DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/11/2002)

PROJECT TITLE 9701 Central Ave. NE Parking Lot	ZONE MAP/DRG. FILE #: K-20/D-53 WORK ORDER #:
DRB#: EPC#:	
LEGAL DESCRIPTION: Lots 1-14, 24-27, Block 2, Buena Ventura St	ubdivision
CITY ADDRESS: 9701 Central Ave. NE	
ENGINEERING FIRM: JC Engineering	CONTACT: Joe Kelley, P.E.
ADDRESS: 1924 Roanoke Dr. NE	PHONE: 269-1936
CITY, STATE: Rio Rancho, NM	ZIP CODE: 87144-5532
ALAMET D.	CONTACT:
OWNER: ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
	$\mathcal{L}$
ARCHITECT:	CONTACT: PHONE:
ADDRESS:	ZIP CODE:
CITY, STATE:	
SURVEYOR:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
CONTRACTOR: Technical Design, Inc.	CONTACT: Bob Kelley
CONTRACTOR: Technical Design, Inc.  ADDRESS:	PHONE: 263-6680
CITY, STATE:	ZIP CODE:
TYPE OF SUBMITTAL:  X DRAINAGE REPORT  DRAINAGE PLAN  CONCEPTUAL GRADING & DRAINAGE PLAN  X GRADING PLAN  EROSION CONTROL PLAN  ENGINEER'S CERTIFICATION (HYDROLOGY)  CLOMR/LOMR  TRAFFIC CIRCULATION LAYOUT (TCL)  ENGINEERS CERTIFICATION (TCL)  ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)  OTHER	CHECK TYPE OF APROVAL SOUGHT:  SIA/FINANCIAL GUARANTEE RELEASE  PRELIMNIARY PLAT APPROVAL  S. DEV. PLAN FOR SUB'D. APPROVAL  S. DEV. PLAN FOR BLDG. PRMT. APPROVAL  SECTOR PLAN APPROVAL  FINAL PLAT APPROVAL  FOUNDATION PERMIT APPROVAL  BUILDING PERMIT APPROVAL  CERTIFICATE OF OCCUPANCY (PERM.)  CERTIFICATE OF OCCUPANCY (TEMP.)  X GRADING PERMIT APPROVAL  X PAVING PERMIT APPROVAL  WORK ORDER APPROVAL  OTHER (SPECIFO)
WAS A PRE-DESIGN CONFERENCE ATTENDED:  YES  X NO  COPY PROVIDED  DATE SUBMITTED: September 5, 2002	BY: Joe P. Kelley, P.E.
Requests for approvals of Site Development Plans and/or Subdivision	n Plats shall be accompanied by a drainage submittal.

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittae. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

- Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five
   acres and Sector Plans.
- 2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
- 3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.



(J/2)

# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 20, 2002

Joe Kelley, PE
JC Engineering
1924 Roanoke Dr. NE
Rio Rancho, NM 87124

Re: 9701 Central Ave Parking Lot Drainage Report

Engineer's Stamp dated 9-5-02 (K20/D53)

Dear Mr. Kelley,

Based upon the information provided in your submittal dated 9-5-02, the above referenced report is approved for Paving Permit and SO#19 Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

A separate permit (SO#19) is required for construction within City R/W. A copy of this approval letter must be on hand when applying for the excavation permit.

Also, upon completion of the project, please provide and Engineer Certification per the DPM checklist for our records. In addition, the sidewalk culvert must be inspected and signed off by Street Maintenance.

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

Sincerely,

Bradley L. Bingham, PE

Sr. Engineer, Planning Dept.

Development and Building Services

C: file

## JC Engineering

1924 Roanoke Dr. NE Rio Rancho, NM 87124-5532 Tel(505)269-1936 Fax(505)867-9304 kelleycj@email.msn.com

September 5, 2002

Mr. Bradley L. Bingham, P.E. City of Albuquerque Hydrology Dept. Plaza del Sol Building, 2<sup>nd</sup> Floor 600 2<sup>nd</sup> Street NW Albuquerque, NM 87102

RE: 9701 Central Ave. Parking Lot

Drainage File K-20/D-53

Dear Mr. Bingham:

This drainage report and grading/paving plan is hereby resubmitted for grading and paving permit approval.

Per your letter of August 15<sup>th</sup>, and our subsequent conversation, the plan has been revised to indicate free discharge to the street west of the site. As we discussed, the discharge could occur via a drivepad or via a sidewalk culvert. There are no existing or planned drivepads in the vicinity of the discharge point, so I called out a new sidewalk culvert at that location.

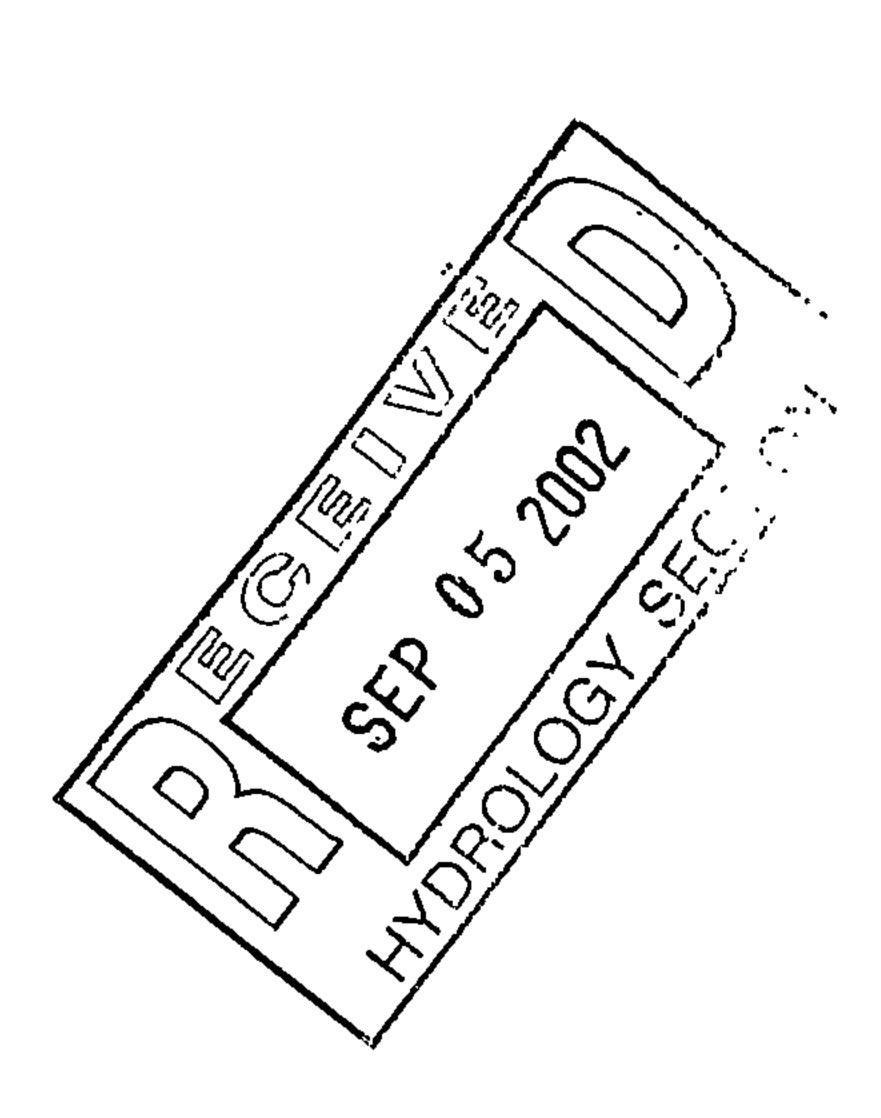
I look forward to receiving plan approval after this submittal. In the event that there are any questions or comments, please call so that I may deal with them immediately, and we can get this thing taken care of.

Thank you!

Best regards,

JC Engineering

oe P. Kellev. P.E.



## JC Engineering

1924 Roanoke Dr. NE Rio Rancho, NM 87124-5532 Tel(505)269-1936 Fax(505)867-9304 kelleycj@email.msn.com

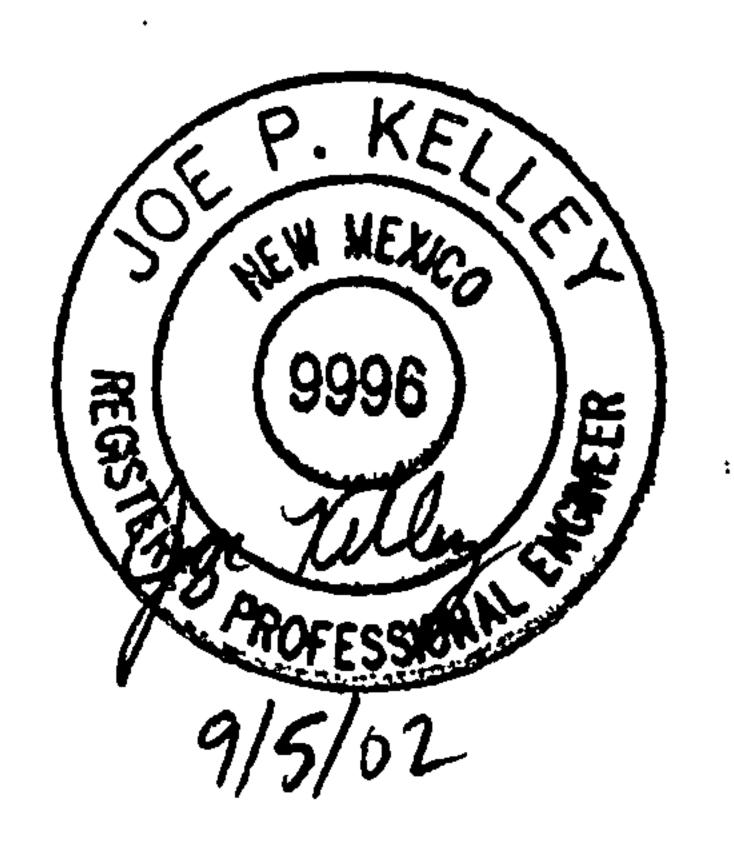
## Drainage Report

for

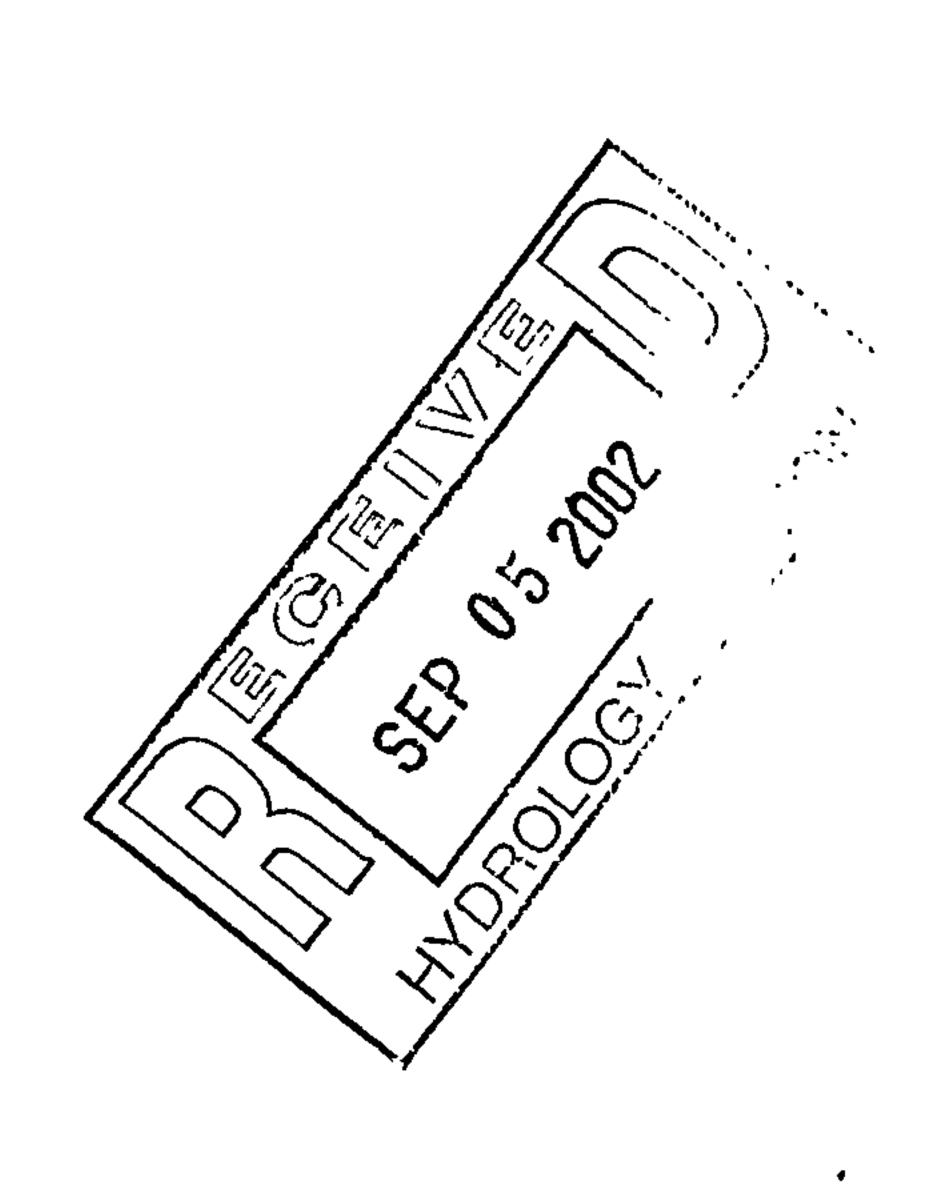
Parking Lot Addition

at 9701 Central Ave. NE

in Albuquerque, New Mexico



September, 2002



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#### Purpose

This drainage report provides the hydrologic rationale for the appropriate discharge of runoff from a parking lot at 9701 Central Ave. NE after additional paving is installed. The purpose of this report is to obtain approval of the grading plan by the City of Albuquerque so a paving permit can be issued.

**Area Description** 

The project is located in an infill are in a commercially-developed part of the city. There is an existing storm drain line in Central Ave., fronting the property. The area is served by all public utilities (water, sanitary sewer, electric, etc.), and there are few (if any) vacant lots in the area. Downstream to the north, there are existing storm drains that discharge to the Lomas storm drain system.

#### Floodplain

There are no floodplains on or adjacent to the site.

Precipitation

The 100-year, 6-hour design storm was used in these calculations. See page A-1 for the AHYMO hydrologic calculations.

### **Existing Conditions**

The existing site consists of a 30,100 s.f. asphalt parking lot covering the 1.999 acre site. The remainder of the site is covered with sparse native vegetation. The site slopes down from southeast to northwest, and freely discharges across the north and west property lines. However, there is a berm on the northwest side of the site that directs most of the developed runoff into the adjacent public right of way (Erbbe Street).

There is an existing storm drain system in Central Ave. on the south side of the site, but the site slopes away from Central, so none of the runoff discharges to the storm drain system. No offsite runoff discharges onto this site.

### **Developed Conditions**

As shown on the grading plan, the existing parking lot is going to be expanded by 16,900 s.f. A new sidewalk culvert will be installed at the approximate end of the existing berm, to take the developed flow from the site underneath the sidewalk. All the new runoff will sheetflow over to the berm, and then be directed into the right-of-way.

100-Year Storm Discharge Summary

	Existing	Developed
Basin Area (ac.)	1.99	1.99
% Treatment B	65	46
% Treatment D	35	54
Peak Flow (cfs)	5.99	6.90
Volume (ac-ft)	0.1968	0.2382

Appendix

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\square (s16.67h8.5v0T\square&18D
                                                     - Version: 1997.02d
       AHYMO PROGRAM (AHYMO 97) -
            RUN DATE (MON/DAY/YR) = 09/05/2002
                                               USER NO. = AHYMO-I-9702c01000S33-AH
           START TIME (HR:MIN:SEC) = 09:19:43
           INPUT FILE = C:\DOCUME~1\ALLUSE~1\DOCUME~1\JCEng\Projects\9701CE~1\HYDROL~1\CENTRA~1.DTA
                            JC ENGINEERING
   *S
*S 9701 CENTRAL AVE. NE PARKING LOT ADDITION
    *S AHYMO HYDROLOGIC ANALYSIS
   *S 100-YEAR, 6-HOUR STORM
    *S
                     TIME=0.0 CODE 0 LINES -6
    START
                     ALBUQUERQUE
   LOCATION
        City of Albuquerque soil infiltration values (LAND FACTORS) used for computations.
        Land Treatment Initial Abstr.(in) Unif. Infilt.(in/hour)
                                             1.67
                         0.65
                                             1.25
                         0.50
                                             0.83
                         0.35
                                             0.04
                         0.10
                      TYPE=-1 RAIN QUARTER=0.0 RAIN ONE=1.95
    RAINFALL
                      RAIN SIX=2.27 RAIN DAY=2.65 DT=0.033333
                 COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
                                                        5.999940 HOURS
                                          END TIME =
                        .033333 HOURS
                 DT =
*S ANALYZE EXISTING BASIN. THIS ENTIRE 1.99 AC AREA DISCHARGES TO
    *S THE SURROUNDING PUBLIC STREETS TODAY -- PRIMARILY TO THE WEST, INTO ERBBE ST.
    *S THE EXISTING SITE WILL BE ANALYZED AS ONE BASIN.
                      ID=1 HYD=EXIST DA=0.003116 SQ MI
    COMPUTE NM HYD
                      PER A=0 PER B=65 PER C=0 PER D=35 TP=-.1333
                      MASS RAINFALL=-1
        K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
        UNIT PEAK = 4.3057 CFS UNIT VOLUME = .9965 B = 526.28 P60 = 1.9500
                   .001091 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
        RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333
        K = .131364HR TP = .133300HR K/TP RATIO = .985475 SHAPE CONSTANT, N = 3.583083
        UNIT PEAK = 4.9586 CFS UNIT VOLUME = .9975 B = 326.34 P60 = 1.9500
        AREA = .002025 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
        RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .0333333
              ID=1 CODE=1
    PRINT HYD
                                         HYDROGRAPH FROM AREA EXIST
       RUNOFF VOLUME = 1.18407 INCHES = .1968 ACRE-FEET
                                 5.99 \text{ CFS} AT 1.500 \text{ HOURS} BASIN AREA = .0031 \text{ SQ}. MI.
       PEAK DISCHARGE RATE =
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```
*S ANALYZE THE DEVELOPED BASIN, WHICH WILL BE ALLOWDED TO FREE DISCHARGE TO
```

PER A=0 PER B=46 PER C=0 PER D=54 TP=-.1333

<sup>\*</sup>S THE STREET BECAUSE OF DOWNSTREAM STORM DRAIN IMPROVEMENTS. ID=1 HYD=DEVELOPED DA=0.003116 SQ MI COMPUTE NM HYD

#### MASS RAINFALL=-1

SHAPE CONSTANT, N = 7.106420K/TP RATIO = .545000.133300HR .072649HR TP =K =P60 = 1.9500526.28 UNIT VOLUME = .9976 CFS 6.6432 UNIT PEAK = .04000 INCHES PER HOUR INF =.10000 INCHES .001683 SQ MI IA =AREA =RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

SHAPE CONSTANT, N = 3.583083K/TP RATIO = .985475.133300HR TP =.131364HR P60 = 1.9500326.34 .9963 UNIT VOLUME = CFS 3.5091 UNIT PEAK = INF = 1.25000 INCHES PER HOUR .50000 INCHES .001433 SQ MI IA =AREA =RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

PRINT HYD ID=1 CODE=1

#### HYDROGRAPH FROM AREA DEVELOPED

RUNOFF VOLUME = 1.43310 INCHES = .2382 ACRE-FEET

PEAK DISCHARGE RATE = 6.90 CFS AT 1.500 HOURS BASIN AREA = .0031 SQ. MI.

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 09:19:43



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 15, 2002

Joe Kelley, PE
JC Engineering
1924 Roanoke Dr. NE
Rio Rancho, NM 87124

Re: 9701 Central Ave Parking Lot Drainage Report

Engineer's Stamp dated 7-31-02 (K20/D53)

Dear Mr. Kelley,

Based upon the information provided in your submittal dated 4-21-00, the above referenced report cannot be approved for Paving Permit and SO#19 Permit for the following reason. It is my belief that the increase in runoff generated by your project will not impact the downstream facilities enough to warrant breaking the curb for the outlet pipe of the proposed pond (that may not be maintained to the City's satisfaction anyway). Therefore, please provide a plan that describes free discharge and an excerpt of the downstream facilities. The storm drain for this basin starts at Ventura and General Patch and connects to the Lomas system at Wyoming.

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

Sincerely,

Bradley L. Bingham, PE

Sr. Engineer, Planning Dept.

Development and Building Services

C: file