

# Drainage Report

Site Location: The Bugg property, (Lot 11-A, Block 6 of the Traction Park and City Electric Addition), is located north of New York Avenue at the intersection with Central Avenue.

Methodology: For this site, Section 22.2 of the City of Albuquerque DPM was followed to calculate the design volume. The charts and formulas in Part A were followed using the 100 year frequency 6-hour rainfall volume as the design storm. The site is located in Zone 1 as determined from Table A-1. The total storm volume was calculated as per section A.5. Peak discharge was calculated as per section A.6.

Existing Conditions: The property consists of two buildings, a swimming pool, a paved parking lot and a vacated alley. Basin 101 includes the alley and runoff from two adjacent buildings. The alley has relatively no slope and the runoff causes ponding. There is an existing 18" RCP storm drain located along the center of the alley. Basin 102 is a completely impervious area with an inlet drain located east of the swimming pool.

## EXISTING CONDITIONS

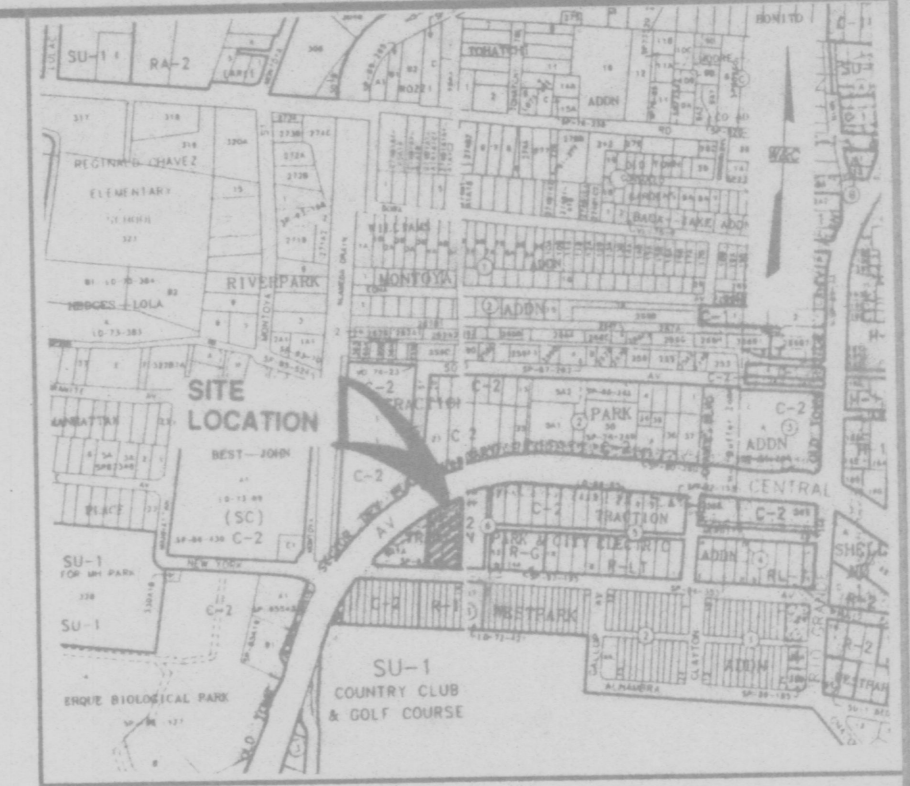
Basin	Area (ac)	Treatment				V <sub>500</sub> (ac-ft)	Q <sub>5</sub> (cfs)
		% A	% B	% C	% D		
101	0.147	0	0	66	34	0.02	0.50
102	0.71	0	0	0	100	0.12	3.10

Proposed Conditions: The replat of the Bugg Property will extend 5 feet past the eastern boundary of Basin 102 into the vacated alley. This area will be an extension of the existing paved parking area and the runoff will drain through the existing inlet located east of the pool area. The remaining 15 feet of vacated alley, located in Basin 101, will become an asphalt driveway for the residence to the east. Runoff from Basin 101 will drain through two 18" inline drains located 45' apart along the center of the driveway. The flow from the drains will enter the existing 18" RCP located in the alley.

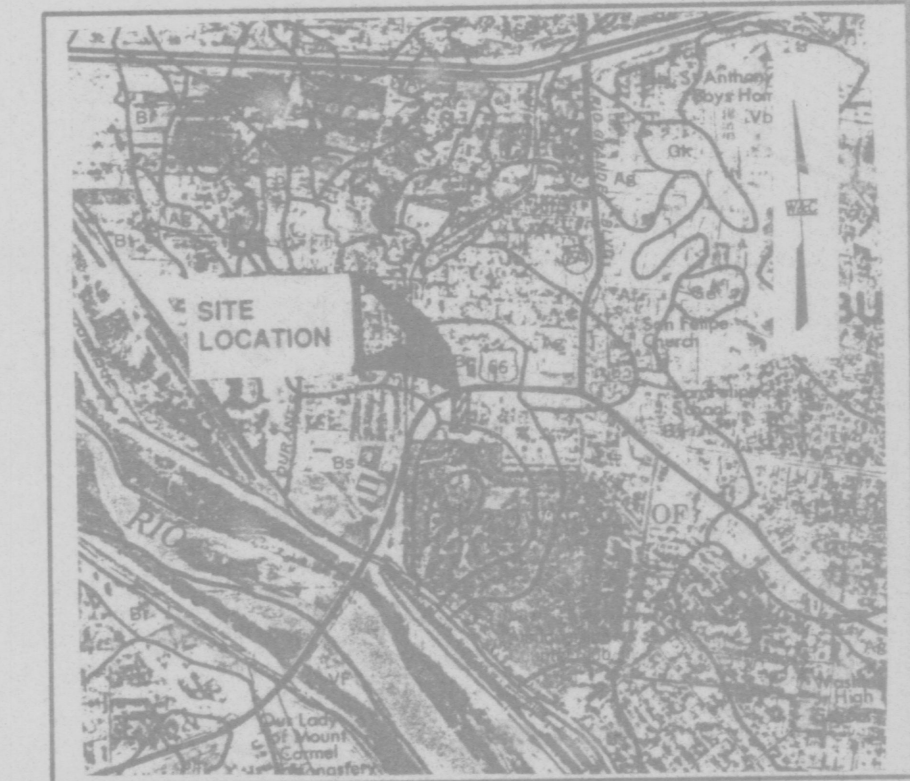
## DEVELOPED CONDITIONS

Basin	Area (ac)	Treatment				V <sub>500</sub> (ac-ft)	Q <sub>5</sub> (cfs)
		% A	% B	% C	% D		
101	0.134	0	0	32	68	0.02	0.52
102	0.72	0	0	0	100	0.12	3.15

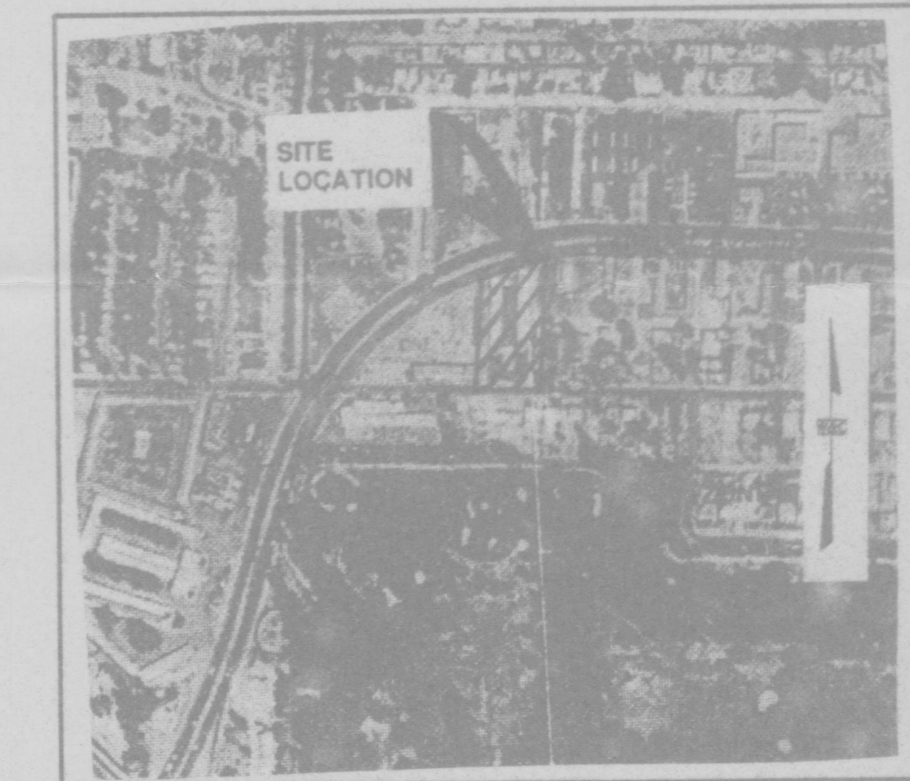
Conclusion: The expansion of the parking lot in Basin 102 will increase the runoff to the existing drain by 0.05 cfs. The improvements for Basin 101 will include paving a driveway and installing two 18" inline drains. The flow from the drains will join the 18" RCP at an existing manhole located in the alley. The flow entering the storm drain will be 0.52 cfs. This will flow into the existing 21" storm drain located in New York Avenue. The proposed flow will pond at the drains and enter the 21" storm drain as its capacity allows.



LOCATION MAP  
ZONE ATLAS MAP NO. J-12-Z



SOILS MAP  
REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY SHEET NO. 30



FLOOD INSURANCE MAP  
REFERENCE: FLOOD INSURANCE STUDY PANEL 28

## LEGAL DESCRIPTION

LOT 11-A BLOCK 6,  
TRACTION PARK AND CITY ELECTRIC ADDITION

## BENCH MARK

AN ACS 3 1/4" ALUMINUM CAP STAMPED "13-J12, 1989" RIVETTED TO A PIPE 0.2' ABOVE THE GROUND, LOCATED 32.8' NORTHEAST FROM BACK OF CURB OF TRAFFIC ISLAND ON NEW YORK AVENUE AT THE INTERSECTION WITH CENTRAL AVENUE.

**WILSON & COMPANY**

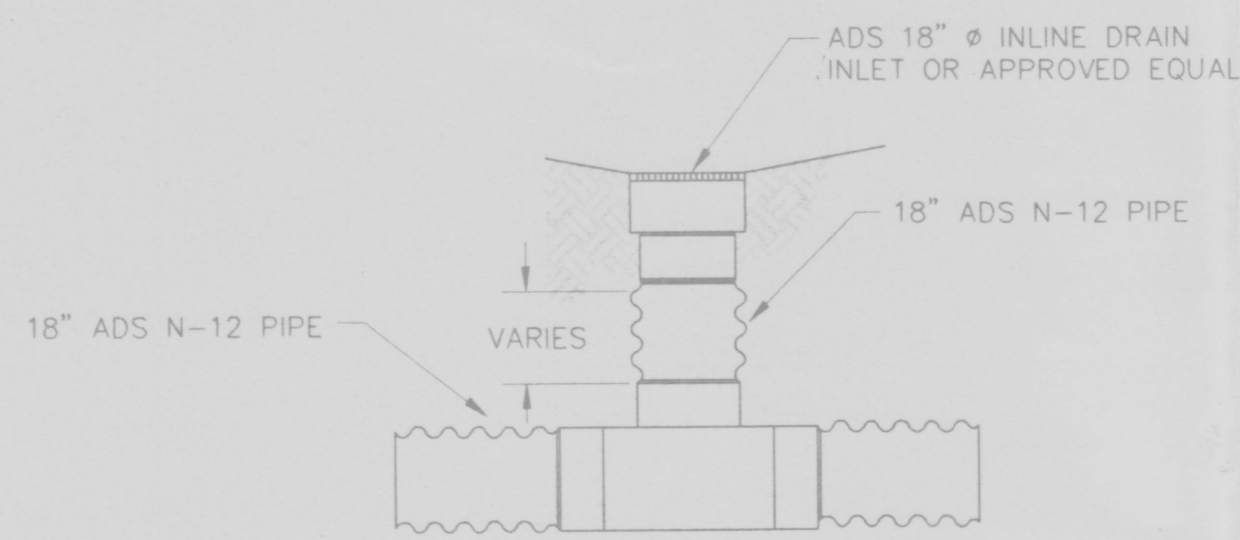
4775 INDIAN SCHOOL ROAD N.E.  
SUITE 200  
ALBUQUERQUE, NEW MEXICO 87110  
(505) 254-4000

RECEIVED  
AUG 25 1997  
HYDROLOGY SECTION

CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING GROUP

## BUGG PROPERTY GRADING & DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. XXXX.XX	Zone Map No. J-12-Z	Sheet 01	Of 01

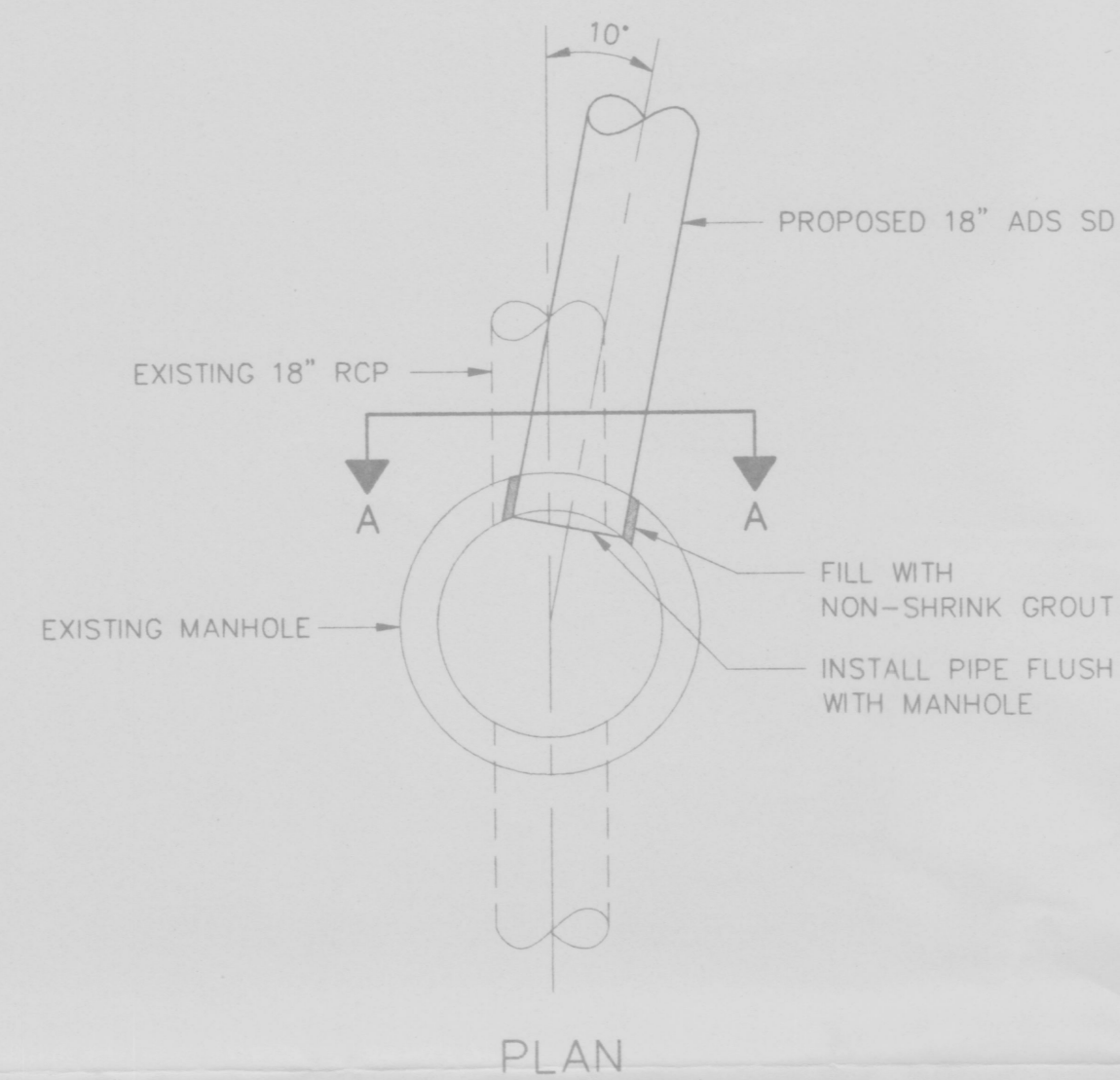


INLINE DRAIN DETAIL

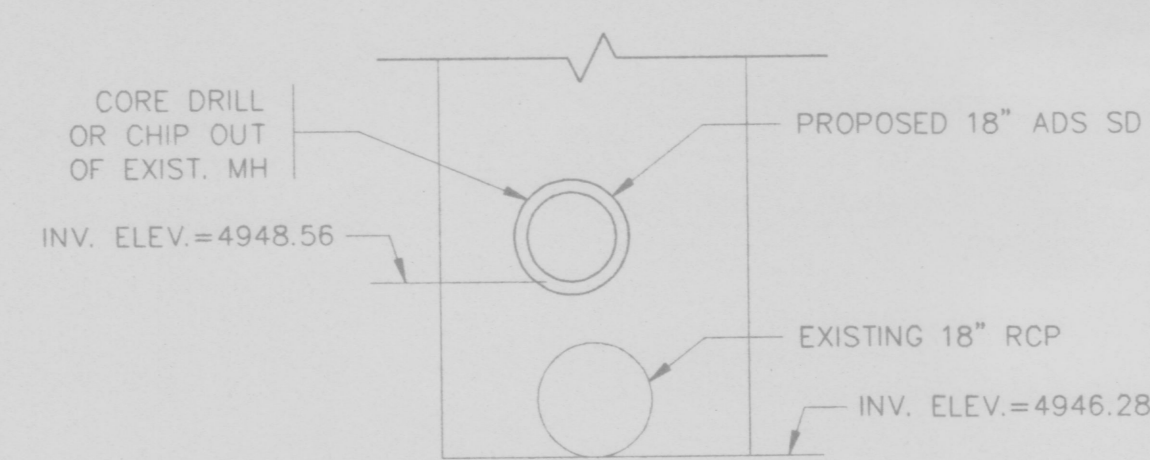
N.T.S.

## ASPHALT SURFACING DETAIL

N.T.S.



PLAN



SECTION A-A

MANHOLE CONNECTION DETAIL

N.T.S.

A.C.S. ALUMINUM CAP  
STAMPED "13-J12"  
X = 372,270.97  
Y = 1,489,903.68  
NEW MEXICO STATE PLANE  
COORDINATE SYSTEM (GRID)  
CENTRAL ZONE  
DELTA ALPHA = (-)00°14'44"  
GRID TO GRID = 0.99968183  
N.A.D. 1927

## DRAINAGE LEGEND

BASIN 101	BASIN DESIGNATION
---	BASIN BOUNDARY
• 52.25	PROPOSED SPOT ELEVATION
---	PROPOSED 3" ASPHALT PAVEMENT
SD	STORM SEWER LINE
SAS	SANITARY SEWER LINE
W	WATERLINE



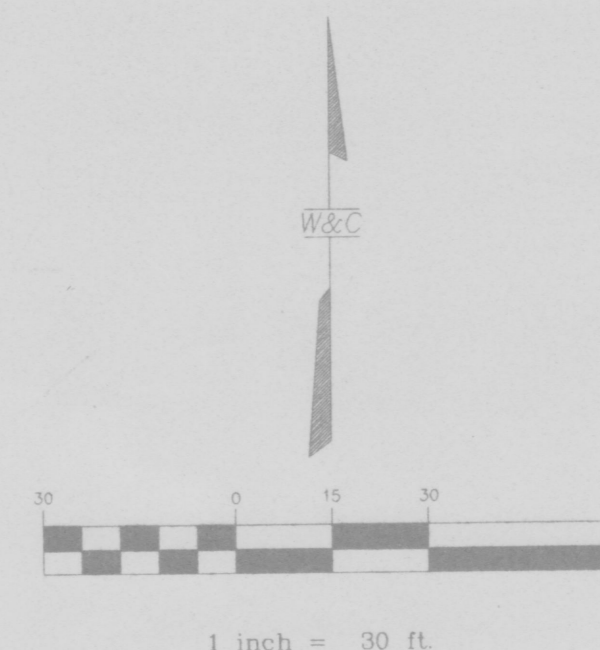
INSTALL SOLID WALL  
ALONG NORTH PROPERTY LINE  
WITH MINOR GRADING SLOPED  
AWAY FROM WALL

INSTALL ADS 18" Ø INLINE DRAIN  
OR APPROVED EQUAL  
SEE DETAIL THIS SHEET  
TOG = 4951.50  
INV. ELEV. = 4948.76  
INSTALL 65 LF  
18" ADS N-12 PIPE

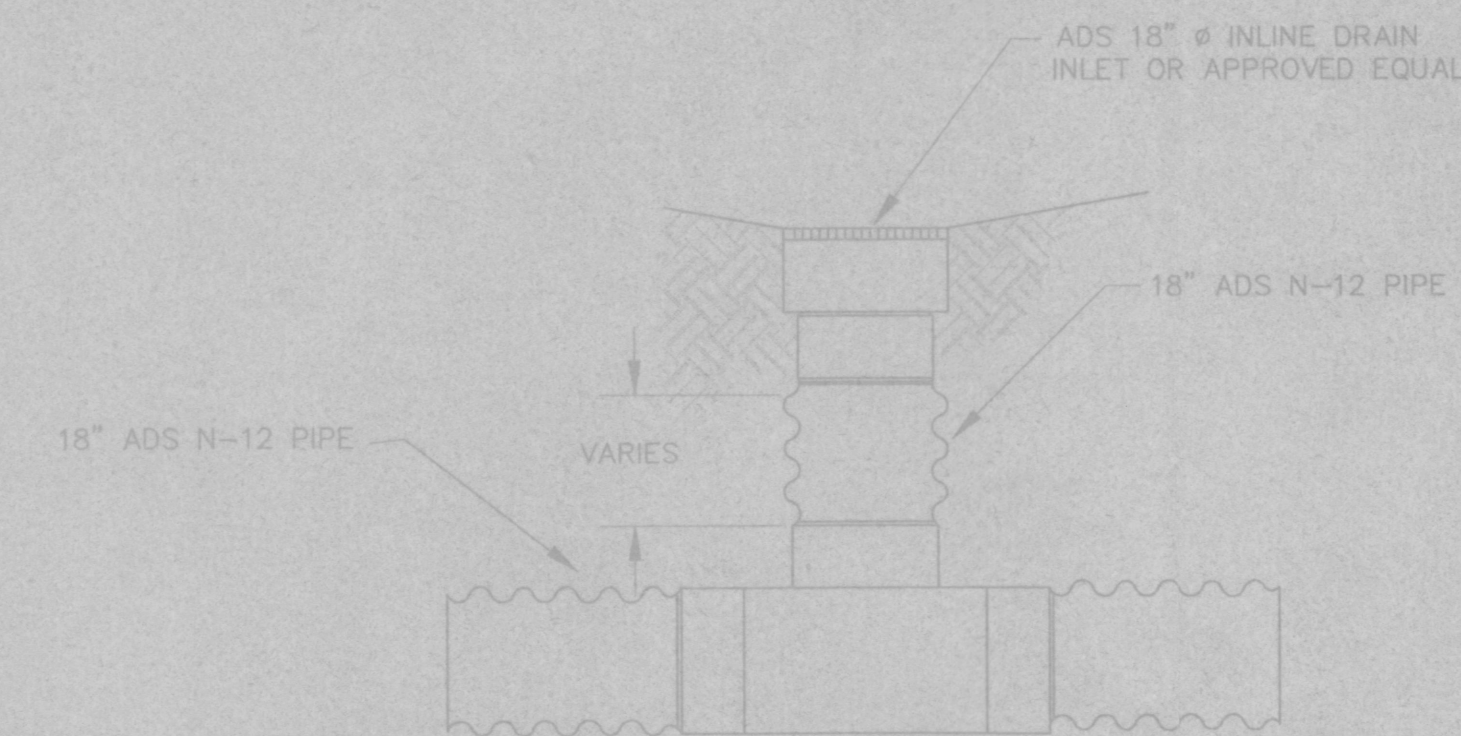
INSTALL ADS 18" Ø INLINE DRAIN  
OR APPROVED EQUAL  
SEE DETAIL THIS SHEET  
TOG = 4951.50  
INV. ELEV. = 4948.62  
INSTALL 30 LF  
18" ADS N-12 PIPE

INSTALL ASPHALT DRIVEWAY  
SEE DETAIL THIS SHEET

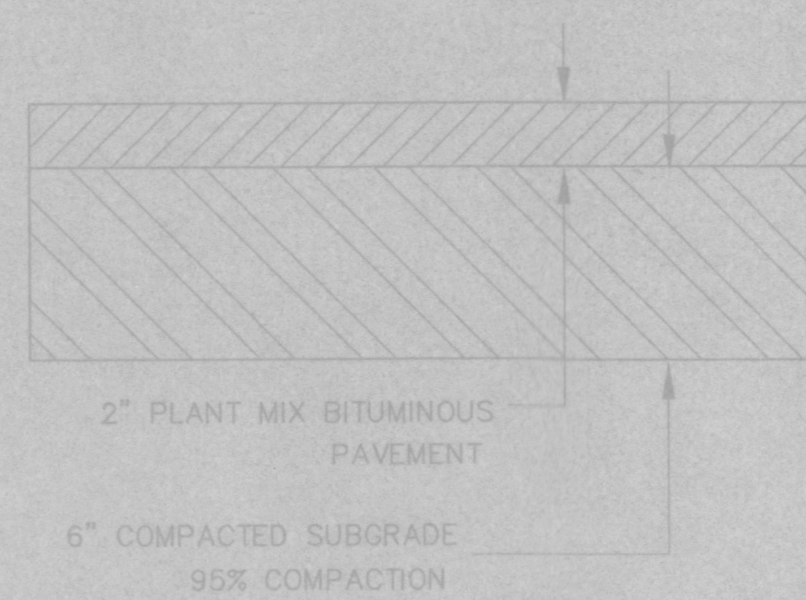
CONNECT TO EXISTING MANHOLE  
INV. ELEV. = 4946.28  
SEE MANHOLE CONNECTION  
DETAIL THIS SHEET







INLINE DRAIN DETAIL  
N.T.S.



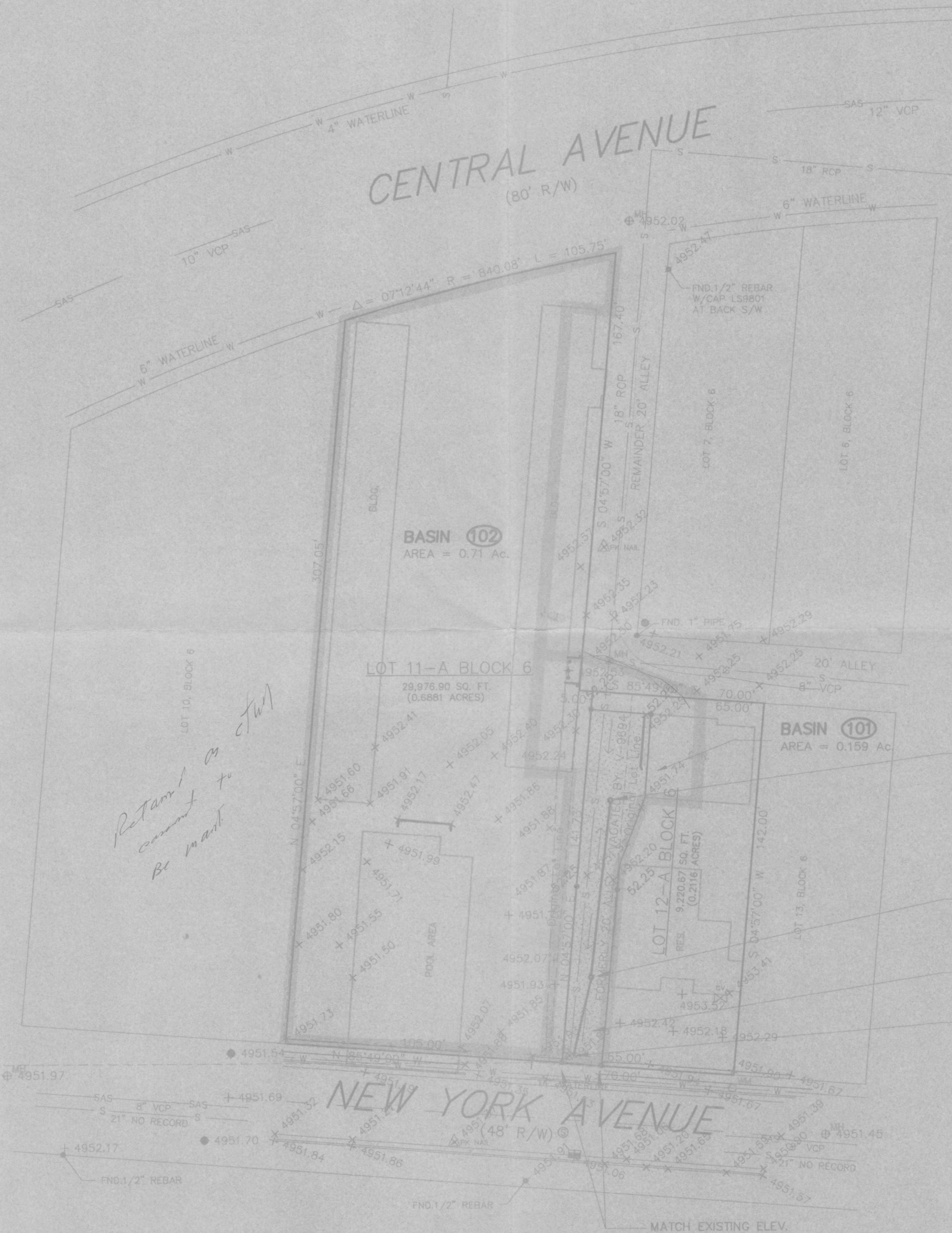
ASPHALT SURFACING DETAIL  
N.T.S.

\*A.C.S. ALUMINUM CAP  
STAMPED "13-J12"  
X = 372,270.97  
Y = 1,496,903.65  
NEW MEXICO STATE PLANE  
COORDINATE SYSTEM (GRID)  
CENTRAL ZONE  
DELTA ALPHA = (-10034.44")  
GRID TO GRID = 0.99998163  
N.A.D. 1977

#### DRAINAGE LEGEND

**BASIN (101)**

- BASIN DESIGNATION
- BASIN BOUNDARY
- PROPOSED SPOT ELEVATION
- PROPOSED 3" ASPHALT PAVEMENT
- S — S STORM SEWER LINE
- SAS — SAS SANITARY SEWER LINE
- W — W WATERLINE

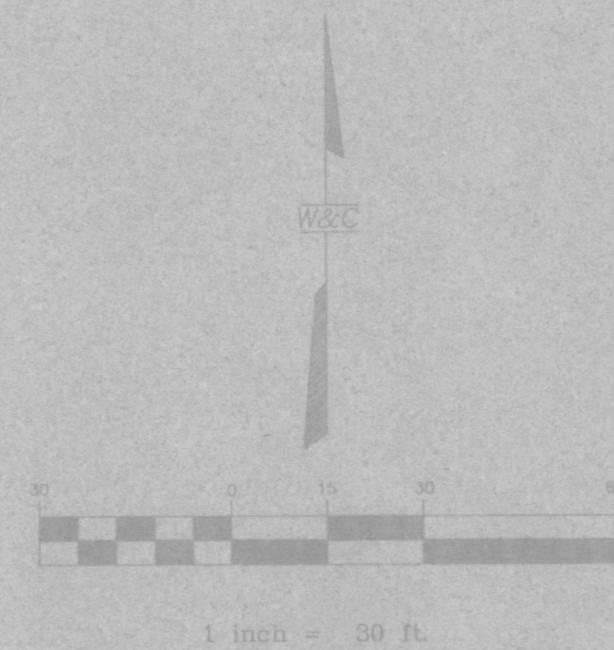


INSTALL ADS 18" & INLINE DRAIN  
OR APPROVED EQUAL  
SEE DETAIL THIS SHEET  
TOG = 4951.50  
INSTALL 65 LF  
18" ADS N-12 PIPE

INSTALL ADS 18" & INLINE DRAIN  
OR APPROVED EQUAL  
SEE DETAIL THIS SHEET  
TOG = 4951.50  
INSTALL 30 LF  
18" ADS N-12 PIPE

INSTALL ASPHALT DRIVEWAY  
SEE DETAIL THIS SHEET

CONNECT TO EXISTING MANHOLE  
INV. ELEV. = 4947.90



#### DRAINAGE REPORT

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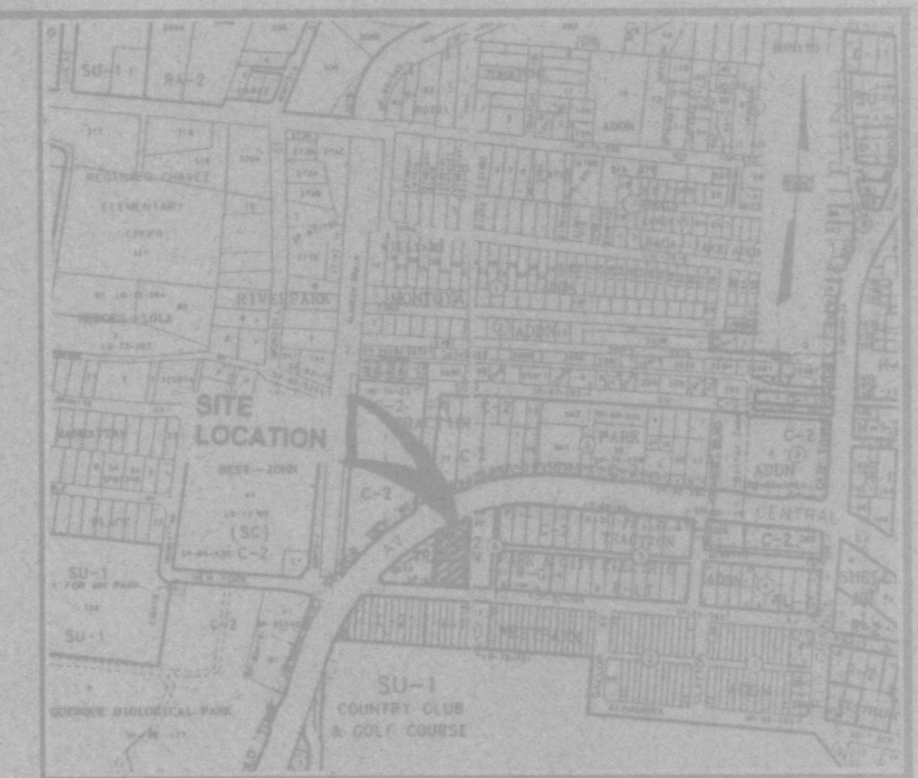
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102	0.71	0	0	0	100	0.12	3.10

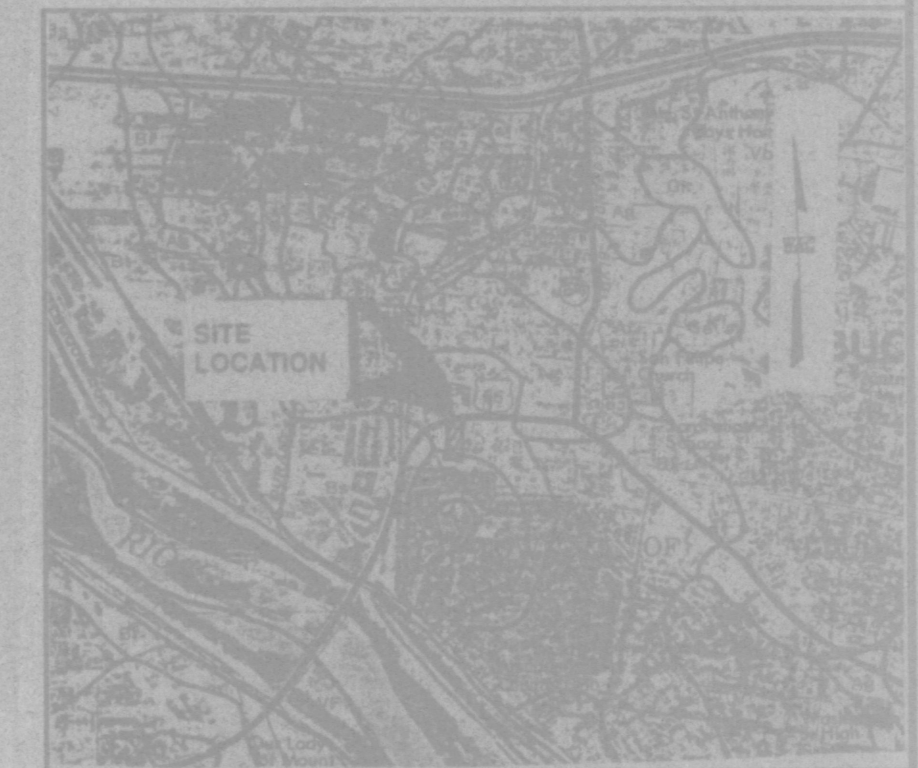
#### DEVELOPED CONDITIONS

Basin	Area (ac)	% A	% B	% C	% D	V <sub>60</sub> (ac-ft)	Q <sub>p</sub> (cfs)
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LOCATION MAP  
ZONE ATLAS MAP NO. J-12-Z



SOILS MAP  
REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY  
SHEET NO. 35



FLOOD INSURANCE MAP  
REFERENCE: FLOOD INSURANCE STUDY  
PANEL 28

#### LEGAL DESCRIPTION

LOT 11-A BLOCK 6,  
TRACTION PARK AND CITY ELECTRIC ADDITION  
**BENCH MARK**

AN ACS 3 1/4" ALUMINUM CAP STAMPED "13-J12, 1989" RIVETTED TO A PIPE 0.2' ABOVE THE GROUND, LOCATED 32.8' NORTHEAST FROM BACK OF CURB OF TRAFFIC ISLAND ON NEW YORK AVENUE AT THE INTERSECTION WITH CENTRAL AVENUE.

<b>WILSON &amp; COMPANY</b> 4775 INDIAN SCHOOL ROAD N.E. SUITE 200 ALBUQUERQUE, NEW MEXICO 87110 (505) 254-4000				DATE JUNE 1997
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP		DESIGN BMS		DRAWN BMS
<b>BUGG PROPERTY GRADING &amp; DRAINAGE PLAN</b>				
Design Review Committee	City Engineer Approval	Ms./Day/yr.	Ms./Day/yr.	
City Project No.	Zone Map No.	Sheet	Of	
XXXX.XX	J-12-Z	01	01	