

FILE COPY



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

## HYDROLOGY SECTION

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

September 8, 1986

Mark Goodwin  
D. Mark Goodwin & Associates, P.A.  
Post Office Box 21307  
Albuquerque, New Mexico 87154

RE: REVISED DRAINAGE PLAN FOR BOWLIN'S, INC.  
(L-21/D27) ENGINEER'S STAMP DATED SEPTEMBER 11, 1986

Dear Mark:

Based on the information provided on your September 2, 1986  
resubmittal, revisions as indicated are acceptable.

If I can be of further assistance, please feel free to call me at  
766-7644.

Cordially,

*Bernie J. Montoya*

Bernie J. Montoya, C.E.  
Engineering Assistant

BJM/bsj

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

# DRAINAGE INFORMATION SHEET

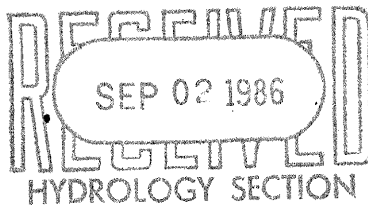
PROJECT TITLE: BOWLINS, INC. ZONE ATLAS/DRNG. FILE #: L-21  
 LEGAL DESCRIPTION: Tract D, Block 12, E. Central Business Addition  
 CITY ADDRESS: 10808 Acoma SE  
 ENGINEERING FIRM: D. Mark Goodwin & Assoc. CONTACT: Mark Goodwin  
 ADDRESS: P.O. Box 21307, Alb., NM 87154 PHONE: 294-9961  
 OWNER: Bowlins, Inc. CONTACT: Chris Bess  
 ADDRESS: 136 Louisiana NE PHONE: 266-5985  
 ARCHITECT: N/A CONTACT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
 SURVEYOR: Tech, Inc. CONTACT: Jim Starcher  
 ADDRESS: 333 E. Main, Farmington, NM PHONE: \_\_\_\_\_  
 CONTRACTOR: N/A CONTACT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

## PRE-DESIGN MEETING:

☐ YES

☐ NO

☐ COPY OF CONFERENCE RECAP SHEET PROVIDED



DRB NO. \_\_\_\_\_

EPC NO. \_\_\_\_\_

PROJ. NO. \_\_\_\_\_

## TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT

☐ DRAINAGE PLAN

☐ CONCEPTUAL GRADING & DRAINAGE PLAN

☒ GRADING PLAN

☐ EROSION CONTROL PLAN

☐ ENGINEER'S CERTIFICATION

## CHECK TYPE OF APPROVAL SOUGHT:

☐ SKETCH PLAT APPROVAL

☐ PRELIMINARY PLAT APPROVAL

☐ SITE DEVELOPMENT PLAN APPROVAL

☐ FINAL PLAT APPROVAL

☐ BUILDING PERMIT APPROVAL

☐ FOUNDATION PERMIT APPROVAL

☐ CERTIFICATE OF OCCUPANCY APPROVAL

☐ ROUGH GRADING PERMIT APPROVAL

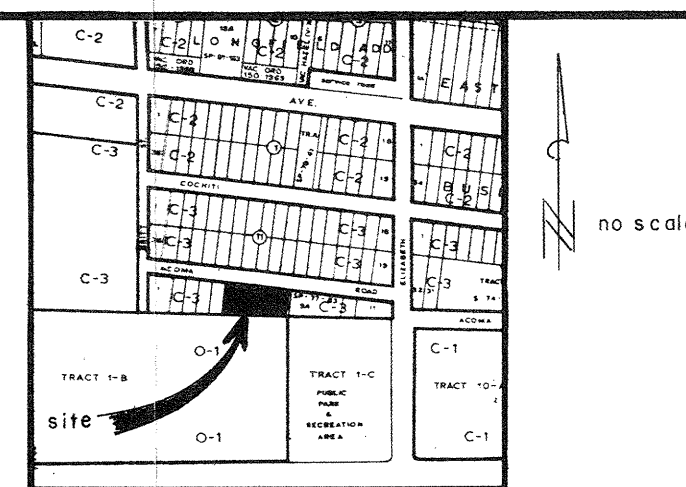
☐ GRADING/PAVING PERMIT APPROVAL

☒ OTHER Revision (SPECIFY)

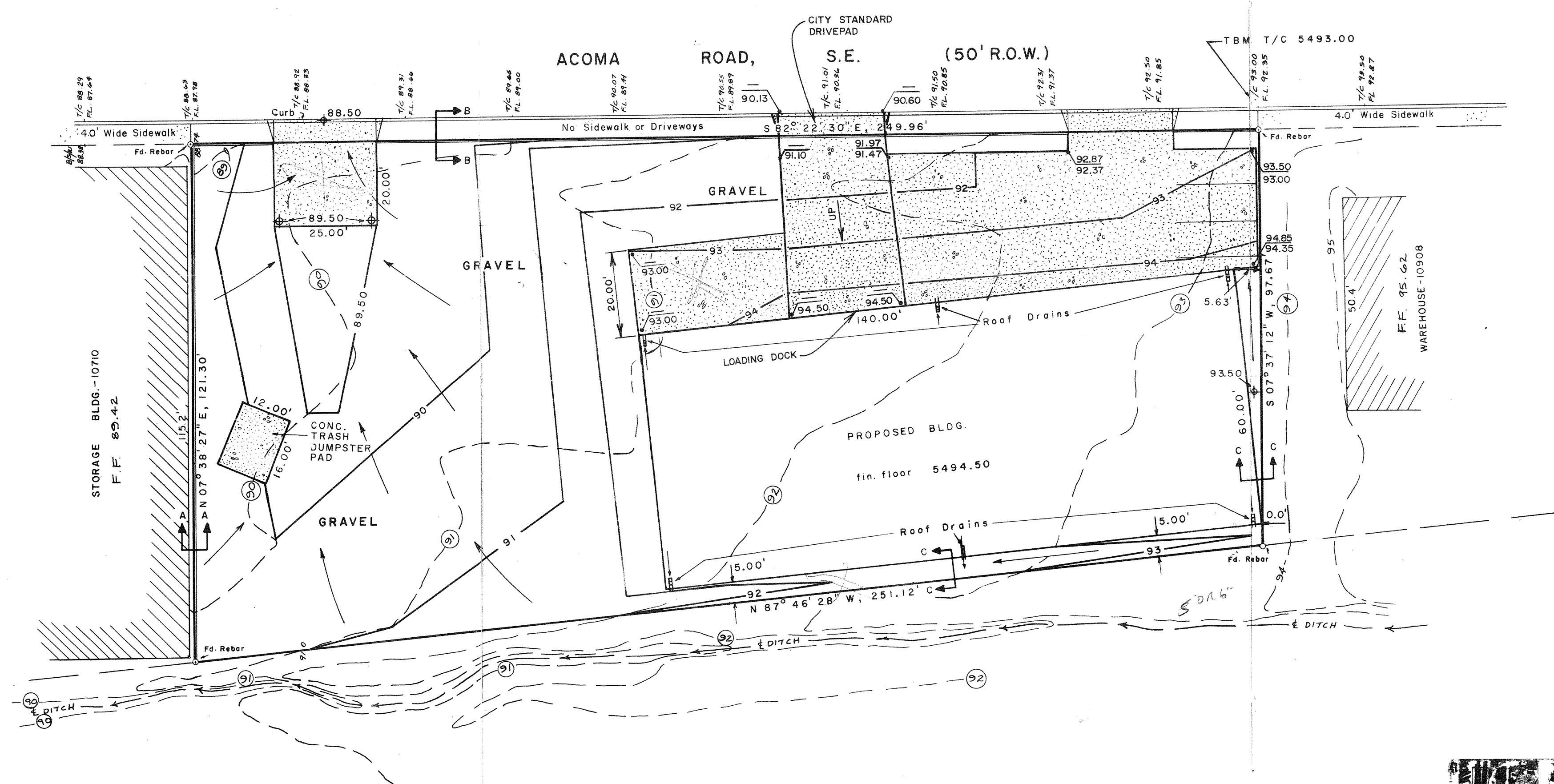
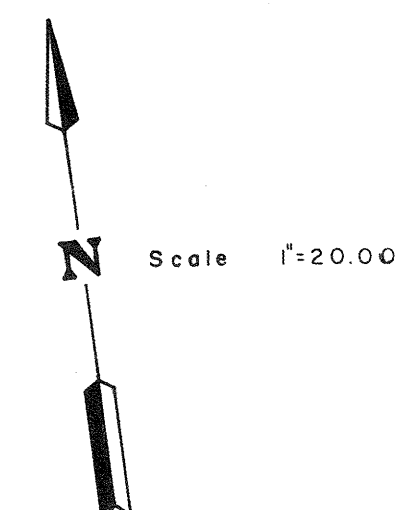
DATE SUBMITTED: 9/2/86

BY: Mark Goodwin

# TOPOGRAPHICAL SURVEY with GRADING & DRAINAGE PLAN



LEGAL DESCRIPTION  
TRACT D, BLOCK 12,  
EAST CENTRAL  
BUSINESS ADDITION



## OFF-SITE CONTRIBUTING WATER SHED

The contributing water shed is the remainder of Block 12 to the East, a maximum area of 0.57 acres.

The maximum developed (as if the remainder of the block is paved):

$$Q_{100} = (0.95)(4.7)(0.57) = 2.55 \text{ CFS PEAK}$$

$$Q_{10} = (0.657)(2.55) = 1.68 \text{ CFS}$$

Drainage South of Block 12 has a tendency to run South by Southwest and ultimately in the ditch shown.

Runoff from this site will be dissipated before any significant amount arrives from upstream, thus downstream flooding conditions will not be affected adversely.

## SITE DATA CALCULATIONS

AREA OF SITE	0.628 AC.
SLOPE	1.73 %
SOILS GROUP	B
DEVELOPED COVERAGE	38.38 %
MODIFIED "C" FACTOR	0.40
100 - YEAR RAINFALL	2.45"
TIME OF CONCENTRATION	10 MINUTES
INTENSITY	4.7 IN/HR

## UNDEVELOPED SITE RUNOFF

$$Q_{100} = (0.40)(4.7)(0.628) = 1.18 \text{ CFS PEAK}$$

$$Q_{10} = (0.657)(1.18) = 0.78 \text{ CFS}$$

## DEVELOPED SITE RUNOFF

### BUILDING:

$$Q_{100} = (0.90)(4.7)(0.193) = 0.816 \text{ CFS PEAK}$$

$$Q_{10} = (0.657)(0.816) = 0.536 \text{ CFS}$$

### GRAVEL (REMAINDER OF SITE):

$$Q_{100} = (0.40)(4.7)(0.435) = 0.818 \text{ CFS PEAK}$$

$$Q_{10} = (0.657)(0.818) = 0.54 \text{ CFS}$$

### TOTAL:

$$Q_{100} = 1.64 \text{ CFS PEAK}$$

$$Q_{10} = 1.08 \text{ CFS}$$

## OFF-SITE CONTRIBUTORY RUNOFF AND DISPOSAL

- RUNOFF FROM THIS SITE WILL BE DISPOSED OF BEFORE ANY SIGNIFICANT UPSTREAM RUNOFF APPEARS
- DEVELOPMENT OF THIS SITE WILL NOT SIGNIFICANTLY ALTER EXISTING RUNOFF QUANTITIES OR OTHERWISE EFFECT DOWNSTREAM CONDITIONS
- DISPOSAL IS TO BE FREE INTO ACOMA ROAD, S.E. WHICH HAS EXISTING CURB AND GUTTERS
- THERE ARE NO EXISTING DRAINAGE STRUCTURES IN THE AREA

## NOTES

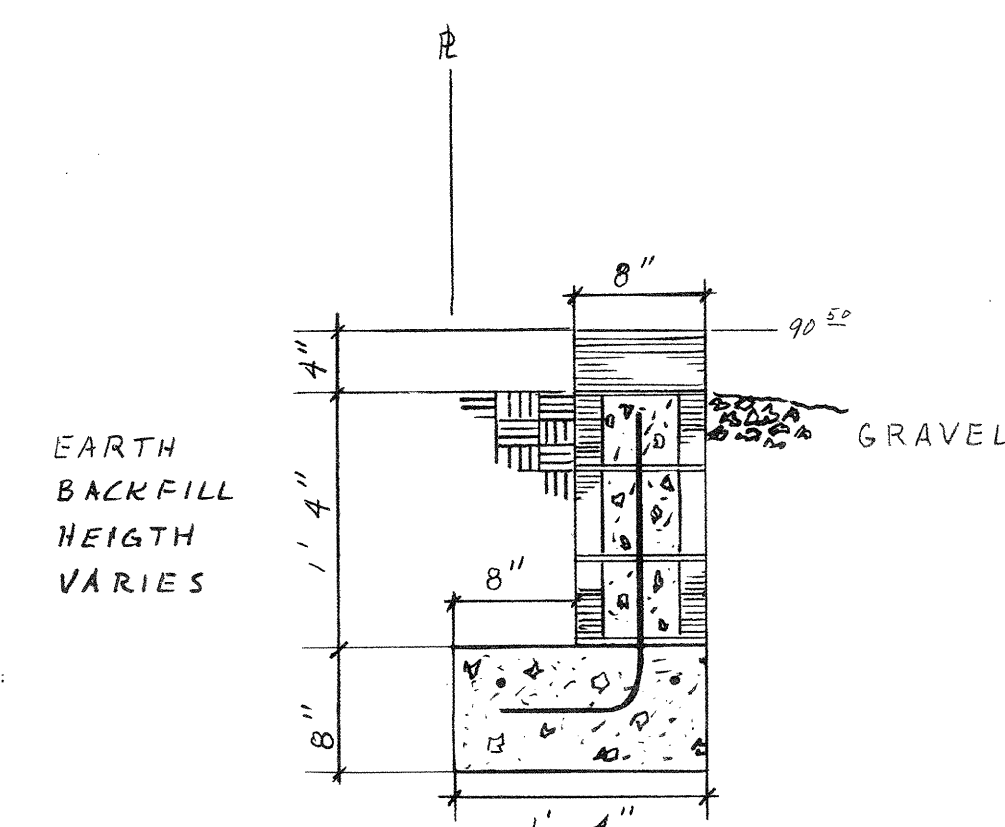
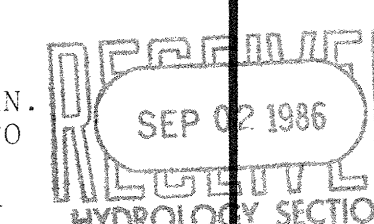
BENCHMARK IS ACS 5-L21R, A STANDARD ACS BRASS TABLET STAMPED "5-L21 RESET 1974", CEMENTED IN A DRILL HOLE FLUSH WITH THE TOP OF A CONCRETE CURB LOCATED AT THE INTERSECTION OF CENTRAL AVENUE AND EUBANK BOULEVARD WITH AN ELEVATION OF 5466.535 FEET.

TEMPORARY BENCHMARK IS PAINT SPOT ON TOP OF CURB AT NORTHEAST CORNER OF PROPERTY WITH AN ELEVATION OF 5,493.00 FEET.

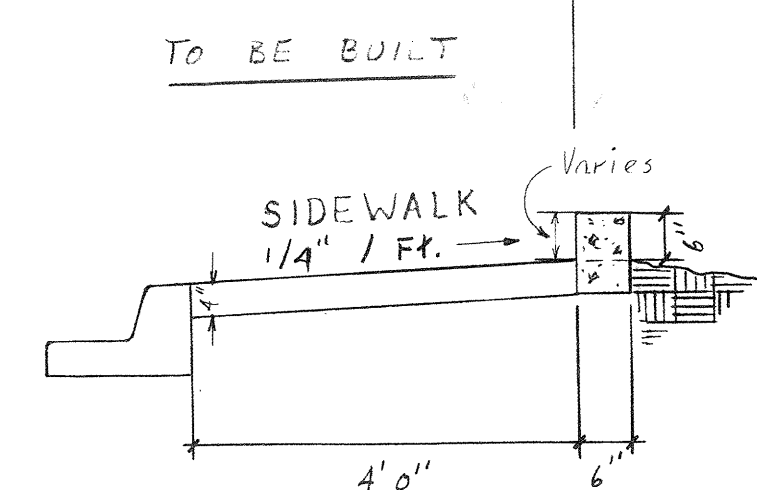
PROPOSED CONTOURS AND SPOT ELEVATIONS ARE TO FINISH SURFACES.

CONTRACTOR SHALL DETERMINE APPROPRIATE SUBGRADES.

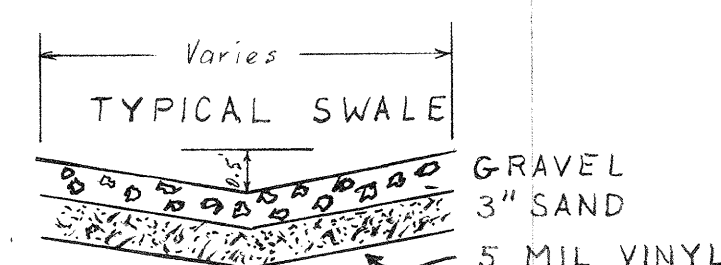
CONTRACTOR IS RESPONSIBLE FOR EROSION CONTROL PLAN. THIS PLAN WILL INCLUDE ABATEMENT OF SEDIMENT UP TO ABUTTING STREET RIGHT-OF-WAY AND PRIVATE LOTS BY CONSTRUCTION OF RETAINING WALL (DETAIL A-A) PRIOR TO EARTH WORK.



DETAIL A-A



DETAIL B-B



DETAIL C-C



UPSTREAM CONTRIBUTORY AREA

## LEGEND

CONTOUR INTERVAL - ONE FOOT

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- REVISED PROPOSED SPOT ELEVATION (Top of Curb & Flow Line)
- CONCRETE SURFACE

REVISED 9/2/86  
ADJACENT  
PARKING LOT



BOWLIN'S, INC.

GRADING AND DRAINAGE PLAN



D. MARK GOODWIN & ASSOCIATES, P.A.  
CONSULTING ENGINEERS

P.O. BOX 21307  
ALBUQUERQUE, NEW MEXICO 87154  
(505) 294-9961

Designed: n/a	Drawn: n/a	Checked: n/a	Sheet 1 of 1
Scale: 1"=20'	Date:		