# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103


March 20, 2002

Russell G. Grayson, P.E.
Huitt-Zollars, Inc.
333 Rio Rancho Dr Suite 301
Rio Rancho, New Mexico 87124

RE: ALAMEDA BUSINESS PARK LOT 41 (S Squire Office) (C-16/D6P)
( 8512 Calle Alameda NE)
ENGINEERS CERTIFICATION FOR CERTIFICATE OF OCCUPANCY
ENGINEERS STAMP DATED 5/2/2001
ENGINEERS CERTIFICATION DATED 3/15/2002

Dear Mr. Grayson:

Based upon the information provided in your Engineers Certification submittal dated 3/18/2002, the above referenced site is approved for a Permanent Certificate of Occupancy.

If I can be of further assistance, please contact me at 924-3981.

Sincerely,

Teresa A. Martin
Hydrology Plan Checker
Public Works Department

BLB

C: Vickie Chavez, COA
drainage file
approval file

# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103


May 11, 2001

Russell G. Grayson, P.E.
Huitt-Zollars, Inc.
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, NM 87124

***RE: S SQUIRE OFFICE, LOT 41, ALAMEDA BUSINESS PARK (C16-D6P). GRADING AND DRAINAGE PLAN FOR BUILDING PERMIT AND GRADING PERMIT APPROVALS. ENGINEER'S STAMP DATED MAY 2, 2001.***

Dear Mr.Grayson:

Based on the information provided on your May 4, 2001 submittal, the above referenced project is approved for Building Permit and for Grading Permit. (Note that Building Permit covers Grading and Paving Permits.).

Show direction(s) of roof drainage on G&D Plan.

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

Prior to Certificate of Occupancy approval, an Engineer's Certification per the DPM will be required.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,

John P. Murray, P.E.
Hydrology

c: Terri Martin
File

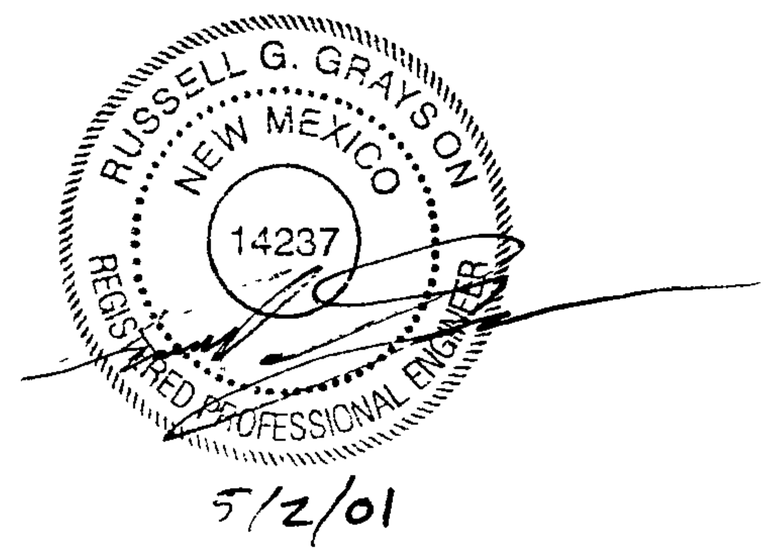
# *GRADING AND DRAINAGE REPORT*

**for**

# *S Squire Office*

# *LOT 41 ALAMEDA BUSINESS PARK*

*Albuquerque, New Mexico*
**May 2001**




**Prepared By:**

HUITT-ZOLLARS, INC.
333 RIO RANCHO DRIVE NE, SUITE 101, RIO RANCHO, NEW MEXICO
(505) 892-5141

# GRADING AND DRAINAGE PLAN
# for
# S Squire Office
# Lot 41 Alameda Business Park

The proposed site is Lot 41 and a portion of Lot 42 of the Alameda Business Park, which is on the southeast corner of Alameda Blvd. and Edith Blvd. Lot 41 is located half way down Calle Alameda on the east side of the road. Lot 42 is to the north of Lot 41.

The "Revised Drainage Report for the Alameda Business Park (Tract B-1 – A-1) dated February 17, 1999 in on file at the City of Albuquerque. Lots 41 and 42 are part of Basin 4 in that report. Basin 4 consists of 3.91 acres and allows for 16.96 cfs of direct discharge onto Calle Alameda. Lots 41 and 42 each consist of .52 acres. The site will consist of all of Lot 41 and .03 acre of Lot 42 for use as a shared driveway between the two lots.

The following allowable runoff was calculated as a percentage of Basin 4:

Basin 4 = 3.91 acres = 16.96 cfs
Proposed Development = .55 acre  % of Basin 4 = .55/3.91 = 14.17%

Therefore, the allowable runoff from the proposed development is 16.96*.1417=2.40 cfs

The following table compares the existing drainage report to the actual proposed site for the total developed area:

| | | | | Land Treatments | | | | Discharge (cfs) |
|---|---|---|---|---|---|---|---|---|
| | Report | Area (ac) | Area (sq mi) | % A | % B | % C | % D | |
| | Existing Drainage Report (14.17% of Basin 4) | 0.55 | .00087 | 0 | 15 | 0 | 85 | 2.40 |
| | Proposed Site | 0.55 | .00087 | 0 | 19 | 0 | 81 | 2.40 |
| | | | | | | | | |

The runoff calculations and design have been done in accordance with Section 22.2 of the Development Process Manual (DPM) of the City of Albuquerque, July 1997. The proposed site was computed using AHYMO 97. An output and summary file are attached. Since the allowable discharge is the same as that of the existing report, our proposed site is in compliance.

# AHYMO Model – Ultimate Developed Conditions
# AHYMO Output File – 100 Year Storm

```
s16.67h8.5v0T &l8D

    AHYMO PROGRAM (AHYMO_97) -                - Version:  1997 02c
      RUN DATE (MON/DAY/YR) = 05/02/2001
      START TIME (HR:MIN:SEC) = 14:03:03    USER NO.= AHYMO-I-9702a0100015O-SH
      INPUT FILE = G:\Proj\17027201\Drainage\LOT41~1.DAT

 *S Lot 41 Alameda Business Park
 *S FN LOT41-100.DAT  4/24/01
 *S Compute 100-Year Flow
 *S Use 24 Hour Storm
 *
 START              TIME=0.0  CODE 0    LINES -6
 LOCATION           ALBUQUERQUE
    City of Albuquerque soil infiltration values (LAND FACTORS) used for computations.
    Land Treatment   Initial Abstr.(in)   Unif. Infilt.(in/hour)
        A          0.65              1.67
        B          0.50              1 25
        C          0.35              0.83
        D          0.10              0.04

 RAINFALL           TYPE=-2 RAIN QUARTER=0.0 RAIN ONE=2.05
                    RAIN SIX=2.45 RAIN DAY=2.85 DT=0.0500

        COMPUTED 24-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
        DT =   .050000 HOURS      END TIME =   24.000000 HOURS

*S**************************************************************************
*S Basin 41 OF DEVELOPED ----------------------------------------------
COMPUTE NM HYD        ID=1  HYD NO=101.1 DA=0.00087 SQ MI
                PER A=0.0 PER B=19.00 PER C=0.0 PER D=81.0 TP=-.133
                MASS RAINFALL=-1

   K =  .072485HR   TP =  .133000HR   K/TP RATIO =  .545000    SHAPE CONSTANT, N =  7.106420
   UNIT PEAK =  2.7885   CFS   UNIT VOLUME =   .9952      B =  526.28     P60 = 2.0500
   AREA =     .000705 SQ MI   IA =   .10000 INCHES   INF =   .04000 INCHES PER HOUR
   RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .050000


   K =  .132272HR   TP =  .133000HR   K/TP RATIO =  .994525    SHAPE CONSTANT, N =  3.549967
   UNIT PEAK =  .40263   CFS   UNIT VOLUME =   .9693      B =  323.96     P60 = 2.0500
   AREA =     .000165 SQ MI   IA =   .50000 INCHES   INF =  1.25000 INCHES PER HOUR
   RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .050000

PRINT HYD          ID=1   CODE=10

                   PARTIAL HYDROGRAPH  101.10

   TIME    FLOW       TIME    FLOW       TIME    FLOW       TIME    FLOW       TIME    FLOW
    HRS    CFS         HRS    CFS         HRS    CFS         HRS    CFS         HRS    CFS
    .000     .0       5 000     .0       10.000     .0       15.000     0       20.000     .0
    .500     .0       5.500     .0       10.500     .0       15.500     .0      20.500     .0
   1.000      0       6.000     .0       11.000     .0       16.000     .0      21.000     .0
   1.500     2.4       6.500     .0       11.500     .0       16.500     .0      21.500     .0
   2.000     .6        7.000     .0       12.000     .0       17.000     .0      22.000     .0
   2.500     .1        7.500     .0       12.500     .0       17.500     .0      22.500     .0
   3.000     .0        8.000     .0       13.000     .0       18.000     .0      23.000     .0
   3.500     .0        8.500     .0       13.500     .0       18.500     .0      23.500     .0
   4.000     .0        9.000     .0       14.000     .0       19.000     .0      24.000     .0
   4 500     .0        9.500     .0       14.500     .0       19.500     .0

   RUNOFF VOLUME =    2.27377 INCHES    =      .1055 ACRE-FEET
   PEAK DISCHARGE RATE =      2.40 CFS  AT   1.500 HOURS   BASIN AREA =   .0009 SQ. MI.


 *S**************************************************************************
 FINISH

    NORMAL PROGRAM FINISH       END TIME (HR:MIN:SEC) = 14:03:03
(s0p10h4099T &l6D
```

# AHYMO Model – Ultimate Developed Conditions
# AHYMO Summary Output File – 100 Year Storm

```
(s16.67h8.5v0T &l8D
 AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -          - VERSION: 1997.02c     RUN DATE (MON/DAY/YR) =05/02/2001
 INPUT FILE = G:\Proj\17027201\Drainage\LOT41~1.DAT                USER NO.= AHYMO-I-9702a0100015O-SH

                  FROM TO          PEAK      RUNOFF        TIME TO  CFS    PAGE =  1
           HYDROGRAPH ID ID        AREA    DISCHARGE     VOLUME    RUNOFF   PEAK    PER
 COMMAND    IDENTIFICATION  NO. NO.   (SQ MI)    (CFS)     (AC-FT)  (INCHES) (HOURS)  ACRE    NOTATION

 *S Lot 41 Alameda Business Park
 *S FN LOT41-100.DAT  4/24/01
 *S Compute 100-Year Flow
 *S Use 24 Hour Storm
 START                                                    TIME=     .00
 LOCATION              ALBUQUERQUE
 RAINFALL  TYPE= 2                                          RAIN24=  2.850
 *S*************************************************************************
 *S Basin 41 OF DEVELOPED ----------------------------------------------
 COMPUTE NM HYD      101.10  -   1      .00087      2.40      .106    2.27377   1.500   4.315 PER IMP=  81.00
 *S*************************************************************************
 FINISH
(s0p10h4099T &l6D
```

A

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00 JEFFERSON NE

erque

EW MEXICO 87109

05.823.1000

X 5 821 0892

# REVISED DRAINAGE REPORT FOR THE ALAMEDA BUSINESS PARK (TRACT B-1-A-1)

**FEBRUARY 17, 1999**

**PREPARED FOR:**

**MICHAEL MECHENBIER**
**4400 ALAMEDA BLVD.**
**ALBUQUERQUE, NM 87113**

AREA =13 ac.
Q=56.38cfs

ALAMEDA PARK DRIVE

BASIN 18
AREA=2.19 ac.
Q=9.50cfs

BASIN 19
AREA=1.16 ac.
Q=5.03cfs

PRIVATE DRAINAGE EASEMENT

BASIN 20
AREA=2.32 ac.
Q=10.06cfs

PRIVATE DRAINAGE EASEMENT

BASIN 4
AREA=3.91 ac.
Q=16.96cfs

Proposed SITE

CIN 12
=3.52 ac.
15.27cfs

PRIVATE DRAINAGE EASEMENT

CALLE ALAMEDA

BASIN 5
AREA=3.04 ac

**ALAMEDA BUSINESS PARK**
**FULLY DEVELOPED CONDITIONS**

| BASIN | AREA (ACRES) | % LAND TREATMENT* A | B | C | D | PEAK DISCHARGE - (CFS/ACRE)** A | B | C | D | Q(100-YR) DEVELOPED (CFS) |
|---|---|---|---|---|---|---|---|---|---|---|
| **On-Site** | | | | | | | | | | |
| 1 | 5.02 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 21.77 |
| 2 | 13.00 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 56.38 |
| 3 | 5.51 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 23.90 |
| 4 | 3.91 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 16.96 |
| 5 | 3.04 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 13.18 |
| 6 | 6.19 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 26.85 |
| 7 | 3.08 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 13.36 |
| 8 | 2.60 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 11.28 |
| 10 | 3.90 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 16.91 |
| 11 | 3.40 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 14.75 |
| 12 | 3.52 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 15.27 |
| 17 | 3.76 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 16.31 |
| 18 | 2.19 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 9.50 |
| 19 | 1.16 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 5.03 |
| 20 | 2.32 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 10.06 |
| **To Edith** | | | | | | | | | | |
| 16 | 1.60 | 50.00 | 50.00 | 0.00 | 0.00 | 1.56 | 2.28 | 3.14 | 4.70 | 3.07 |
| 28 | 0.46 | 50.00 | 50.00 | 0.00 | 0.00 | 1.56 | 2.28 | 3.14 | 4.70 | 0.88 |
| 31 | 0.33 | 50.00 | 50.00 | 0.00 | 0.00 | 1.56 | 2.28 | 3.14 | 4.70 | 0.63 |
| 32 | 0.88 | 50.00 | 50.00 | 0.00 | 0.00 | 1.56 | 2.28 | 3.14 | 4.70 | 1.69 |
| **Edith** | | | | | | | | | | |
| 21 | 0.61 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 2.65 |
| 22 | 3.62 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 15.70 |
| 23 | 1.05 | 0.00 | 15.00 | 0.00 | 85.00 | 1.56 | 2.28 | 3.14 | 4.70 | 4.55 |
| **Off-Site** | | | | | | | | | | |
| 13 | 0.10 | 0.00 | 50.00 | 0.00 | 50.00 | 1.56 | 2.28 | 3.14 | 4.70 | 0.35 |
| 14 | 0.39 | 0.00 | 50.00 | 0.00 | 50.00 | 1.56 | 2.28 | 3.14 | 4.70 | 1.36 |
| 27 | 1.28 | 0.00 | 50.00 | 0.00 | 50.00 | 1.56 | 2.28 | 3.14 | 4.70 | 4.47 |
| 24 | 0.40 | 0.00 | 50.00 | 0.00 | 50.00 | 1.56 | 2.28 | 3.14 | 4.70 | 1.40 |
| **To South of Site** | | | | | | | | | | |
| 33 | 0.11 | 0.00 | 50.00 | 90.00 | 10.00 | 1.56 | 2.28 | 3.14 | 4.70 | 0.49 |

rear of the lot, at which point a swale directs runoff to Calle Alameda via a sideyard swale along Lot 44. The flow discharges into Calle Alameda through sidewalk culverts.

**Basin 4 (3.91 acres, $Q_{100}$=16.96 cfs)** is comprised of five lots and Calle Alameda. Runoff from each lot within this basin sheet flows into Calle Alameda. A portion of the storm water from Basin 4 combined with the runoff from Basin 19 above**($Q_{100}$=26.22 cfs)** is intercepted in Calle Alameda by one double grate Type "A" inlet located between lots 42 and 43. The inlet accepts **6.60 cfs** and allows **19.62 cfs** to pass by. The double grate Type "A" inlet located between lots 48 and 47 accepts **6.0 cfs** from Calle Alameda and forces **13.62 cfs** to continue down. A double grate Type "C" inlet located next to the knuckle PC, down stream of lot 44, will receive flow from the residual from the inlets mentioned above as well as the runoff from Basin 18 and 20. This inlet accepts **6.60 cfs** from Calle Alameda and permits **29.06 cfs** to continue down. The residual from this inlet is then intercepted down stream by two double grate Type "C" inlets (one located on each side of the street). Each inlet accepts **5.7 cfs** allowing **17.66 cfs** to pass by. The storm drain beneath Calle Alameda directs the storm water from the inlets above toward the drainage pond in Tract A below.

**Basin 11 (3.40 acres, $Q_{100}$=14.75 cfs)** contains four lots and a portion of Vista Alameda. Basin 11 is located at the southeast corner of the site. The runoff from this basin sheet flows to Vista Alameda. There is a retaining wall with a maximum height of 4' that extends along the south end of Lots 16 – 21. There is a small area along the southern boundary of Basin 11, along Lots 13 – 16, that slopes upward toward the property boundary in order to tie to natural grade. This sloped area ties to existing grade at the southern boundary at a 3:1 maximum and is contained within a maximum 11-foot wide strip.

**Basin 33** is a maximum 9' wide pond 0.5' deep that is located on the north side of the retaining wall along Lots 17 – 19. The slopes of the pond slope at 2:1 from the north edge of the pond and slope at 3:1 from the south edge of the pond at the top of the retaining wall. This area will pond drain .38 cfs that will drain onto the southern property (General Mills).

**Basin 10 (3.90 acres, $Q_{100}$=16.91 cfs)** contains six lots along the southern portion of this site. The runoff from this basin sheet flows to Vista Alameda.

**Basin 5 (3.04 acres, $Q_{100}$=13.18 cfs)** contains four lots and is located along Calle Alameda. The runoff from this basin drains toward the rear on the lot where flow is caught in the

# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

***Public Works Department***
***Transportation Development Services Section***


March 18, 2002

Steven Perich, Registered Architect
Dekker Perich Sabatini
6801 Jefferson NE
Suite 100
Albuquerque, NM 87109

Re: Certification Submittal for Final Building Certificate of Occupancy for
S Squire Office, ~~[C-16/D006]~~ C-16/D006P
8512 Calle Alemeda
Engineer's Stamp Dated 3/14/02

Dear Mr. Perich:

The TCL / Letter of Certification submitted on 3/15/02 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to Building and Safety and final C.O. has been logged in by Vicki Chavez in the Building Safety Section downstairs.

Sincerely,

Leslie Romero
Engineering Associate
Development and Building Services
Public Works Department

c: Terri Martin, Hydrology
File (1)

Dekker/Perich/Sabatini
architecture
interiors
planning
engineering

# ARCHITECTS CERTIFICATION

I, Steven J Perich, licensed under the laws of the State of New Mexico, do hereby certify that this project was constructed in substantial compliance with the improvements shown on the approved Traffic Circulation Layout for the S Squire Office Building located at 8512 Calle Alameda NE. Minor adjustments to the approved TCL are noted on the attached copy of the TCL.

Steven J Perich

3/14/02
Date

STATE OF NEW MEXICO
STEVEN J.
PERICH
No. 2225
3/14/02
REGISTERED ARCHITECT

RECEIVED
MAR 15 2002
HYDROLOGY SECTION

6801 Jefferson NE
Suite 100
Albuquerque NM
87109
505 761.9700
fax 761.4222
dps@dpsabq.com