CITY OF
Albuquerque

September 21,1998

Mark Burak
Burak Consulting
1512 Sagebrush trail SE
Albuquerque, New Mexico 87123

RE: ENGINEER CERTIFICATION FOR WOMEN'S COMMUNITY ASSOCIATION
(K15-D64) ENGINEER'S-CERTIFICATION STATEMENT DATED 8/17/98

Dear Mr. Burak:

Based on the information provided on your August 18,1998 submittal, Engineer Certification for the above referenced site is acceptable.

If I can be of further assistance, please feel free to contact me at 924-3986.

C: Andrew Garcia
File

Sincerely

Bernie J Montoya

Bernie J. Montoya CE
Associate Engineer

DRAINAGE INFORMATION SHEET

PROJECT TITLE: **Women's Community Association** ZONE ATLAS/DRNG.FILE# **K15/D64**

DRB #: EPC #: WORK ORDER #:

LEGAL DESCRIPTION: Lots 4-10, Block 4, the Terrace Addition, Abq, New Mexico

CITY ADDRESS: Lead and Elm

ENGINEERING FIRM: Burak Consulting CONTACT: Mark Burak
ADDRESS: 1512 Sagebrush Trail SE, ABQ, NM 87123 (505) 296-0461

OWNER: City of Albuquerque CONTACT:
ADDRESS:

ARCHITECT: Kevin Georges & Assoc. CONTACT: Ron Tucker
ADDRESS:

SURVEYOR: Harris Surveying CONTACT: Tony Harris
ADDRESS:

CONTRACTOR: Iverson CONTACT: Alan Iverson
ADDRESS:

TYPE OF SUBMITTAL

_____ DRAINAGE REPORT
_____ DRAINAGE PLAN
_____ CONCEPTUAL GRADE & DRAIN PLAN
_____ GRADING PLAN
_____ EROSION CONTROL PLAN
X ENGINEER'S CERTIFICATION
_____ OTHER

PRE-DESIGN MEETING

X YES
_____ NO
_____ COPY PROVIDED

CHECK TYPE OF APPROVAL SOUGHT:

_____ SKETCH PLAT APPROVAL
_____ PRELIMINARY PLAT APPROVAL
_____ SITE DEV. PLAN FOR SUBD. APPROVAL
_____ SITE DEV. PLAN FOR BLDG. PERMIT APP.
_____ SECTOR PLAN APPROVAL
_____ FINAL PLAT APPROVAL
_____ FOUNDATION PERMIT APPROVAL
_____ BUILDING PERMIT APPROVAL
X CERTIFICATION OF OCCUPANCY APPROVAL
_____ GRADING PERMIT APPROVAL
_____ PAVING PERMIT APPROVAL
_____ S.A.D. DRAINAGE REPORT
_____ DRAINAGE REQUIREMENTS
_____ OTHER

DATE SUBMITTED: **08/17/98**

BY: Mark Burak

RECEIVED
AUG 18 1998
HYDROLOGY SECTION

Civil Engineering
BURAK
Consulting
Water Resources Software & Design

Mark H. Burak, P.E.

1512 Sagebrush Trail SE Albuquerque, NM 87123 (505) **296-0461** 235-2256 cell 296-0467 fax

August 17, 1998

Andrew Garcia
Drainage Inspector
City of Albuquerque
600 Second Street NW
Albuquerque, NM 87103

Case No: (K-15/D64)
Site Location: Lead and Elm
Project Title: **Women's Community Association**

Dear Andrew,

This letter is in response to your comments dated 6 May 1998. The as-built drawing submitted previously did not indicate elevations on the plan, but showed only instrument heights as indicated by the contractor. I did not transpose these points into elevation at that time. Since the previous submittal, I hired a surveyor to establish as-constructed points. The following are the responses to clear up any other questions or concerns you may have:

1. As-built designation is based on the Benchmark as described on the plan.

2. The new improved "as-built" grades (elevations) do show Basin "B" draining to Lead.

3. The purpose of the sand trap/cleanout is for the proposed laundry facility that is the basis of this whole project.

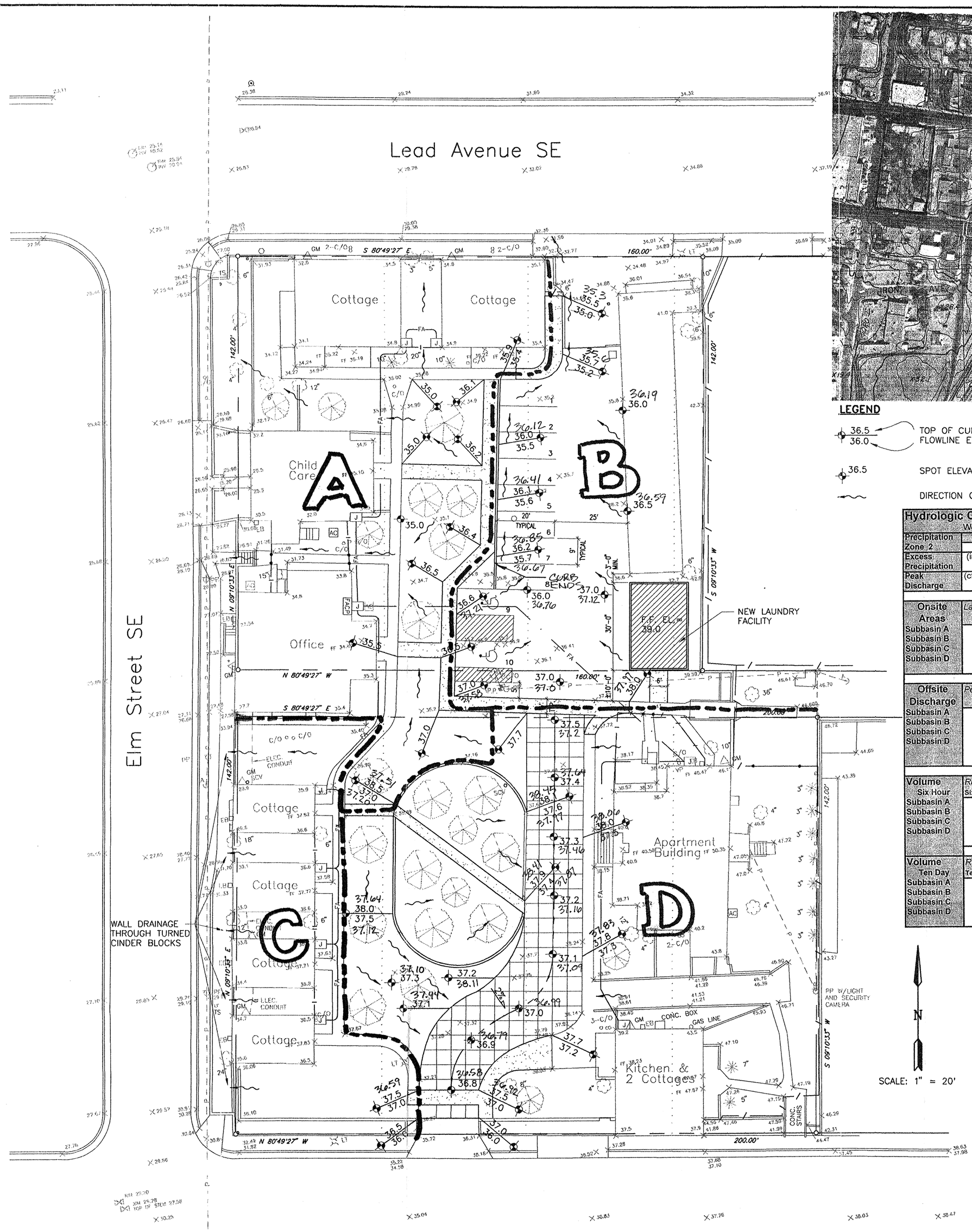
4. With the new improved "as-built" elevations as shown, the plan as approved is now in substantial compliance.

If you have any more questions or need any clarification concerning the above project, please feel free to call me at 296-0461.

Sincerely,

Mark Burak

Mark H. Burak, P.E.



LEGEND

36.5 / 36.0 — TOP OF CURB ELEVATION / FLOWLINE ELEVATION

36.5 — SPOT ELEVATION

DIRECTION OF FLOW

Hydrologic Calculations - COA DPM 22.2
Women's Community Association - 400 Elm Street SE

Precipitation Zone 2				(inches) P60	2.01	P360	2.35	P1440	2.75	P4days	3.3	P10days	3.95
Excess Precipitation	(inches)	0.53	0.78	1.13	2.12		0.53	0.78	1.13	2.12			
Peak Discharge	(cfs/acre)	1.56	2.28	3.14	4.7		1.56	2.28	3.14	4.7			

Onsite Areas	Land Treatments - Existing Conditions A	B	C	D	Area (sf)	Land Treatments - Acres A	B	C	D	Area (sf)
Subbasin A			3,720	14,880	18,600	3,720			14,880	18,600
Subbasin B			1,050	9,450	10,500				10,500	10,500
Subbasin C			1,450	5,800	7,250			1,450	5,800	7,250
Subbasin D			15,750	6,750	22,500	3,720			14,880	22,500
					58,850					58,850

Offsite Discharge	Peak Flow Rate - Existing Conditions A	B	C	D	100 yr Q (cfs)	Peak Flow Rate - Developed Conditions A	B	C	D	100 yr Q (cfs)
Subbasin A	0.00	0.00	0.27	1.61	**1.87**	0.00	0.19	0.00	1.61	**1.80**
Subbasin B	0.00	0.00	0.08	1.02	**1.10**	0.00	0.00	0.00	1.13	**1.13**
Subbasin C	0.00	0.00	0.10	0.63	**0.73**	0.00	0.00	0.10	0.63	**0.73**
Subbasin D	0.00	0.00	1.14	0.73	**1.86**	0.00	0.19	0.00	1.61	**1.80**
					5.56					**5.46**

Volume Six Hour	Runoff Volume - Existing Conditions Six Hour Storm				100 yr V (cu-ft)	Runoff Volume - Developed Conditions Six Hour Storm				100 yr V (cu-ft)
Subbasin A	0	0	350	2,629	2,979	0	242	0	2,629	2,871
Subbasin B	0	0	99	1,670	1,768	0	0	0	1,855	1,855
Subbasin C	0	0	137	1,025	1,161	0	0	137	1,025	1,161
Subbasin D	0	0	1,483	1,193	2,676	0	242	0	2,629	2,871
					8,584					**8,757**

Volume Ten Day	Runoff Volume - Existing Conditions Ten Day Storm Event	100 yr V (cu-ft)	Runoff Volume - Developed Conditions Ten Day Storm Event	100 yr V (cu-ft)
Subbasin A		4,963		4,855
Subbasin B		3,028		3,115
Subbasin C		1,935		1,935
Subbasin D		3,576		4,855
		13,502		**14,759**

Site Location - As shown by the Vicinity Map, the site at 400 Elm Street SE is located between Lead and Coal on the east side of Elm Street and is comprised of 1.24 acres. A gas station lies between Interstate 25 and the project site. Currently, the majority of the site is fully developed with buildings and paving and is zoned SU-2 NCR. The vast majority of the surrounding area is also currently developed, thereby making this a modification to an existing site within an infill area. The proposed improvements consist of the addition of a laundry facility and regrading and paving of the driveway and parking areas.

Legal Description - Lots 4-10 and westerly 10 feet of lot 3, Block 4, The Terrace Addition, Albuquerque, New Mexico.

Benchmark - Elevations shown are SLD 1929 elevations based on City of Albuquerque Bench Mark "7-K15", elevation = 5017.06 feet.

Flood Zone - As shown by Panel 334 of 825 of the FEMA National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (FIRM) for the City of Albuquerque, New Mexico, dated September 20, 1996, this site does not lie within a designated flood hazard zone.

Existing Facilities - The project site is mostly developed with dormitory style and out buildings within a walled and gated compound. The ground elevation of the site is elevated above the adjacent streets between three and six feet. Lead Avenue and Coal Avenue act as the primary drainage facilities for all offsite runoff that may discharge from the east. The commercially developed property adjacent to the east drains north and south to either Lead Avenue or Coal Avenue. No offsite runoff impacts the project site during the 100-year design storm.

The onsite runoff currently drains from east to west across the site. The cinder block wall on the western property boundary contains a series of wall drains along its entire length. These wall drains function as the primary discharge points for the site. The undeveloped portion of the compound is comprised of compacted earth with very little vegetation, therefore, the entire site is comprised exclusively of land treatments D and C.

Proposed Facilities - This project is intended to assess the effect of the addition of a laundry facility as shown on the plan. Also, the driveway and parking areas will be regraded and resurfaced. Landscaping in the form of grass and trees will also be incorporated into the new layout. Runoff within the driveway and parking facility will be directed either north to Lead Avenue or south to Coal Avenue as shown on the plan. Runoff from the landscaped area and existing cottages and out buildings will continue to discharge west to the wall drains.

Proposed Grading - The Grading Plan shows 1) existing and proposed grades indicated by spot elevations with continuity between existing and proposed grades; 2) the limit of existing and proposed improvements. As shown by this plan, the site was generally split into four quadrants; A, B, C, and D representing hydrologic subbasins. Subbasins A and C drain west to Elm Street; subbasin B drains north to Lead Avenue; and subbasin D drains south to Coal Avenue.

Hydrologic Methods - The site was broken into four separate subbasins A through D to assess peak flow rates at various discharge points within the project site. The calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The process outlined in the DPM, Section 22.2 was used to quantify the peak flow rates and volumes. As shown by these calculations, the proposed improvements will result in an increase in runoff generated by the site. The mitigation of this increase has been shown to provide a minor reduction in the existing free discharge of runoff to Elm Street, thus, in effect, reducing the local flooding potential in the immediate vicinity of the project site.

A spreadsheet for Precipitation Zone 2 is included on this Plan. This spreadsheet outlines the peak runoff and volume generated for each subbasin for existing and proposed fully developed conditions.

Erosion Control Measures - The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property. This can be achieved by constructing temporary berms at the property lines and wetting the soil to keep it from blowing. The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street. The contractor shall secure "Topsoil Disturbance Permits" prior to beginning construction.

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HYDROLOGY SECTION

Engineer's Certification
Women's Community Association

This site was surveyed on August 9, 1998 by Harris Surveying to confirm post-construction design elevations and drainage. I, Mark H. Burak, P.E. have assessed the "as constructed" conditions and have found the site to be in substantial compliance with the approved plan stamped 4/16/97.

Mark H. Burak, P # 10987 — August 17, 1998

MARK H. BURAK — NEW MEXICO — 10987 — REGISTERED PROFESSIONAL ENGINEER

BY	DATE	REVISION

DESIGNED BY: M.H.B.
DRAWN BY: T.D.S.
CHECKED BY:

MARK H. BURAK — NEW MEXICO — 10987 — REGISTERED PROFESSIONAL ENGINEER

Mark H. Burak, P.E.
1512 Sagebrush Trail SE
Albuquerque, New Mexico, 87123
(505) 296-0461

Civil Engineering — BURAK Consulting — Development and Design

WOMEN'S COMMUNITY ASSOCIATION

GRADING PLAN

DRAWING NUMBER
C1

1 OF 1

File: D:\BURAK\WOMENS\GRADING Plotted: Wed Apr 16 11:48:13 1997
Plot Label: Technical Drafting Services, Inc.