give the direction of drainage flows and the project hydrology is tabulated for both existing and proposed conditions. The drainage criteria for the site was established by the Drainage Masterplan for Alameda Business Park, prepared by Bohannon Huston, dated February 19, 1999.

All drainage flows will be managed on-site and discharged to the Masterplan drainage improvements that convey all runoff to an existing retention pond located to the north. Basin A flows east to Paseo Alameda, which drains north to a series of inlets that outfall at the pond. Basin B drains west to Edith Blvd where a roadside swale conveys flows north to inlets that outfall to the pond.

#### EROSION CONTROL

Temporary erosion control will be required during the construction phase to protect downstream property and improvements from sediment and uncontrolled runoff. This Plan recommends the placement of earthen berms or silt fencing along the construction boundaries to mitigate sediment deposition to the adjoining properties and public streets. As an additional erosion control measure, the contractor shall place an earthen berm at the top of the 3:1 fill slope to prevent Basin A flows from flowing westward down the slope. It is the Contractor's responsibility to properly maintain these facilities during the construction phase of the project.

#### CALCULATIONS

Calculations are provided which define the 100-year/6-hour design storm falling with the project area under existing and proposed conditions. Hydrology is per Section 22.2, Part A, DPM, Vol 2, updated July 1997.

### 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 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.

35001C0136

FIRM PANEL

1" = 500'

C-16

LOCATION MAP

1" = 800'

### LEGEND

ITEM	EXISTING	PROPOSED
MOUNTABLE CURB		
STD CURB & GUTTER		
DROP INLET		
OVERHEAD ELEC	OHU	
UNDERGROUND ELEC	UGT	
CASTEL TV		
FLOWLINE ELEV	FL 0.14	FL 0.14
TOP OF CURB ELEV	99.3	99.3
AS-BUILT ELEV		16.8
SEWER SERVICE		
POWER POLE (GUIN)	PP	
CENTERLINE		
RETAINING WALL		
TOP OF ASPHALT ELEV	TA 16.2	TA 16.2
STREET LIGHT		
DIRECTION OF FLOW		
BASIN BOUNDARY		
RETAINING CURB		
WATER BLOCK		
DRAINAGE SWALE		

#### PROPERTY ADDRESS

8501 Paseo Alameda NE

#### LEGAL DESCRIPTION

Lot 12, Alameda Business Park

#### SURVEY

Topographic and Field Measurements by  
Brasher & Lorenz  
Dated July, 2001

#### PROJECT BENCHMARK

TBM, Northeast Property Corner  
of Lot 12, Alameda Business Park  
ELEV = 5033.88 FT MSLD

<b>PROJECT NAME</b> BAKER OFFICE-WAREHOUSE ALAMEDA BUSINESS PARK 8501 PASEO ALAMEDA NE ALBUQUERQUE, NM		<b>REVISIONS</b> NO. DATE	
<b>PROJECT NUMBER</b>		<b>DATE:</b> JUNE, 2001	
<b>DRAWING TITLE</b> GRADING & DRAINAGE PLAN		<b>C-1</b>	

### TEMPORARY EROSION CONTROL BERM DETAIL (A)

NTS

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