



# *City of Albuquerque*

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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December 14, 1994

Jeff Mortensen  
Jeff Mortensen & Associates  
6010-B Midway Park Blvd. NE  
Albuquerque, NM 87109

RE: ENGINEER CERTIFICATION FOR COUNTRY HARVEST RESTAURANT  
@ GATEWAY SHOPPING CENTER (H17-D64) ENGINEER'S  
CERTIFICATION STATEMENT DATED 12/7/94.

Dear Mr. Mortensen:

Based on the information provided on your December 7, 1994  
submittal, Engineer Certification for the above referenced site  
is acceptable.

If I can be of further assistance, please feel free to contact me  
at 768-2667.

Sincerely,

*Bernie J. Montoya*  
Bernie J. Montoya, CE

BJM/dl

c: Andrew Garcia  
File



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 28, 1994

Jeff Mortensen  
Jeff Mortensen & Associates, Inc.  
6010-B Midway Park Blvd. NE  
Albuquerque, NM 87109

RE: REVISED DRAINAGE PLAN FOR GATEWAY SHOPPING CENTER RESTAURANT  
AND PAVING (H17-D64) REVISION DATED 3/23/94.

Dear Mr. Mortensen:

Based on the information provided on your March 24, 1994 resubmittal, the above referenced site is approved for Building Permit.

Please be advised that Engineer Certification per the D.P.M. checklist will be required prior to Certificate of Occupancy release.

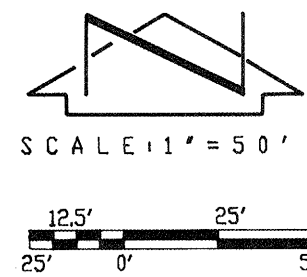
If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

*Bernie J. Montoya*  
Bernie J. Montoya, CE  
Engineering Associate

BJM/d1/WPHYD/7867

c: Andrew Garcia  
File



# LEGAL DESCRIPTION

TRACTS B, C & D, A.J. JOHNSON SUBDIVISION, FILED MAY 5, 1988, BOOK C36, PAGE 11.

## NOTE:

NO BOUNDARY SURVEY WAS PERFORMED. ALL BEARINGS & DISTANCES PROVIDED BY PLAT OF RECORD. BOUNDARY HAS BEEN GRAPHICALLY SUPERIMPOSED.

PROJECT BENCHMARK = T.B.M.

A.C.S. STA. 11+17.7 AN ALUMINUM CAP LOCATED AT THE S.E. CURB RETURN OF THE INTERSECTION OF MENAUL BOULEVARD N.E. AND CARLISLE BOULEVARD N.E.  
ELEVATION = 5140.36 FEET (M.S.L.D.)

# LEGEND

X 51.4	EXISTING SPOT ELEVATION
48.50	PROPOSED SPOT ELEVATION
51.55	EXISTING CONTOUR
55	PROPOSED CONTOUR
TC	TOP OF CURB
TA	TOP OF ASPHALT
FL	FLOW LINE
---	DIRECTION OF FLOW
X 58.17	AS-BUILT ELEVATION
60.06	AS-BUILT ELEVATION
50.50	AS-BUILT = AS DESIGNED

# Site Characteristics

- Precipitation Zone 2
- $P_{6,100} = P_{360} = 2.35"$
- Total Area ( $A_T$ ) 13.39
- Developed Land Treatment

## A. Basin A

Treatment	Area (sf/ac)	%
B	31,500/0.72	09
D	330,000/7.57	91

## B. Basin B

Treatment	Area (sf/ac)	%
B	29,850/0.69	13
D	191,900/4.41	87

# Developed Condition

## A. Basin A

### 1. Volume

$$E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$
$$E_w = (0.78)(0.72) + 2.12(7.57) / 13.39 = 1.24"$$
$$V_{100} = (E_w / 12) A_T$$
$$V_{100} = (1.24 / 12) 13.39 = 1.3842 \text{ ac.ft.}; 60,300 \text{ cf}$$

### 2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$
$$Q_p = Q_{100} = 2.28(0.72) + (4.70)(7.57) = 37.2 \text{ cfs}$$

## B. Basin B

### 1. Volume

$$E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$
$$E_w = (0.78)(0.69) + (2.12)(4.41) / 13.39 = 0.74"$$
$$V_{100} = (E_w / 12) A_T$$
$$V_{100} = (0.74 / 12) 13.39 = 0.8257 \text{ ac.ft.}; 36,000 \text{ cf}$$

### 2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$
$$Q_p = Q_{100} = (2.28)(0.69) + (4.70)(4.41) = 22.3 \text{ cfs}$$

# Comparison

## 1. Basin A

$$\Delta V_{100} = 60,300 - 53,500 = 6,800 \text{ cf (increase)}$$
$$\Delta Q_{100} = 37.2 - 32.9 = 4.3 \text{ cfs (increase)}$$

## 2. Basin B

$$\Delta V_{100} = 48,150 - 36,000 = 12,150 \text{ cf (decrease)}$$
$$\Delta Q_{100} = 29.3 - 22.3 = 7 \text{ cfs (decrease)}$$

## 3. Net

$$\Delta V_{100} = (53,500 + 48,150) - (60,300 + 36,000) = 5,350 \text{ cf (decrease)}$$
$$\Delta Q_{100} = (32.9 + 29.3) - (37.2 + 22.3) = 2.7 \text{ cfs (decrease)}$$

## 2 DRAINAGE PLAN UPDATE NO. 2

The Drainage Plan for Gateway Shopping Center is being updated to relocate the proposed restaurant which was previously connected to the southeast corner of the existing building. The construction will involve the relocation of the proposed restaurant location. This will not alter the impervious characteristics of this portion of the site. The proposed construction will slightly modify the proposed drainage as previously presented and approved. There will be no change in the impervious area of the site, hence there will be no change in the hydrologic characteristics and calculations for the site. The proposed modifications are consistent with the previously approved plan; this revision is merely an update to the previously approved plan.

## DRAINAGE CERTIFICATION

As indicated by the as-built elevations shown hereon, the Country Harvest Restaurant has been constructed in substantial conformance with the approved Grading and Drainage Plan. This certification applies to that area identified by Revision 2 below. It is based upon the review of the as-built information, combined with visual observation of the completed project on December 05, 1994, that issuance of a Permanent Certificate of Occupancy for the Country Harvest Restaurant is hereby recommended.

Jeffrey G. Mortenson  
NMPE/8547  
REGISTERED PROFESSIONAL ENGINEER  
NEW MEXICO  
12-07-94

LIMIT OF NEW PAVING REMOVAL

Jeffrey G. Mortenson  
NMPE/8547  
REGISTERED PROFESSIONAL ENGINEER  
NEW MEXICO  
DEC - 7 1994  
07-10-93  
12-30-93  
03-23-94

DESIGNED BY	J.G.M.	N.D.	DATE	BY	REVISIONS	JOB NO.
DRAWN BY	J.M.C.	12/93	12/93	J.G.M.	RECEIVING & TRUCK DOCK	941211
APPROVED BY	J.G.M.	3/94	3/94	J.G.M.	RELOCATE RESTAURANT & REGRADE PARKING LOT FOR RELOCATION	DATE 06-1993
		12/94	12/94	J.G.M.	AS-BUILT & CERTIFY	SHEET 3 OF 4