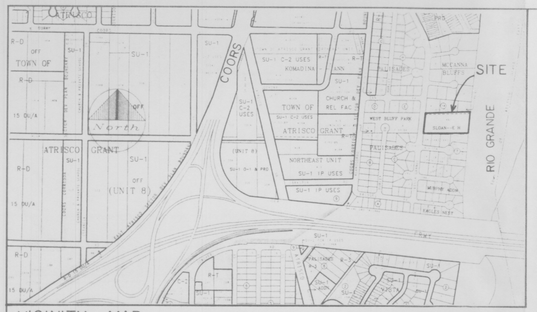


VICINITY MAP
SCALE: 1" = 750'

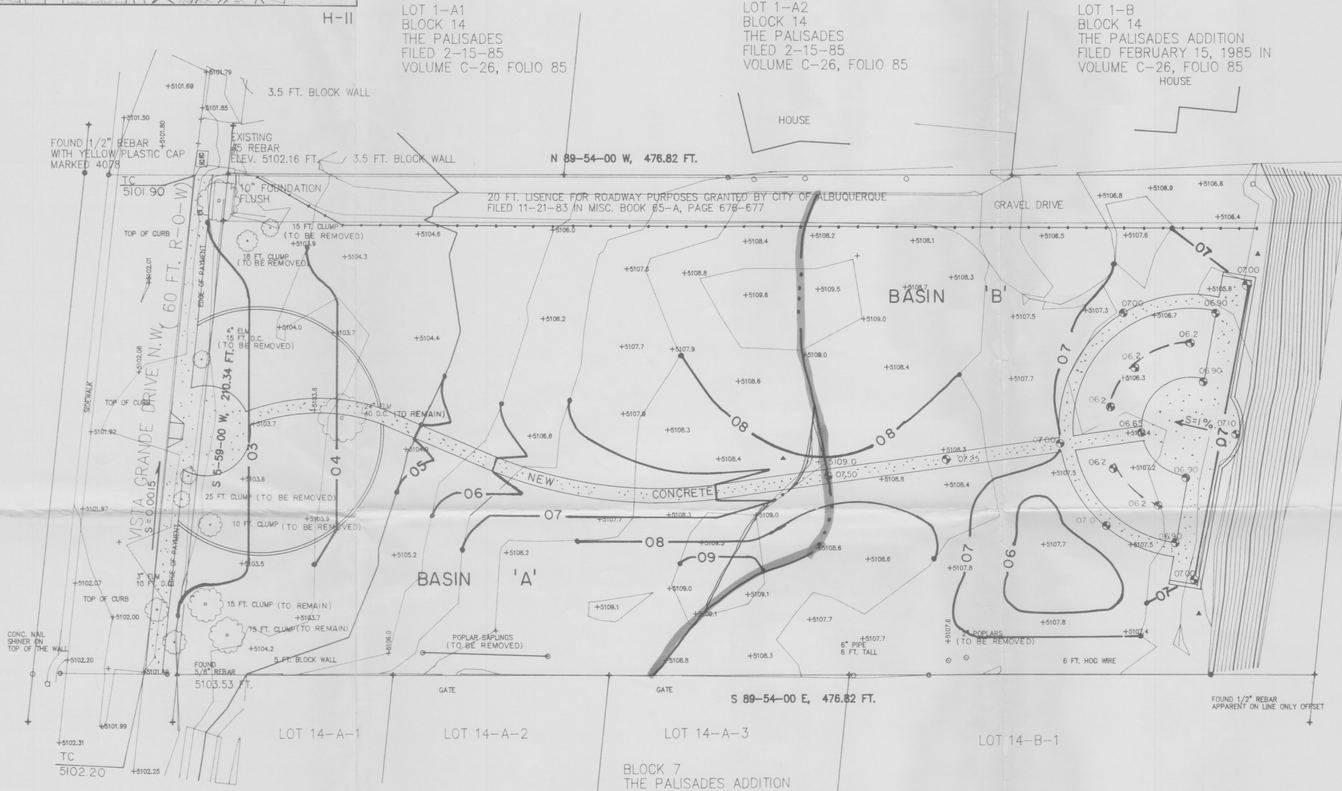
H-11

LEGAL DESCRIPTION

TRACT A62
SLOAN - EH

LEGEND

EXISTING CONTOUR
EXISTING FENCE
EXISTING SPOT ELEVATION
NEW BASIN BOUNDARY
EXISTING BASIN BOUNDARY
PROPOSED SPOT ELEVATION
PROPOSED CONTOUR



CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SERVICE 260-1990 FOR LOCATION OF EXISTING UTILITIES.

2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

6. THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.

EROSION CONTROL MEASURES

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.

2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.

3. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.

DRAINAGE PLAN

The following items concerning the West Bluffs Park Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

As shown by the Vicinity Map, the site is located between Vista Grande Drive N.W. and the Rio Grande, south of Ian Avenue N.W., and is not currently developed. Panel 21 of 50 of the National Flood Insurance Program Flood Insurance Rate Maps (F.I.R.M.) for the City of Albuquerque, New Mexico, dated October 14, 1983, shows the site does not lie in a designated flood hazard zone. The site is characterized by two basins, A & B. Basin A drains west toward Vista Grande Drive N.W., and Basin B drains east toward the Rio Grande.

The site improvements consist of the construction of new concrete sidewalks and overlook area adjacent to the river. Grading of the site is minor, however, natiye grasses will be seeded to replace the grasses removed to construct the sidewalks and overlook. The Grading Plan shows: 1) existing and proposed grades indicated by contours at 1'0" intervals and spot elevations, 2) continuity between existing and proposed grades, and 3) the limit and character of the proposed improvements. The basin boundary will shift slightly upon completion of the project, however, the storm runoff will continue to be directed in the historical pattern established. This site lies in an infill area. No offsite flows enter the site from the south because an existing CMU wall along the property line contains potential flows from the adjacent properties. No offsite flows enter the site from the north because it is topographically lower.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Procedure for 40-acre and Smaller Basins, as set forth in the Revision of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated January, 1993, has been used to quantify the peak rate of discharge and volume of runoff generated.

CALCULATIONS

Site Characteristics

1. Precipitation Zone = 1
2. $P_{6,100} = P_{360}$ = 2.20 in.
3. Total Area (A_T) = 2.1 acres
4. Existing Land Treatment

Basin "A" - A_{TA} = 1.0 Acre

Treatment	Area (sf/ac)	%
B	45,250/1.0	47.6

Basin "B" - A_{TB} = 1.1 Acre

Treatment	Area (sf/ac)	%
B	45,350/1.1	52.4

5. Developed Land Treatment

Basin "A" - A_{TA} = 1.1 Acre

Treatment	Area (sf/ac)	%
B	44,250/1.0	47.6
D	2,350/0.1	4.8

Basin "B" - A_{TB} = 1.0 Acre

Treatment	Area (sf/ac)	%
B	39,850/0.9	42.9
D	4,150/0.1	4.7

Existing Condition

A. Basin A

1. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$
$E_W = (0.67(1.0))/1.0 = 0.67$
$V_{100} = (E_W/12)A_T$
$V_{100} = (0.67/12)1.0 = 0.056$ ac.ft. = 2,430 cf

2. Peak Discharge

$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
$Q_p = Q_{100} = 2.03(1.0) = \underline{2.0}$ cfs

B. Basin B

1. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$
$E_W = (0.67(1.1))/1.1 = 0.67$
$V_{100} = (E_W/12)A_T$
$V_{100} = (0.67/12)1.1 = 0.061$ ac.ft. = 2,680 cf

2. Peak Discharge

$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
$Q_p = Q_{100} = 2.03(1.1) = \underline{2.2}$ cfs

Developed Condition

A. Basin A

1. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$
$E_W = (0.67(1.0) + 1.97(0.1))/1.1 = 0.79$
$V_{100} = (E_W/12)A_T$
$V_{100} = (0.79/12)1.1 = 0.072$ ac.ft. = 3150 cf

2. Peak Discharge

$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
$Q_p = Q_{100} = 2.03(1.0) + 4.37(0.1) = \underline{2.5}$ cfs

B. Basin B

1. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$
$E_W = (0.67(0.9) + 1.97(0.1))/1.0 = 0.80$
$V_{100} = (E_W/12)A_T$
$V_{100} = (0.80/12)1.1 = 0.067$ ac.ft. = $\underline{2900}$ cf

2. Peak Discharge

$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
$Q_p = Q_{100} = 2.03(0.9) + 4.37(0.1) = \underline{2.3}$ cfs

Comparison

A. Basin "A"
1. ΔV_{100} = 3150 - 2430 = 720 cf (increase)
2. ΔQ_{100} = 2.5 - 2.0 = 0.5 cfs (increase)

B. Basin "B"
1. ΔV_{100} = 2900 - 2680 = 220 cf (increase)
2. ΔQ_{100} = 2.3 - 2.2 = 0.1 cfs (increase)

C. Site
1. ΔV_{100} = 3150 + 2900 - 2430 - 2680 = 940 cf (increase)
2. ΔQ_{100} = 2.5 + 2.3 - 2.0 - 2.2 = 0.6 cfs (increase)

NORTH 0 15' 30' 60'
SCALE: 1"=30'-0"

Campbell Okuma Perkins Associates, Inc.
Landscape Architecture and Site Planning
418 Central S.E.
Albuquerque, NM 87102
(505) 242-9928
1338 Pachaco No. 5
Santa Fe, NM 87501
(505) 982-8399

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY — DATE:
INSPECTORS APPROVAL — DATE:
FIELD VERIFICATION BY — DATE:
DRAWING CORRECTED BY — DATE:
MICRO-FILM INFORMATION
RECORDED BY — DATE:
NO.

BENCH MARK
16 - H-11; ACS ALUMINUM DISK SET IN CURB AT N.E. QUADRANT OF THE INTERSECTION OF ALAMOGORDO NW AND IAN NW. ELEV. 5099.57

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
—	C.O.A.	

ENGINEER'S SEAL
JEFFREY G. MORTENSEN NEW MEXICO 9547 REGISTERED PROFESSIONAL ENGINEER
05-12-94

NO.	REVISIONS/REMARKS	BY	DATE
	DESIGNED BY: J.G.M.		DATE: 05/94
	DRAWN BY: COPA/JMA		DATE: 05/94
	CHECKED BY: J.G.M.		DATE: 05/94

JMA 94018
JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS & SURVEYORS (505)345-4250

CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES DEPARTMENT
DESIGN AND DEVELOPMENT DIVISION

TITLE: WESTBLUFF PARK
GRADING & DRAINAGE PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER		
TRANSPORTATION			WASTE WATER		
HYDROLOGY					
PARKS/GEN. SVC.					

PROJECT NO. 4531.90 | MAP NO. H-11-Z | SHEET OF