CITY OF ALBUQUERQUE



September 1, 2006

Mr. John MacKenzie, P.E.

MARK GOODWIN & ASSOCIATES
P.O. Box 90606

Albuquerque, NM 87199

Re: JOURNAL CENTER LAW OFFICES, LOT 9, TR. 9-A-1A-2-B & 9-A-1A-2-C

7411 Jefferson Street NE

Approval of Permanent Certificate of Occupancy (C.O.)

Engineer's Stamp dated 11/29/20005 (D-17/D94)

Certification dated 08/31/2006

Dear John:

P.O. Box 1293 Based upon the information provided in your submittal received 09/01/2006, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

Albuquerque If you have any questions, you can contact me at 924-3982.

New Mexico 87103

C:

www.cabq.gov

CO Clerk File Arlene V. Portillo

Sincerely,

Plan Reviewer, Planning Dept.-Hydrology

arlen V. Portillo

Development and Building Services

CITY OF ALBUQUERQUE



January 17, 2006

John MacKenzie, P.E. Mark Goodwin & Associates, PA P.O. Box 90606 Albuquerque, NM 87199

Re:

Journal Center Law Office, 7411 Jefferson Street NE, Grading and

Drainage Plan

Engineer's Stamp dated 11-29-05 (D17-D94)

Dear Mr. MacKenzie,

P.O. Box 1293

Based upon the information provided in your submittal received 12-22-05, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required. In addition, please provide a copy of the necessary sidewalk easement for this site prior to Certificate of Occupancy approval.

Albuquerque

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. If you have any questions regarding this permit please feel free to call the New Mexico 87103 DMD Storm Drainage Design section at 768-3654 (Charles Caruso).

If you have any questions, you can contact me at 924-3981.

www.cabq.gov

Sincerely,

Kristal D. Metro, P.E.

Senior Engineer, Planning Dept. Development and Building Services

C: Charles Caruso, DMD Storm Drainage Design File

CITY OF ALBUQUERQUE



July 19, 2005

John MacKenzie, PE Mark Goodwin & Associates P.O. 90606 Albuquerque, NM 87199

Re: Journal Center Law Office Grading and Drainage Report Engineer's Stamp dated 6-12-05 (D17/D94)

Dear Mr. MacKenzie,

Based upon the information provided in your submittals dated 6-17-05, the above referenced plan is approved for Preliminary Plat and Site Plan action by the DRB. Prior to Building Permit approval, please address the following comments.

P.O. Box 1293

• Per the DPM, supplemental data supporting a grading plan should be contained in a bound report, stamped, signed and dated by the engineer of record. This information can also be included on a drainage plan as long as it is stamped and signed.

Albuquerque

Please submit the AHYMO input and summary files as well.

If you have any questions, you can contact me at 924-3986.

New Mexico 87103

www.cabq.gov

Sincerely,

Bradley L. Bingham, PE

Principal Engineer, Planning Dept Development and Building Services

C: file

AUG 6:3 2005

HYDROLOGY SECTION

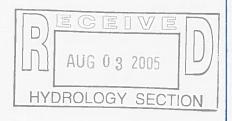
DRAINAGE REPORT for Journal Center Law Offices

Prepared for

Mullen Heller Architecture, PC 1015 Tijeras NW, Suite 220. Albuquerque, NM 87102 (505) 268-4144

Prepared by

Mark Goodwin & Associates, PA P.O. Box 90606 Albuquerque, NM 87199 (505) 828-2200



August, 2005



I. PROJECT DESCRIPTION

The proposed site area comprises approximately 2.68 acres and is located on Jefferson Street one tract south of 9A-1A-1, of which is on the SW corner of the Masthead/Jefferson intersection. The current legal description of the site is Tract 9-A-1A-2-A, 9-A-1A-2-B, 9-A-1A-2-C.

The Purpose of this report is to present the drainage management plan for the three-lot proposed office buildings in order to obtain the building permit and grading and drainage plan approval. A platting action of this site is to be submitted to DRB concurrent with a site development plan. All applicable ordinances, the DPM and AHYMO were utilized to prepare this plan.

II. DRAINAGE DESIGN CRITERIA

The design criteria used in this report was in accordance with Section 22.2 Hydrology of the Development Process Manual. The 100-year, 6-hour storm event was utilized to determine site runoff rates using P(1 hr) = 1.65", P(6 hr) = 2.23" and P(24 hr) = 2.59", obtained from the latest NOAA Precipitation Atlas. The onsite Land Treatment values used were Treatment D=85 and Treatment B=15. AHYMO printouts are provided in Appendix A.

III. EXISTING DRAINAGE CONDITION

The site is located on Jefferson Street one tract south of 9A-1A-1, of which is on the SW corner of the Masthead/Jefferson intersection. The subject property slopes down to the west from its Jefferson frontage. A small berm exists along the west property line of the property which helps to divert existing on-site runoff to the north along the west property line and into Tiburon Street west of the site. The property to the west of the site (Tract 9) is fully developed and its runoff discharges freely into Tiburon, as do all the other developed properties within this phase of the Journal Center. The existing developed property south of this site is part of another subdivision and it drains south into Hawkins

Street. To the north of the subject site the undeveloped Tract 9A-1A-1 slopes down to the west and discharges into Tiburon Street. As a result, there are no off-site flows entering this site.

Bohannon-Huston, Inc. submitted a drainage report for the subject property in connection with its work on the original subdivision of the Journal Center, Phase 2, in 2001. The report has an engineer's stamp date of 8/25/00. According to the report, developed runoff discharging from this site is designed to be collected in Tiburon and then conveyed in the street to drop inlets located in Washington Street to the west. As a result there is no additional public drainage infrastructure needed in connection with the proposed 3-tract division of this property.

IV. DEVELOPED DRAINAGE CONDITIONS

The total developed conditions flow from this site is 9.38 cfs. All of the on-site runoff is to be conveyed north and into a common driveway between the subject property and Tract 9A-1A-1 to the north. The common drive will then discharge directly into Tiburon Street.

V. CONCLUSIONS

The proposed drainage scheme for the new buildings can be readily accommodated through the implementation of this plan. It has been adequately shown in this report that the internal conveyance of storm water to off-site facilities can be accomplished while meeting all current City requirements.



POINT PRECIPITATION FREQUENCY ESTIMATES FROM NOAA ATLAS 14



New Mexico 35.155 N 106.586 W 5187 feet

from "Precipitation-Frequency Atlas of the United States" NOAA Atlas 14, Volume 1, Version 3 G.M. Bonnin, D. Todd, B. Lin, T. Parzybok, M. Yekta, and D. Riley NOAA, National Weather Service, Silver Spring, Maryland, 2003

| | Extracted: Thu Jul 28 2005 | | | | | |
|-------------|----------------------------|-------------|-------|------|------|-----|
| Seasonality | Location Maps | Other Info. | Grids | Maps | Help | Doc |

| Cor | nfiden | ce Lin | nits |)[s | Seasor | nality | | Locati | on Ma | aps | Ot | her In | fo. | Grids | Ma | aps | Help | Doc |
|-----------------|--|-----------|-----------|-----------|-----------|------------|---------|---------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|
| | Precipitation Frequency Estimates (inches) | | | | | | | | | | | | | | | | | |
| ARI* (years) | 5 min | 10 min | 15 min | 30 min | 60 min | 120 min | 3 hr | 6 hr | 12 hr | 24 hr | 48 hr | 4 day | 7 day | 10 day | 20 day | 30 day | 45 day | 60 day |
| 2 | 0.21 | 0.32 | 0.39 | 0.53 | 0.65 | 0.78 | 0.84 | 0.97 | 1.07 | 1.20 | 1.33 | 1.62 | 1.83 | 2.00 | 2.50 | 2.98 | 3.64 | 4.19 |
| 5 | 0.28 | 0.43 | 0.53 | 0.72 | 0.89 | 1.04 | 1.10 | 1.26 | 1.36 | 1.52 | 1.69 | 2.00 | 2.24 | 2.46 | 3.05 | 3.60 | 4.35 | 5.01 |
| 10 | 0.34 | 0.51 | 0.64 | 0.86 | 1.06 | 1.25 | 1.31 | 1.47 | 1.59 | 1.76 | 1.97 | 2.30 | 2.55 | 2.82 | 3.46 | 4.05 | 4.85 | 5.59 |
| 25 | 0.41 | 0.62 | 0.77 | 1.04 | 1.29 | 1.53 | 1.59 | 1.77 | 1.89 | 2.10 | 2.33 | 2.70 | 2.98 | 3.30 | 3.98 | 4.63 | 5.47 | 6.30 |
| 50 | 0.47 | 0.71 | 0.88 | 1.19 | 1.47 | 1.74 | 1.82 | 2.00 | 2.12 | 2.34 | 2.62 | 3.01 | 3.29 | 3.66 | 4.37 | 5.04 | 5.90 | 6.79 |
| 100 | 0.53 | 0.80 | 0.99 | 1.33 | 1.65 | 1.96 | 2.04 | 2.23 | 2.34 | 2.59 | 2.90 | 3.32 | 3.61 | 4.02 | 4.74 | 5.43 | 6.30 | 7.24 |
| 200 | 0.58 | 0.89 | 1.10 | 1.49 | 1.84 | 2.19 | 2.27 | 2.46 | 2.57 | 2.84 | 3.18 | 3.63 | 3.92 | 4.38 | 5.09 | 5.80 | 6.65 | 7.64 |
| 500 | 0.66 | 1.01 | 1.25 | 1.69 | 2.09 | 2.50 | 2.60 | 2.77 | 2.87 | 3.16 | 3.56 | 4.04 | 4.32 | 4.85 | 5.54 | 6.25 | 7.06 | 8.12 |
| 1000 | 0.72 | 1.10 | 1.37 | 1.84 | 2.28 | 2.75 | 2.85 | 3.01 | 3.10 | 3.40 | 3.83 | 4.36 | 4.62 | 5.20 | 5.86 | 6.57 | 7.32 | 8.42 |

AHYMO PROGRAM (AHYMO_97) -

- Version:

1997.02d

per in the

RUN DATE (MON/DAY/YR) = 06/17/2005

START TIME (HR:MIN:SEC) = 11:17:19

USER NO. = AHYMO-I-

TIME=0.0

9702dGoodwinM-AH

INPUT FILE = C:\DOCUME~1\pavan\Desktop\PAVAN\journal.txt

START

***** AHYMO - JOURNAL.DAT ***** JUNE 17, 2005

***** HYDOLOGY FOR THE JOURNAL CENTER

RAINFALL

TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=2.01 IN RAIN SIX=2.35 IN
RAIN DAY=2.75 IN DT=0.0333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR. .033300 HOURS DT = END TIME = 5.994000 HOURS .0033 .0049 .0066 .0000 .0016 .0084 .0102 .0120 .0139 .0158 .0178 .0198 .0219 .0241 .0263 .0285 .0309 .0333 .0358 .0384 .0410 .0438 .0467 .0497 .0528 .0561 .0595 .0630 .0750 .0864 .0928 .0668 .0708 .0805 .1059 .1359 .1822 .2488 .3398 .4596 .6124 .8028 1.0352 1.2584 1.3500 1.4271 1.4955 1.5577 1.6150 1.6682 1.7178 1.7644 1.8082 1.8495 1.8885 1.9255 1.9605 1.9937 2.0252 2.0551 2.0835 2.0912 2.0972 2.1030 2.1085 2.1137 2.1188 2.1236 2.1282 2.1327 2.1370 2.1412 2.1452 2.1491 2.1529 2.1566 2.1602 2.1637 2.1671 2.1704 2.1737 2.1768 2.1799 2.1830 2.1859 2.1889 2.1917 2.1945 2.1973 2.2000 2.2026 2.2052 2.2078 2.2103 2.2128 2.2152 2.2176 2.2200 2.2223 2.2246 2.2268 2.2291 2.2313 2.2334 2.2356 2.2377 2.2397 2.2418 2.2438 2.2458 2.2478 2.2498 2.2517 2.2536 2.2555 2.2574 2.2592 2.2611 2.2629 2.2647 2.2664 2.2682 2.2699 2.2716 2.2733 2.2750 2.2767 2.2784 2.2800 2.2816 2.2832 2.2848 2.2864 2.2880 2.2895 2.2911 2.2926 2.2941 2.2956

***** BASIN A - (2.67 ACRES)

9-1 1-0

COMPUTE NM HYD ID=2 HYD NO=100.2 AREA=0.0041 SQ MI PER A=0 PER B=15 PER C=0 PER D=85 TP=0.1333 HR MASS RAINFALL=-1

K = .072649 HR TP = .133300 HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420

UNIT PEAK = 13.759 CFS UNIT VOLUME = .9985 B = 9985 B = 99

AREA = .003485 SQ MI IA = .10000 INCHES INF =

.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

K = .132088HR TP = .133300HR K/TP RATIO = .990905 SHAPE CONSTANT, N = 3.563124

UNIT PEAK = 1.4990 CFS UNIT VOLUME = .9915 B = 324.91 P60 = 2.0100

 $AREA = .000615 \text{ SQ MI} \qquad IA = .50000 \text{ INCHES} \qquad INF = 1.25000 \text{ INCHES PER HOUR}$

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

PRINT HYD ID=2 CODE=24

PARTIAL HYDROGRAPH 100.20

| | TIME | FLOW | TIME | FLOW | TIME |
|------|-------|------|-------|------|-------|
| FLOW | TIME | FLOW | TIME | FLOW | |
| | HRS | CFS | HRS | CFS | HRS |
| CFS | HRS | CFS | HRS | CFS | |
| | .000 | .0 | 1.998 | 2.7 | 3.996 |
| . 1 | 5.994 | . 1 | | | |
| | .666 | . 0 | 2.664 | . 2 | 4.662 |
| . 1 | 6.660 | .0 | | | |
| | 1.332 | 3.2 | 3.330 | . 1 | 5.328 |
| . 1 | | | | | |

RUNOFF VOLUME = 1.91475 INCHES = .4187 ACRE-FEET PEAK DISCHARGE RATE = 11.39 CFS AT 1.499 HOURS BASIN AREA = .0041 SO. MI.

