HYDROLOGY

G21/D21B

JUAN TABO OFFICE

PARK - LOT 1

G21 - D21B

2 PLANS

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Juan Tabo Office Park ZONE ATLAS / DRNG FILE: G-21 /D21B

LEGAL DESCRIPTION: Lot 1, Juan Tabo Business Park

CITY ADDRESS: 3909 Juan Tabo Blvd NE

ENGINEERING FIRM: Engineering Associates CONTACT: Tucker Green

ADDRESS: 532 Adams NE 87102 PHONE: 865-6545

OWNER: Albuquerque Title Company CONTACT: Mark Schlecter

ADDRESS: 6301 Indian School PHONE: 881 8600

ARCHITECT: Jack T. Belcher CONTACT: Jack T. Belcher

ADDRESS: PO BOX 1742 Corrales 87048 PHONE: 897 1297

SURVEYOR: Tyree Surveying Inc CONTACT: Ronald Tyree

ADDRESS: 201-C Eubank NE PHONE: 293-5538

CONTRACTOR: Enchanted Builders CONTACT: Ronald Clark

ADDRESS: 9004 Menaul Suite 8 PHONE: 294 1429

PREDESIGN MEETING:

___YES
_X_NO
___COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO.
EPC NO.
PROJ. NO.

TYPE OF SUBMITTAL:
___DRAINAGE REPORT
_X_DRAINAGE PLAN
___CONCEPTUAL GRADING & DRAINAGE PLAN
_X_GRADING PLAN
___EROSION CONTROL PLAN
___ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:
___SKETCH PLAT
___PRELIMINARY PLAT
___SITE DEVELOPMENT PLAN
___FINAL PLAT APPROVAL
_X_BUILDING PERMIT APPROVAL
___CERTIFICATE OF OCCUPANCY
___ROUGH GRADING PERMIT
___GRADING/PAVING PERMIT
___OTHER (SPECIFY)

DATE SUBMITTED: ~~12/10/85~~ 12/13/85

BY: August Mosimann

RECEIVED
DEC 13 1985
HYDROLOGY SECTION

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

January 8, 1986

August Mosimann
Engineering Associates
532 Adams, NE
Albuquerque, New Mexico 87102

RE: DRAINAGE PLAN FOR JUAN TABO OFFICE PARK
RECEIVED DECEMBER 13, 1985 (G-21/D21B)

Dear Mr. Mosimann:

I have reviewed the referenced submittal and forward the following comments:

1. The first page of the report should reference from where the information regarding flood hazard came, not the individual that provided it to you.

2. The plan should show sufficient contours and/or spot elevations to clearly show the interfacing of this property and the adjacent properties. These contours and spot elevations should extend a minimum of 25 feet beyond the property line.

3. The finished floor elevation of the building should have the complete MSL designation.

Should you have any questions or comments, call me at 766-7644.

Cordially,

Billy J. Goolsby

Billy J. Goolsby, P.E.
C.E./Design Hydrology

BJG/bsj

DRAINAGE INFORMATION SHEET
**** RESUBMITTAL: ATTENTION BILLY J. GOOLSBY ****

PROJECT TITLE: Juan Tabo Office Park — ZONE ATLAS / DRNG FILE: G-21/D21B

LEGAL DESCRIPTION: Lot 1, Juan Tabo Business Park

CITY ADDRESS: 3909 Juan Tabo Blvd NE

ENGINEERING FIRM: Engineering Associates — CONTACT: Tucker Green
ADDRESS: 532 Adams NE 87102 — PHONE: 865-6545

OWNER: Albuquerque Title Company — CONTACT: Mark Schlecter
ADDRESS: 6301 Indian School — PHONE: 881 8600

ARCHITECT: Jack T. Belcher — CONTACT: Jack T. Belcher
ADDRESS: PO BOX 1742 Corrales 87048 — PHONE: 897 1297

SURVEYOR: Tyree Surveying Inc — CONTACT: Ronald Tyree
ADDRESS: 201-C Eubank NE — PHONE: 293-5538

CONTRACTOR: Enchanted Builders — CONTACT: Ronald Clark
ADDRESS: 9004 Menaul Suite 8 — PHONE: 294 1429

RECEIVED
JAN 10 1986
HYDROLOGY SECTION

PREDESIGN MEETING:

___YES
_X_NO
___COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO.
EPC NO.
PROJ. NO.

TYPE OF SUBMITTAL:
___DRAINAGE REPORT
_X_DRAINAGE PLAN
___CONCEPTUAL GRADING & DRAINAGE PLAN
_X_GRADING PLAN
___EROSION CONTROL PLAN
___ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:
___SKETCH PLAT
___PRELIMINARY PLAT
___SITE DEVELOPMENT PLAN
___FINAL PLAT APPROVAL
_X_BUILDING PERMIT APPROVAL
___CERTIFICATE OF OCCUPANCY
___ROUGH GRADING PERMIT
___GRADING/PAVING PERMIT
___OTHER (SPECIFY)

NOTES:
1. CONTOURS & SPOT ELEVATIONS ADDED TO CLARIFY OFFSITE TOPOGRAPHY
2. FINISHED FLOOR NOW GIVEN COMPLETE MEAN SEA LEVEL ELEVATION
3. PLAN IDENTIFIES F.E.M.A. MAP THAT SHOWS SITE NOT IN 100-YEAR FLOOD HAZARD ZONE.
4. THESE CHANGES AFFECT ONLY SHEET G-2, THE FIRST DRAINAGE SHEET.
5. THERE ARE NO OTHER CHANGES.

DATE RESUBMITTED: 1/10/86

BY: Tucker Green
for Engineering Associates, Inc.

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

January 16, 1986

August Mosimann
Engineering Associates
532 Adams, NE
Albuquerque, New Mexico 87102

RE: DRAINAGE PLAN FOR JUAN TABO OFFICE PARK
RECEIVED JANUARY 10, 1986 (G-21/D21B)

Dear Mr. Mosimann:

The referenced drainage plan dated January 10, 1986, is approved for Building Permit sign-off.

Please attach a copy of this approved plan to both sets of construction plans prior to sign-off by Hydrology.

If you have any questions regarding this project, call me at 766-7644.

Cordially,

Billy J. Goolsby

Billy J. Goolsby, P.E.
C.E./Design Hydrology

BJG/bsj

G21-021B

CITY OF ALBUQUERQUE
DRAINAGE COMPLAINT REPORT

Location ..... Sheet ..... of .....

Reported by BOB BORN ..... Phone .....

Address 3709 LUANN TADO .....

Taken by ..... Date .....

COMPLAINT CONTRACTOR IS DUMPING DIRT IN ARROYO R/W .....

Referred to .....

INVESTIGATION—CAUSE NEW COMMERCIAL DEVELOPMENT IS WORKING IN ARROYO R/W .....

Recommendation DO NOT RELEASE ANY C.O.'S UNTIL PROBLEM IS CLEANED UP! .....

Investigated by ..... Date .....

ACTION TAKEN .....

..... Taken by ..... Date .....

FOLLOW UP .....

..... Taken by ..... Date .....

ZONE ATLAS G21 DATE .....

COMPLAINT REPORT NO. G21-C1 PRIORITY .....

GRADING & DRAINAGE REPORT
FOR
JUAN TABO OFFICE PARK

LOT 1 JUAN TABO BUSINESS PARK MAP 6-21

RECEIVED
DEC 13 1985
HYDROLOGY SECTION

INTRODUCTION

The owner proposes to erect a 9600 sq. ft. office building on an 0.7977 acre site at the southwest corner of Juan Tabo Blvd and Juan Tabo Place, across from Eldorado High School. The site is currently bare. The south property line of the site adjoins the right-of-way for AMAFCA's concrete-lined Embudito channel. Under a previously approved drainage master plan (See Drainage File 621-21 and City Project No. 1504 from 1982) the site was graded so that most of the site slopes gently toward a drop inlet at the southwest corner. This inlet, located in a small drainage easement, sends runoff from the site, and from the lot adjacent on to west, directly to the lined channel. The slope is steeper on-to-site near the north propertly and off-from-site at the west propertly line.

Compared to the master plan, peak runoff will be less and will be routed somewhat differently. Runoff from the roof and part of the landscaping will flow to the existing drop inlet as per the master plan, but runoff from all the parking area and the remaining landscaping will flow out a driveway onto Juan Tabo Blvd. There is an existing storm drain inlet within 10 feet downstream and a conrete-lined rundown channel within 30 feet downstream (both lead directly to the Embudito Channel) so this change in routing is insignificant.

The site is not in a 100-yr flood hazard area ~~(per Michelle @ City Hydrology office).~~ No! Delete Reference Maps

EXISTING CONDITIONS

The site is bare except for some trash and some scrub vegetation. Runoff is directed to the southwest corner and thence to the lined channel.

The flow area is 37748 sq. ft. or .7977 acres.
The flow area is 100% impervious
The soil is Group B, Type Tg (SCS Soil Survey Sheet 22)
The "C" factor is 0.34 (DPM Pl. 22.2 C-1)
The runoff Length L is 260 ft.
The slope S is 3.3%
The time of concentration Tc is 0.0078*(L^.77)/(S^.385) = 2.10 min
(Use 10 minutes minimum)
The average velocity is L / (Tc x 60) = 2.06 ft/sec.
The 100-yr 6-hr precipitation amount AMT is 2.5 in (Pl 22.2 D_1)
The 100-yr intensity I is 2.114 x 2.5 = 5.29 in/hr (Pl 22.2 D-2)
The 100-yr flow rate is CIAc = 0.34 x 5.29 x 0.7977 = 1.43 cfs.
The 100-yr volume is 0.34 x 2.5 / 12 x 37748 = 2674 cu. ft.
The 10-yr values are 65.7 % of the 100-yr values
for amount, intensity, rate, and volume. (Pl 22.2 D-1)

12/13/85

OFFSITE FLOW

There is no offsite flow. The north and east sides are protected by curb and gutter in existing streets, the lot to the west is lower, and to the south the AMAFCA right-of-way is lower still.

PROPOSED CONDITIONS

The site will be graded as shown on the plans. Roof flow will be carried by buried PVC pipes to exit onto gravel aprons near the drop inlet. The inlet will also receive runoff from the southern part of the landscaping. Runoff from the parking area will flow out the driveway and into Juan Tabo Blvd for a few feet before being conveyed to the Embudito Channel. Note that the peak flow rate of 3.16 cfs is less than the 4.1 cfs designated on the master plan.

The flow area is 37748 sq. ft. or .7977 acres.
The flow area is 71 % impervious
The soil is Group B, Type Tg (SCS Soil Survey Sheet 22)
The "C" factor is 0.75 (DPM Pl. 22.2 C-1)
The runoff Length L is 260 ft.
The slope S is 1.3%
The time of concentration Tc is 0.0078*(L^.77)/(S^.385) = 3.00 min
(Use 10 minutes minimum)
The average velocity is L / (Tc x 60) = 1.44 ft/sec.
The 100-yr 6-hr precipitation amount AMT is 2.5 in (Pl 22.2 D_1)
The 100-yr intensity I is 2.114 x 2.5 = 5.29 in/hr (Pl 22.2 D-2)
The 100-yr flow rate is CIAc = 0.75 x 5.29 x 0.7977 = 3.16 cfs.
The 100-yr volume is 0.75 x 2.5 / 12 x 37748 = 5898 cu. ft.
The 10-yr values are 65.7 % of the 100-yr values
for amount, intensity, rate, and volume. (Pl 22.2 D-1)

RUNOFF CONTROL

Runoff control consists solely of the measures described above. From the master plan, note that although that the north property line is not a full foot above the flow line in Juan Tabo Place the top of a vertical curve occurs only a few feet upstream of the proposed curb cut; there will never be significant gutter flow. On the east side, there is a full one foot above flow line within a few feet of the property line.

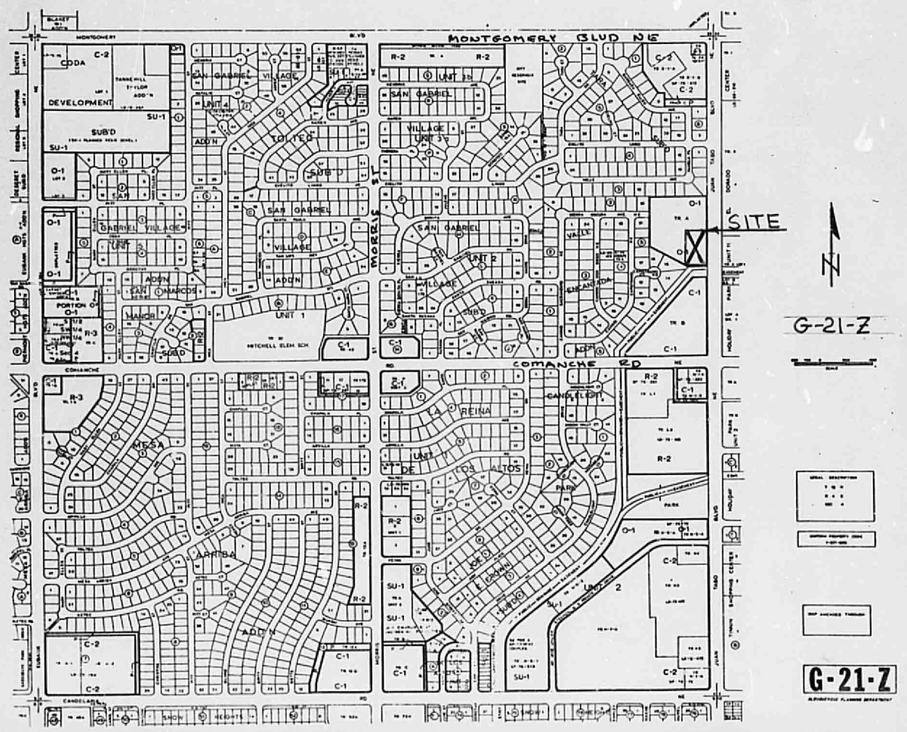
EROSION CONTROL

A note on the plans directs the contractor to construct, at the beginning of construction, either (1) the low wall shown for the south property line, or (2) a 1-1/2 foot high compacted temporary berm. This is to protect AMAFCA right-of-way and the adjacent property. A second note directs him to control dust by wetting exposed dirt or other effective means.

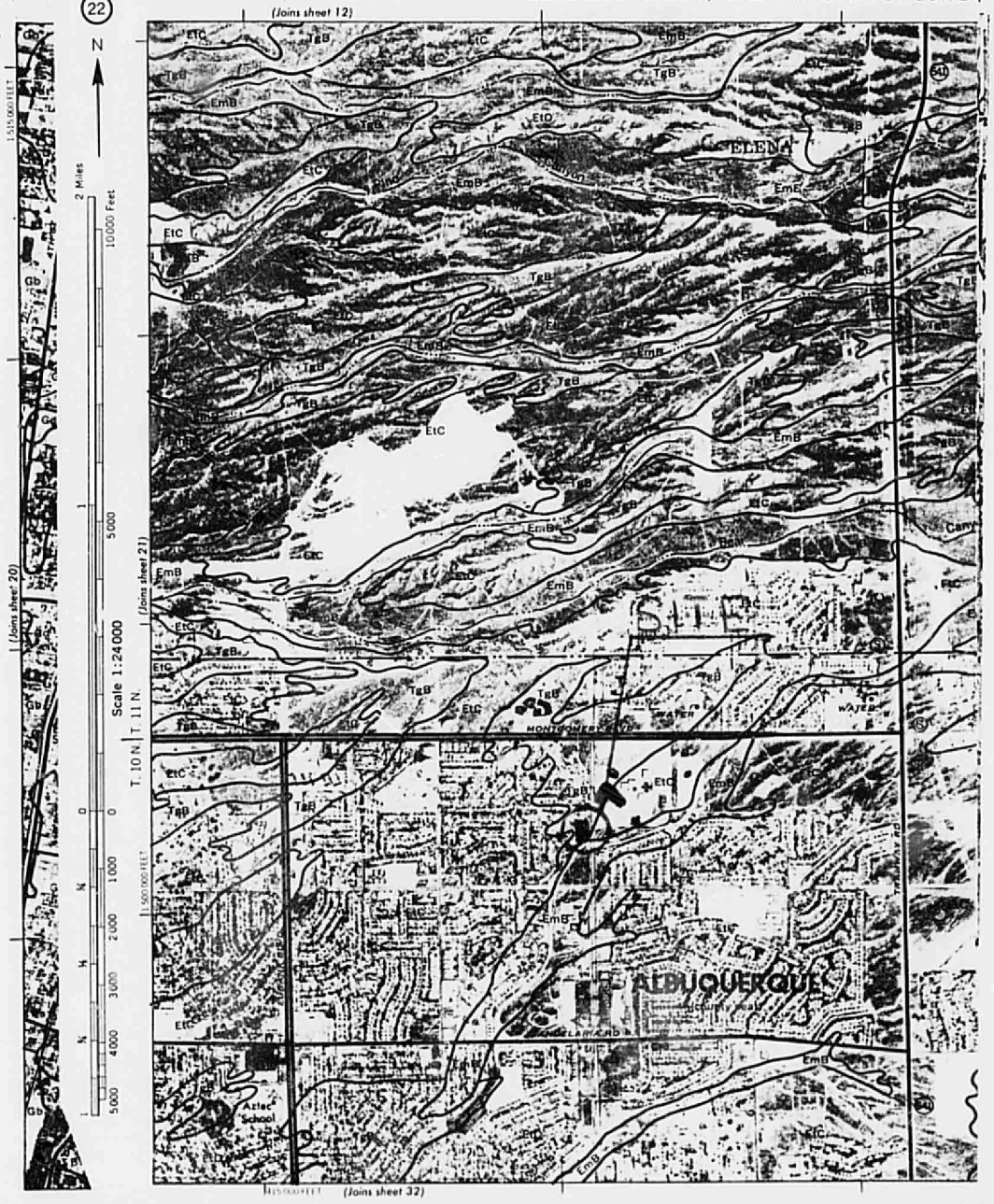
END OF REPORT

APPENDIX

RECEIVED
DEC 13 1985
HYDROLOGY SECTION



THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT


22
N
(Joins sheet 12)
(Joins sheet 20)
(Joins sheet 21)
(Joins sheet 32)
ELENA
ALBUQUERQUE
Aztec School
Scale 1:24 000
2 Miles
10 000 Feet
5000
4000
3000
2000
1000
0
T. 10 N.
T. 11 N.
EtC
TgB
EmB
Gb

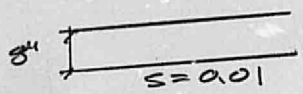
BY TJG DATE 12/9 SUBJECT JUAN TABO OFFICE PARK SHEET NO. ____ OF ____
CHKD. BY ____ DATE ____ CLIENT BELCHER JOB NO. ____

engineering associates, inc. • 532 Adams Street, NE • Albuquerque, NM 87108 • (505) 265-6545

CAPACITY OF 8" PVC

GRAVITY, FULL PIPE
N = 1.013

Q = 1.21 CFS



Q KER BLDG FLOWING WEST

A = 195 x 44 = 8580 ft² = 0.1970 Ac

C = 1.00 SAY

I = 2.114 x 2.5 = 5.29 in/hr

Q = CIA = 1 x 5.29 x .1970 = 1.04 < 1.21 OK

NOTE: THIS PIPE WILL HAVE SEVERAL FEET OF HEAD AVAIL. THIS PROVIDES A FACTOR OF SAFETY NOT SHOWN HERE

1730