

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							
Basin	Area (ac)	Treatment				V ₁₀₀ (ac-ft)	Q _p (cfs)
		A (%)	B (%)	C (%)	D (%)		
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 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 (%)	D (%)		
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.

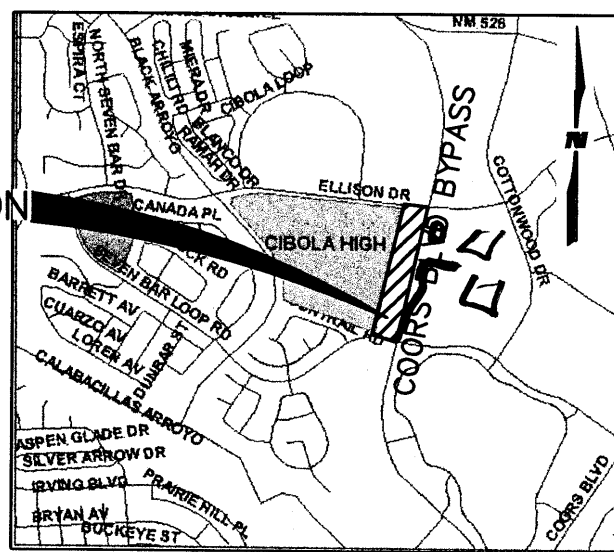
Conclusion: All proposed runoff will be diverted to the northeast corner of the site through a 24" concrete sidewalk culvert and into Coors By-Pass. These flows will then drain into an existing detention pond located in Tract N-2B-1. This pond was designed to accept flows as per SAD 223 - Part 4.

GRADING NOTES

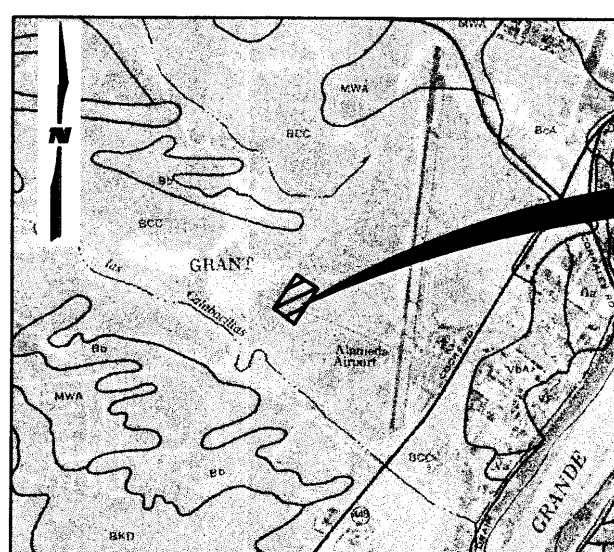
- ALL GRADING AND CONSTRUCTION UNDER THIS PLAN TO BE CONSTRUCTED IN ACCORDANCE WITH THE "CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", LATEST EDITION.
- CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING 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

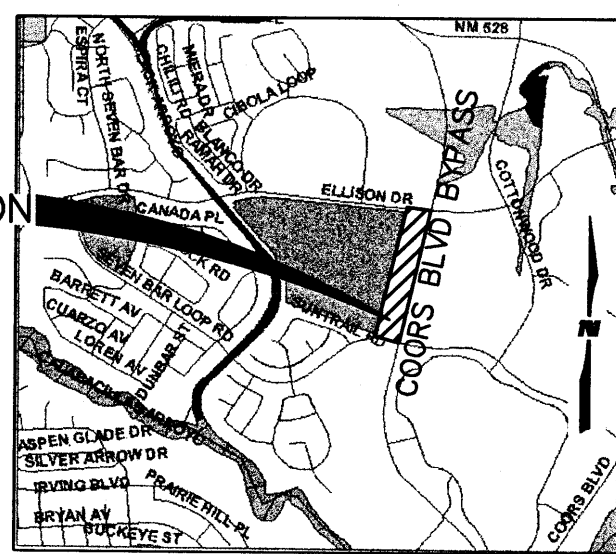
- PROPOSED BASIN BOUNDARY
- EXISTING BASIN BOUNDARY
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- PROPOSED FLOWLINE
- PROPOSED CONCRETE



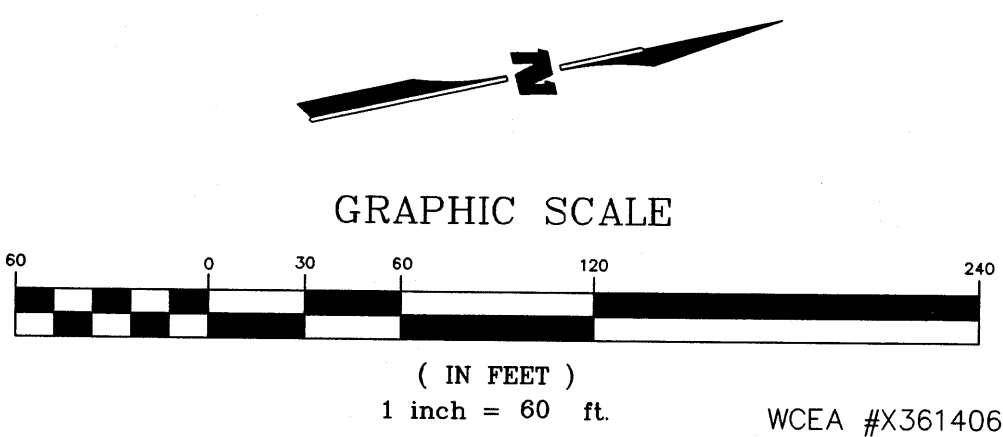
LOCATION MAP
ZONE ATLAS MAP NO. A-13, B-13



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



FLOOD INSURANCE MAP
REFERENCE: FLOOD INSURANCE STUDY PANEL 109



AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	A.C.S. Survey Monument "NM448-N12"	DATE	FIELD NOTES	BY		REMARKS
INSPECTOR'S	DATE	New Mexico State Plane Coord's, Central	DATE	NO.			
RECORDING BY	DATE	Zone (NAD 1927) as published:	DATE				
VERIFICATION BY	DATE	Y = 1,528,910.94	DATE				
MICRO-FILM INFORMATION		Elevation = 5023.41		DESIGNED BY		WILSON & COMPANY, ENGINEERS & ARCHITECTS	
RECORDED BY		Ground to grid factor = 0.99967595		DRAWN BY		DATE MAR. 2003	
NO.				CHECKED BY		DATE MAR. 2003	

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

WILSON & COMPANY