



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 28, 2003

Chris Perea, PE
Wilson & Company
4900 Lang Ave NE
Albuquerque, NM 87109

Re: Tract N-2B-1, Seven Bar Ranch Drainage Plan
Engineer's Stamp dated 3-26-03 (A13/D18)

Dear Mr. Perea,

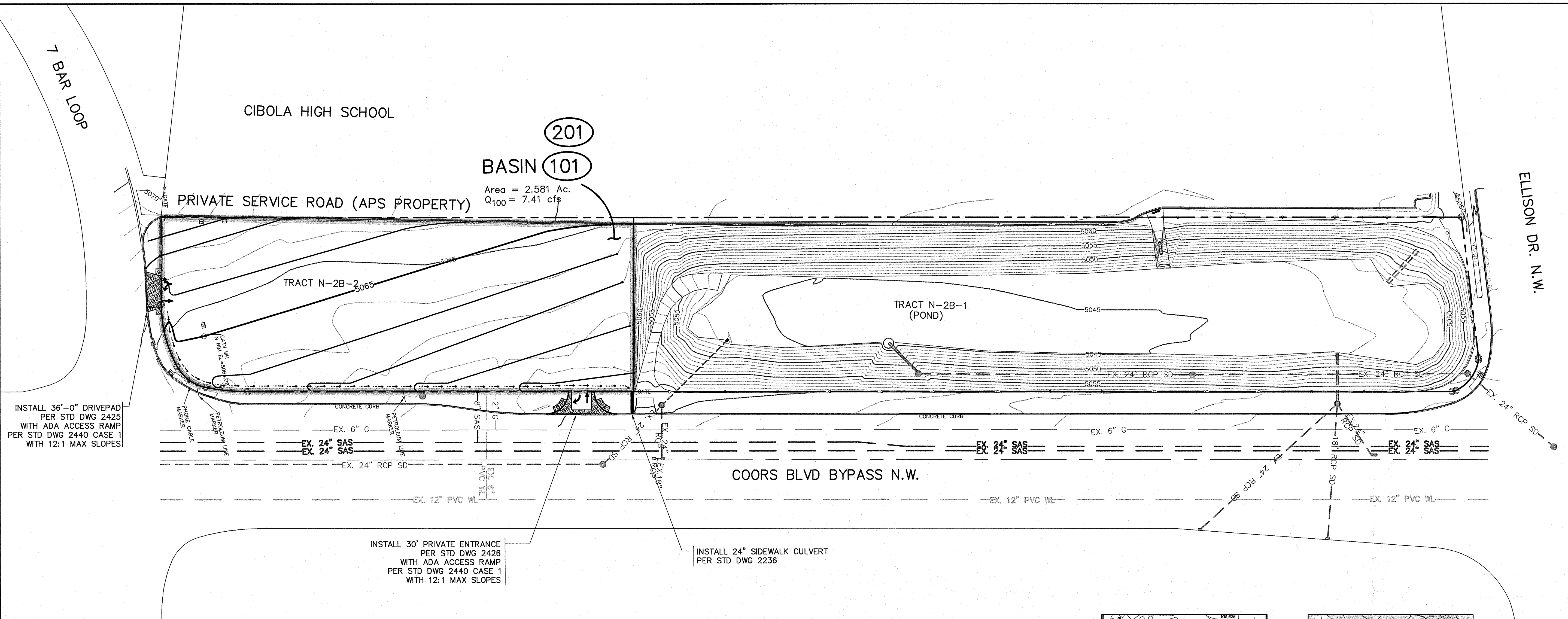
Based upon the information provided in your submittal dated 3-26-03, the above referenced plan is approved for Preliminary Plat action by the DRB.

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



Site Location: Tract N-2B-2 is located at the northwest corner of the 7-Bar Loop and Coors By-Pass intersection. Proposed development is for re-grading of the site and zone changing from R-1 to C-1 for future sale purposes.

Methodology: Section 22.2 of City of Albuquerque DMP was followed to calculate the design volume. The charts and formulas in Parts A were followed using the 100-year frequency 24-hour rainfall 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. The peak discharge was calculated as per section A.6.

Existing Conditions: The site consists of only one basin, Basin 101, which encompasses the entire site. The site is primarily a vacant lot with native shrubbery. Currently, the drainage from this basin sheet flows in a northeast direction toward Coors By-Pass, which then drains into an existing detention pond located on Tract N-2B-1.

Existing volumetric runoff and peak discharge quantities are as shown below:

Table 1 - Existing Conditions						
Basin	Area (ac)	Treatment			V ₁₀₀ (ac-ft)	Q _p (cfs)
		A (%)	B (%)	C (%)		
101	2.58	0	0	100	0.213	7.41
Total	2.58				0.213	7.41

Table 1 - provides a breakdown of existing volumetric runoff and peak discharge of the site.

Proposed Conditions: The proposed basin, Basin 101, remained the same as the existing basin. Re-grading improvements to the site did not change land treatments from existing conditions. Drainage will sheet flow towards the northeast corner of the site into Coors By-Pass via a proposed concrete sidewalk culvert.

Proposed volumetric runoff and peak discharge quantities are as shown below:

Table 2 - Proposed Conditions						
Basin	Area (ac)	Treatment			V ₁₀₀ (ac-ft)	Q _p (cfs)
		A (%)	B (%)	C (%)		
201	2.58	0	0	100	0.213	7.41
Total	2.58				0.213	7.41

Table 2 - provides a breakdown of proposed volumetric runoff and peak discharge of the site.

Due to these proposed improvements the total amount of runoff will not change.

Conclusion: All proposed runoff will be diverted to the northeast corner of the site through a 24" concrete sidewalk culvert and into Coors By-Pass. These flows will then drain into an existing detention pond located in Tract N-2B-1. This pond was designed to accept flows as per SAD 223 - Part 4.

GRADING NOTES

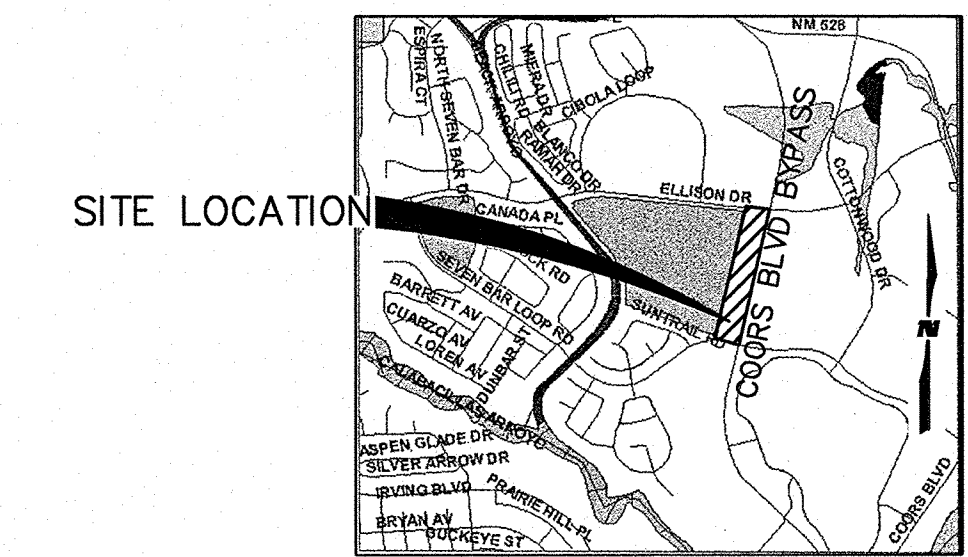
- ALL GRADING AND CONSTRUCTION UNDER THIS PLAN TO BE CONSTRUCTED IN ACCORDANCE WITH THE "CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", LATEST EDITION.
- CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY COSTS INCURRED FOR REPAIRS SHALL BE THE COST OF THE CONTRACTOR.
- PAVING/ROADWAY GRADES SHALL BE +.05 FT. FROM SHOWN PLAN ELEVATIONS.
- PADS SHALL NOT VARY FROM A TRUE HORIZONTAL PLANE BY MORE THAN +.01 FOOT AT ANY POINT. THIS TRUE PLANE SHALL NOT VARY FROM THE SHOWN PAD ELEVATION BY +.02 FOOT, UNLESS PERMITTED BY OWNER.
- CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS AND GRADING OPERATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS AND INSPECTION APPROVALS NECESSARY FOR THE CONSTRUCTION OF THESE FACILITIES AND ALL GRADING OPERATIONS.
- THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
- UNLESS OTHERWISE SHOWN, DRAINAGE SWALES SHALL HAVE A MINIMUM 1% SLOPE IN THE DIRECTION OF FLOW.
- ALL SCARIFYING, EXCAVATION, COMPACTION, AND REPLATTED SOILS WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS.
- ALL SITE CONCRETE SHALL HAVE EXPANSION JOINTS GREATER THAN 20' WITH CONTROL JOINTS NO GREATER THAN 10' UNLESS OTHERWISE NOTED IN THIS PLAN SET. CURB & GUTTER AND SIDEWALKS SHALL HAVE JOINTS PER COA STD SPECIFICATIONS.

LEGEND

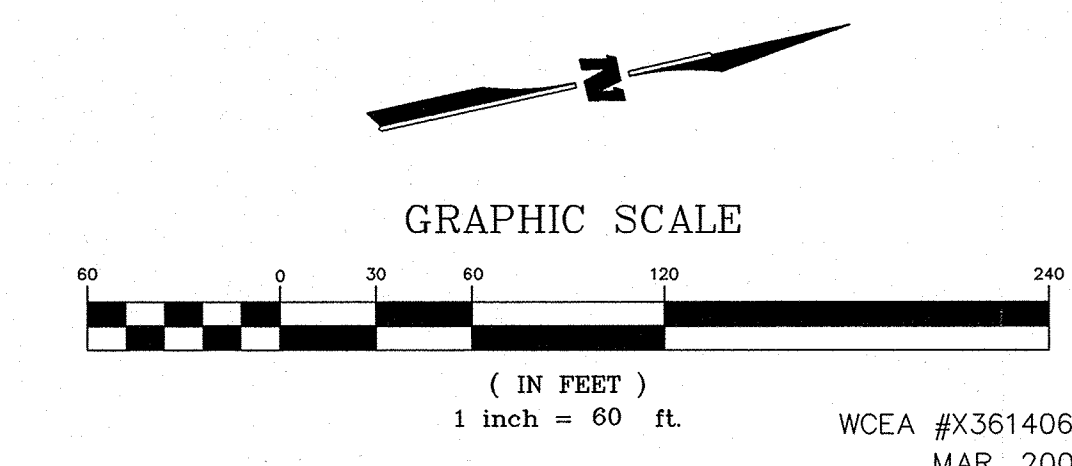
- PROPOSED BASIN BOUNDARY
- EXISTING BASIN BOUNDARY
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- PROPOSED FLOWLINE
- PROPOSED CONCRETE

LOCATION MAP
ZONE ATLAS MAP NO. A-13, B-13

SOILS MAP
REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY SHEET NO. 10



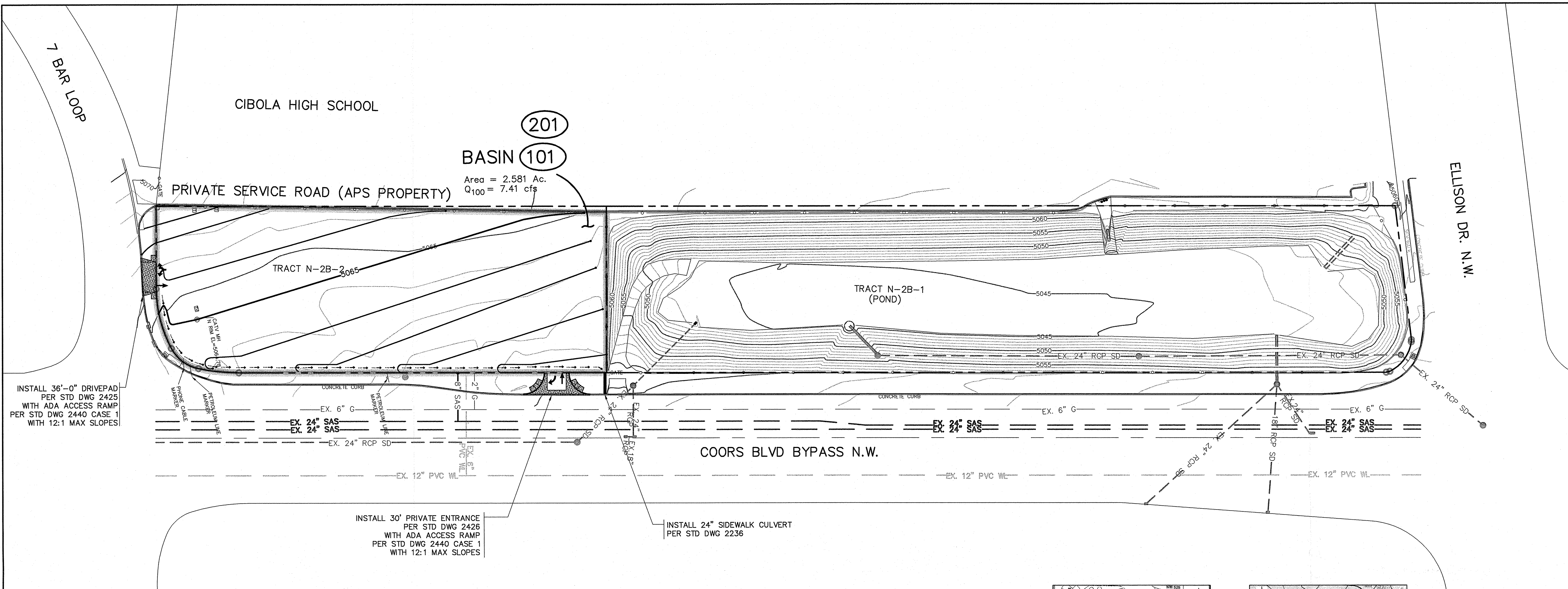
FLOOD INSURANCE MAP
REFERENCE: FLOOD INSURANCE STUDY PANEL 109



ENGINEER'S SEAL		REVISIONS		NO. DATE		BY	
		REMARKS		DATE		DATE	
		WILSON & COMPANY, ENGINEERS & ARCHITECTS		JAT		JLB	
		DESIGNED BY		CAP		CAP	
		DRAWN BY		CAP		CAP	
CHECKED BY		CAP		CAP		CAP	

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP			
SEVEN BAR RANCH / TRACT N-2B-1 GRADING & DRAINAGE PLAN			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. XXXX.XX		Zone Map No. A-13,B-13	Sheet 5 of 6

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION	
CONTRACTOR	DATE	A.C.S. Survey Monument "NM448-N12" New Mexico State Plane Coord's, Central Zone (NAD 1927) as published:		DATE	DATE
INSPECTOR'S NAME	DATE	Y = 1,528,910.94		DATE	DATE
INSPECTOR'S FIELD VERIFICATION BY	DATE	X = 381,708.54		DATE	DATE
INSPECTOR'S FIELD VERIFICATION BY	DATE	Elevation = 5023.411		DATE	DATE
INSPECTOR'S FIELD VERIFICATION BY	DATE	Ground to grid factor = 0.99967595		DATE	DATE



TRACT N-2B-2
7-Bar Loop and Coors By-Pass

Drainage Report

Site Location: Tract N-2B-2 is located at the northwest corner of the 7-Bar Loop and Coors By-Pass intersection. Proposed development is for re-grading of the site and zone changing from R-1 to C-1 for future sale purposes.

Methodology: Section 22.2 of City of Albuquerque DMP was followed to calculate the design volume. The charts and formulas in Parts A were followed using the 100-year frequency 24-hour rainfall 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. The peak discharge was calculated as per section A.6.

Existing Conditions: The site consists of only one basin, Basin 101, which encompasses the entire site. The site is primarily a vacant lot with native shrubbery. Currently, the drainage from this basin sheet flows in a northeast direction toward Coors By-Pass, which then drains into an existing detention pond located on Tract N-2B-1.

Existing volumetric runoff and peak discharge quantities are as shown below:

Table 1 – Existing Conditions							
	Treatment						
Basin	Area (ac)	A (%)	B (%)	C (%)	D (%)	V ₅₀₀ (ac-ft)	Q _p (cfs)
101	2.58	0	0	100	0	0.213	7.41
Total	2.58					0.213	7.41

Table 1 - provides a breakdown of existing volumetric runoff and peak discharge of the site.

Proposed Conditions: The proposed basin, Basin 201, remained the same as the existing basin. Re-grading improvements to the site did not change land treatments from existing conditions. Drainage will sheet flow towards the northeast corner of the site into Coors By-Pass via a proposed concrete sidewalk culvert.

Proposed volumetric runoff and peak discharge quantities are as shown below:

Table 2 – Proposed Conditions							
		Treatment					
Basin	Area (ac)	A (%)	B (%)	C (%)	D (%)	V ₅₀₀ (ac-ft)	Q _p (cfs)
201	2.58	0	0	100	0	0.213	7.41
Total	2.58					0.213	7.41

Table 2 - provides a breakdown of proposed volumetric runoff and peak discharge of the site.

Due to these proposed improvements the total amount of runoff will not change.

Conclusion: All proposed runoff will be diverted to the northeast corner of the site through a 24\"/>

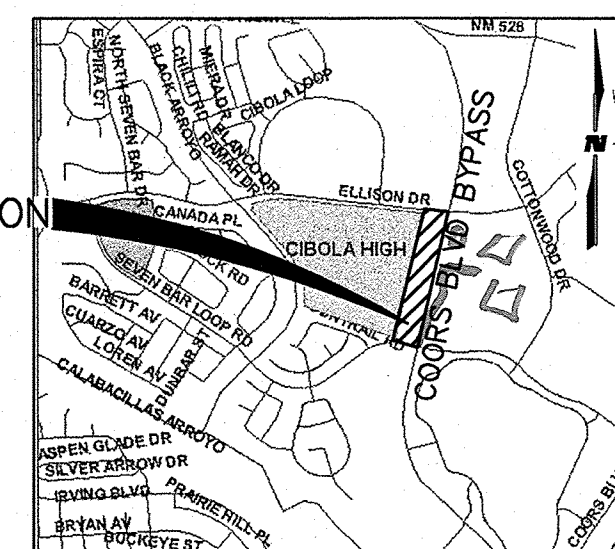
GRADING NOTES

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LEGEND

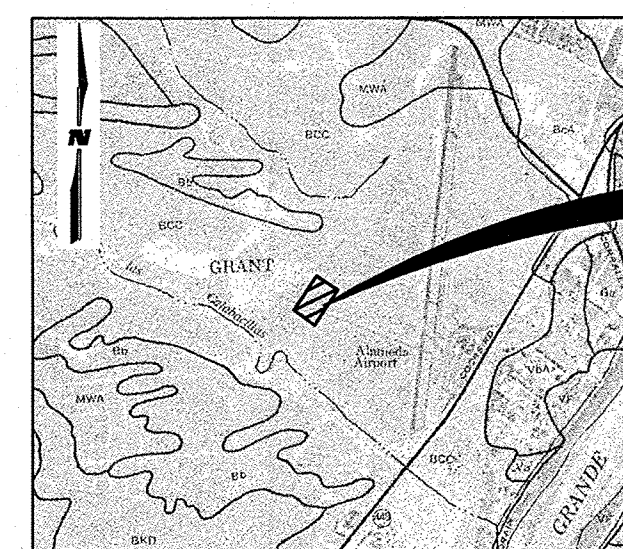
- PROPOSED BASIN BOUNDARY
- EXISTING BASIN BOUNDARY
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- PROPOSED FLOWLINE
- PROPOSED CONCRETE

SITE LOCATION



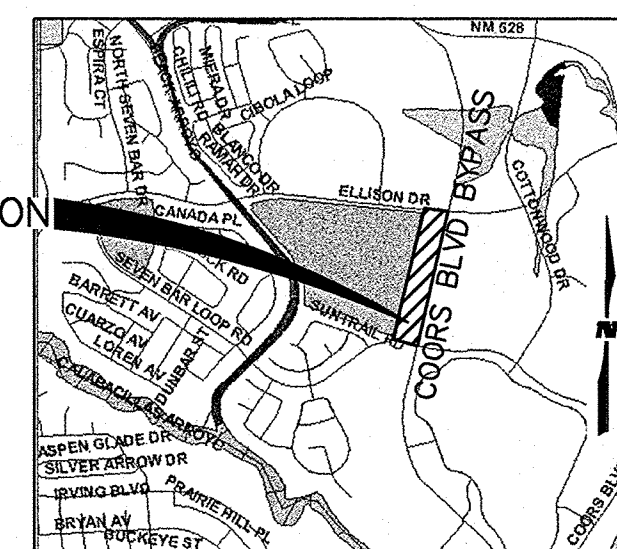
LOCATION MAP
ZONE ATLAS MAP NO. A-13, B-13

SITE LOCATION

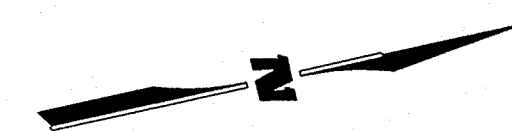


SOILS MAP
REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY SHEET NO. 10

SITE LOCATION



FLOOD INSURANCE MAP
REFERENCE: FLOOD INSURANCE STUDY PANEL 109



GRAPHIC SCALE

(IN FEET)
1 Inch = 60 ft.

WCEA #X3614062
MAR. 2003

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		
CONTRACTOR	DATE	A.C.S. Survey Monument "NM448-N12"	DATE	FIELD NO.	DATE		REVISIONS	
WORK	DATE	New Mexico State Plane Coord's, Central Zone (NAD 1927) as published:	DATE	BY	DATE			
STAKED BY	DATE	Y = 1,528,910.94	DATE	NO. DATE	DATE			
FIELD ACCEPTANCE BY	DATE	X = 387,708.54	DATE	REMARKS	DATE			
DRAWINGS	DATE	Elevation = 5023.411	DATE	WILSON & COMPANY, ENGINEERS & ARCHITECTS	DATE MAR. 2003	DESIGNED BY		
CORRECTED BY	DATE	Ground to grid factor = 0.99967595	DATE	DRAWN BY	DATE MAR. 2003	CHECKED BY		
MICRO-FILM INFORMATION	DATE		DATE	CAP	DATE MAR. 2003			
NO.	DATE		DATE		DATE			

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP			
SEVEN BAR RANCH / TRACT N-2B-1 GRADING & DRAINAGE PLAN			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
Design Update	Mo./Day/Yr.	Mo./Day/Yr.	Mo./Day/Yr.
City Project No.	Zone Map No.	Sheet	Of
XXXX.XX	A-13,B-13	5	6

WILSON
& COMPANY