



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 11, 2001

Craig Hoover
Bohannon-Huston, Inc.
7500 Jefferson NE
Courtyard One
Albuquerque, New Mexico 87109-4335

**RE: Grading and Drainage Plan For Bel-Air/Miramontes Park (H17-D98) Dated
September 28, 2001**

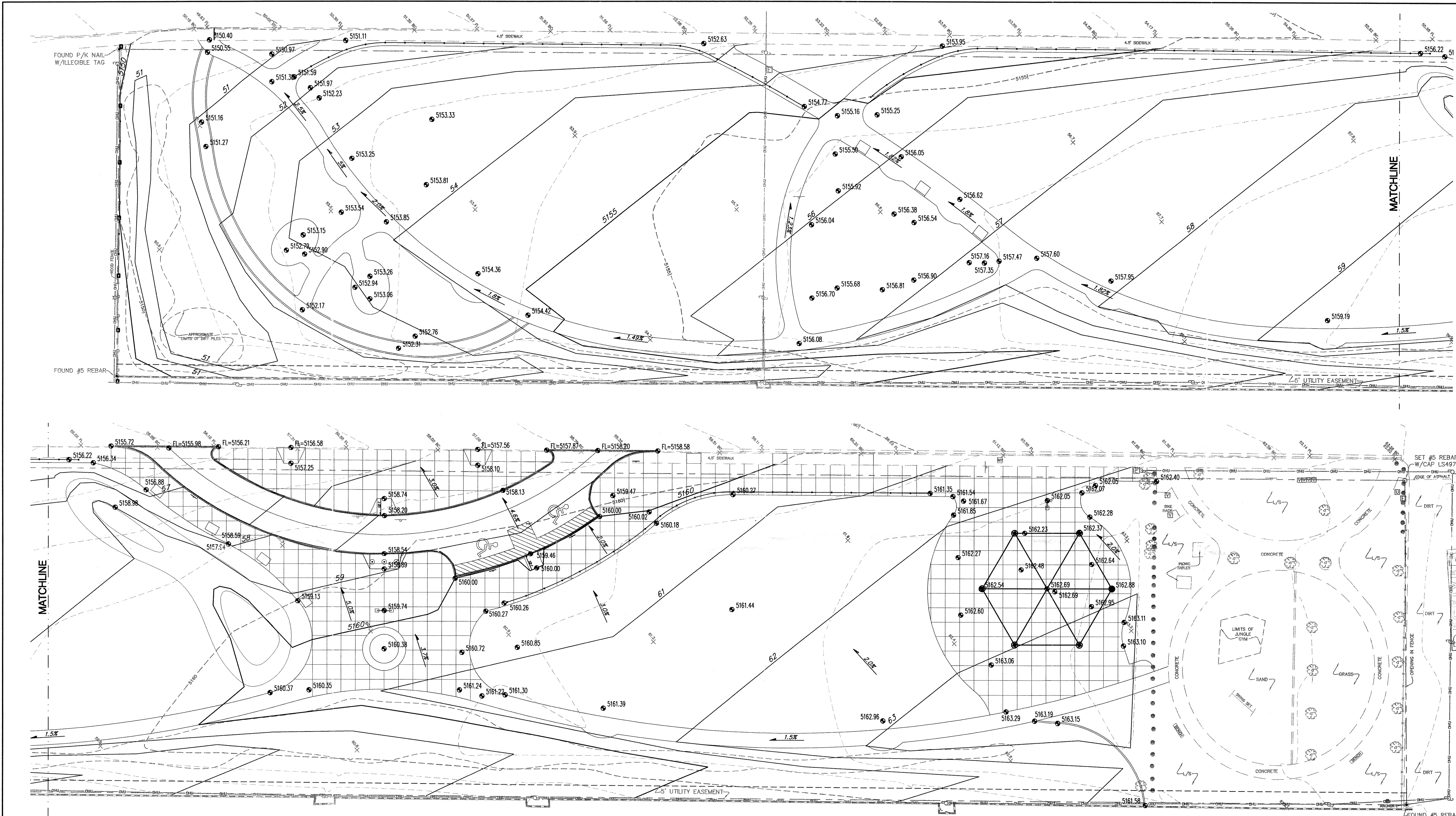
Dear Mr. Hoover:

The above referenced drainage plan received October 1, 2001 is approved for grading permit and for approval at DRC. At the end of the project the Engineer will need to certify the project per the DPM Certification Checklist.

If you have any questions please call me at 924-3982.

Sincerely,

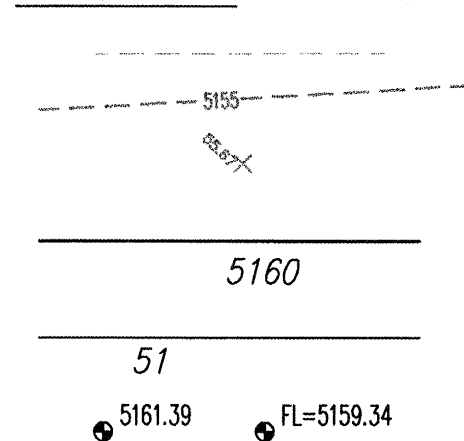
Carlos A. Montoya
City Floodplain Administrator



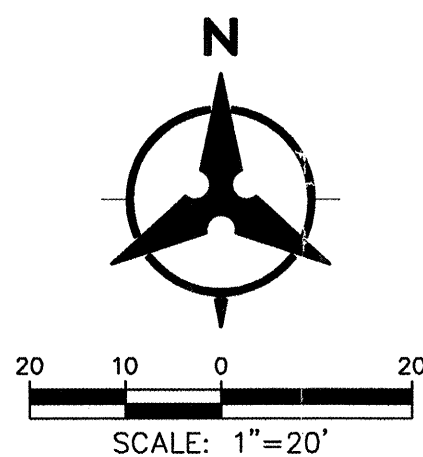
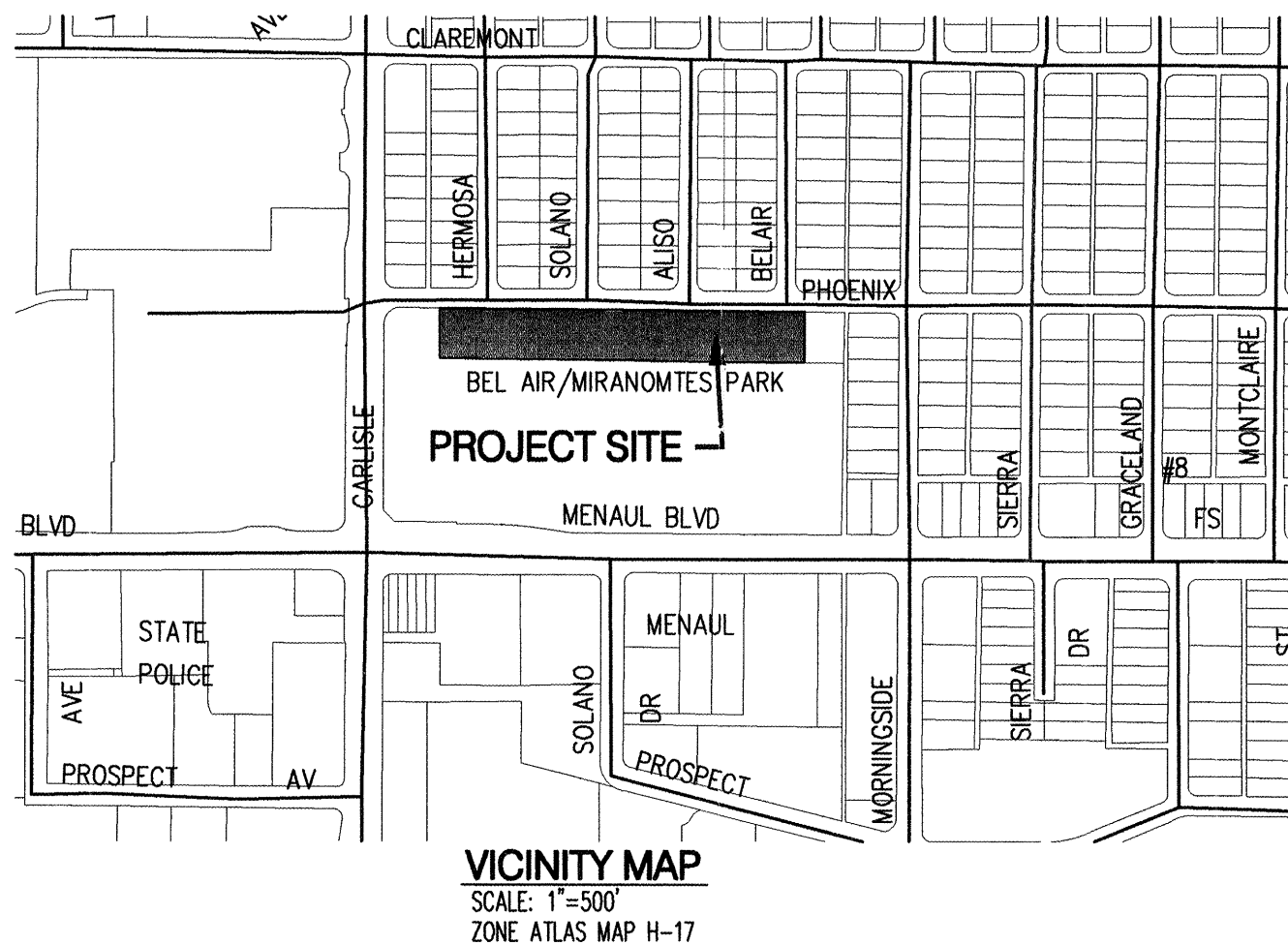
GRADING NOTES

1. CONTRACTOR SHALL CLEAR ENTIRE SITE TO REMOVE TRASH, DEBRIS, CONCRETE, TUMBLEWEEDS, TYP. ALL EXISTING BOULDERS SHALL REMAIN ON SITE FOR USE AS DIRECTED.
2. CONTRACTOR SHALL PROTECT EXISTING VEGETATION ON SITE IN ALL AREAS NOT SHOWN TO BE GRADED OR DISTURBED.
3. SPOT ELEVATIONS ON CURB REFER TO TOP OF CURB UNLESS OTHERWISE NOTED.

LEGEND



- EXISTING CONTOURS
- EXISTING SPOT ELEVATION
- PROPOSED INDEX CONTOURS
- PROPOSED INTERMEDIATE CONTOURS
- PROPOSED SPOT ELEVATIONS



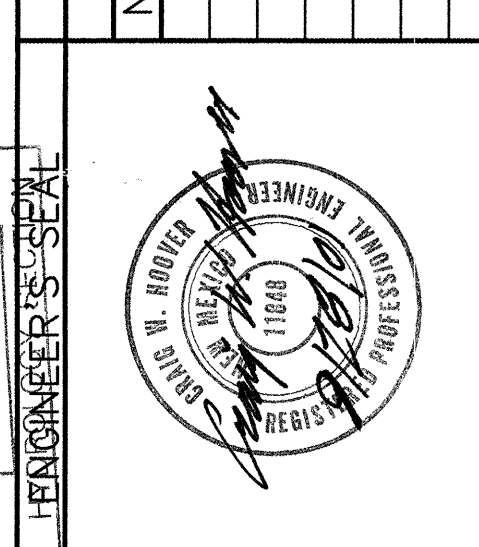
Bohannon & Huston
Court yard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
BEL-AIR MIRAMONTES PARK
GRADING PLAN

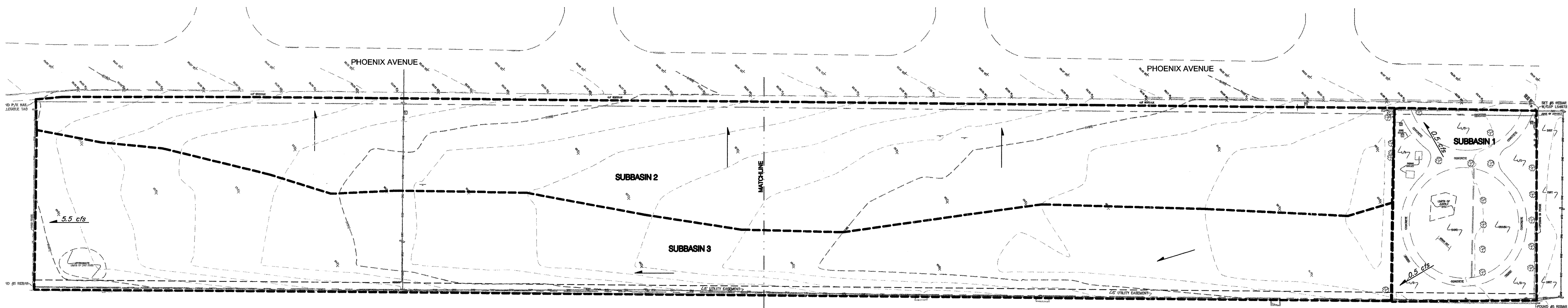
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No.	Zone Map No. H-17	Sheet 4	Of 18

AS-BUILT INFORMATION	
CONTRACTOR	DATE
INSPECTOR	DATE
FIELD ENGINEER	DATE
VERIFICATION BY	DATE
CORRECTED BY	DATE
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	

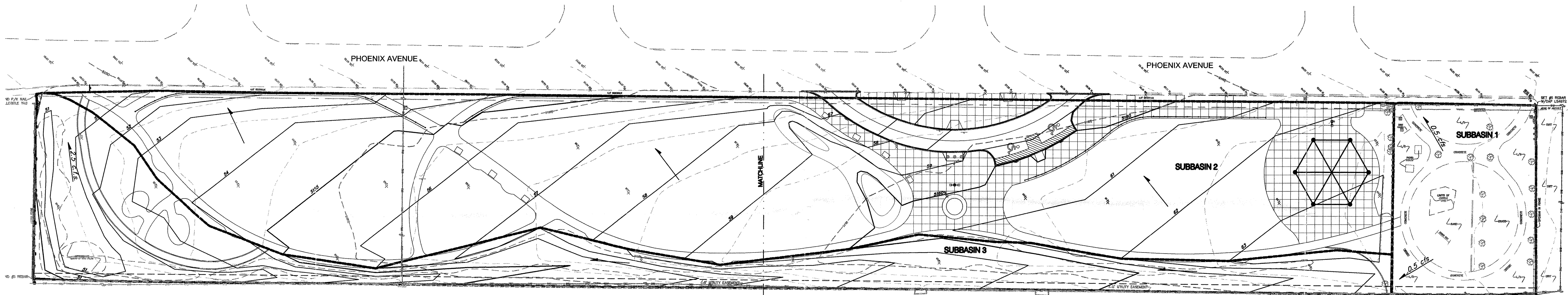
SURVEY INFORMATION	
FIELD NOTES	DATE
BY	
NO.	



REVISIONS	
No.	Date
1	09/20/01
2	09/20/01
3	09/20/01



EXISTING CONDITIONS DRAINAGE BASINS



PROPOSED CONDITIONS DRAINAGE BASINS

GRADING AND DRAINAGE PLAN

AS DISCUSSED WITH CITY HYDROLOGY PRIOR TO THE PREPARATION OF THESE PLANS THE SITE RECEIVES NO OFF-SITE FLOWS. ACCORDING TO FEMA MAPPING THE SITE IS NOT IN A FLOOD ZONE. ALL DRAINAGE CALCULATIONS ARE DONE IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, CHAPTER 22.2. THE DESIGN STORM IS THE 100-YEAR 6-HOUR STORM IN ZONE 2 (DPM CHAPTER 22, FIGURE A-1).

EXISTING CONDITIONS

UNDER EXISTING CONDITIONS THE PROJECT SITE FOR THE BEL AIR/MIRAMONTES PARK HAS TWO PRIMARY SLOPES WITH A RIDGE IN BETWEEN ONE OF THE SLOPES DRAINS TO PHOENIX AVENUE. THE OTHER DRAINS TO THE SOUTH AND WEST, COLLECTING ALONG THE SOUTHERN BLOCK WALL AND FLOWING ONTO THE PROPERTY WEST OF THE PROJECT SITE. IT IS BELIEVED THAT THERE IS NO DRAINAGE EASEMENT FOR THIS FLOW. EXISTING SUBBASIN 1 HAS ALREADY BEEN DEVELOPED AND THE FLOWS FROM THIS SUBBASIN APPEAR TO BE SPLIT, WITH HALF THE FLOW GOING TO THE STREET AND THE OTHER GOING TO THE BLOCK WALL/SWALE ON THE SOUTHERN EDGE OF THE PROPERTY. EXISTING SUBBASIN 2 FLOWS TO PHOENIX AVENUE. EXISTING SUBBASIN 1 FLOWS TO THE BLOCK WALL/SWALE AND EVENTUALLY TO THE WEST THROUGH THE ADJACENT PROPERTY TO CARLISLE BOULEVARD. CALCULATION OF FLOWS ARE SHOWN BELOW.

DEVELOPED CONDITIONS

FOR THE CONDITIONS PROPOSED IN THIS PLAN SET THERE WOULD BE NO FLOW TO THE ADJACENT PROPERTY. INSTEAD ALL FLOW WOULD BE DIRECTED TO PHOENIX AVENUE. SUBBASIN 1 WILL REMAIN THE SAME. SUBBASIN 2 WOULD INCREASE IN SIZE DUE TO THE FACT THAT THE RIDGE WILL HAVE BEEN MOVED OVER TO THE SOUTH. IT WILL STILL DRAIN OVER THE SIDEWALK INTO PHOENIX AVENUE. SUBBASIN 3 WHICH IS REDUCED IN SIZE WILL DRAIN TO A SWALE ON THE SOUTHERN SIDE. THIS SWALE TURNS NORTH ON THE WESTERN EDGE OF THE PROPERTY AND DELIVERS THE FLOWS TO PHOENIX AVENUE. PEAK FLOW RATES ARE SHOWN FOR EACH BASIN IN THE CALCULATIONS BELOW.

THE GRADING FOR THE SITE IS DONE IN ACCORDANCE WITH THE OWNERS DESIRE TO BALANCE THE EARTHWORK. A 4% MAXIMUM SLOPE IS USED IN THE PLAZA AREAS TO RAISE THE SURFACE. ON THE GRASS AREAS A 10 TO 1 SLOPE IS USED ON THE NORTHERN EDGE TO RAISE THE FIELD AREAS WHICH HAVE A 2% SLOPE. THIS 10 TO 1 SLOPE IS NECESSARY TO MAKE THE SITE BALANCE. THE GROUND SURFACE ALONG THE BLOCK WALL IS RAISED APPROXIMATELY ONE FOOT AND THE SWALE IS MORE DEFINED AND MOVED FURTHER AWAY FROM THE WALL.

ZONE 2 FLOWRATES (Chapter 22.2, Table A-9)

Land Treatment	CFS/Acre
A	1.56
B	2.28
C	3.14
D	4.7

EXISTING CONDITIONS

	Total Area (Ac.)	Areas of Land Treatments (Acres)				Flowrate (cfs)
		A	B	C	D	
Subbasin 1	0.33	0.05	0.07	0.16	0.06	1.0
Subbasin 2	1.60	0.00	0.00	1.60	0.00	5.0
Subbasin 3	1.59	0.00	0.00	1.59	0.00	5.0

DEVELOPED CONDITIONS

	Total Area (Ac.)	Areas of Land Treatments (Acres)				Flowrate (cfs)
		A	B	C	D	
Subbasin 1	0.33	0.05	0.07	0.16	0.06	1.0
Subbasin 2	2.33	0.10	1.15	0.00	1.08	7.9
Subbasin 3	0.85	0.00	0.82	0.03	0.00	2.0

LEGEND

- EXISTING CONTOURS
- EXISTING SPOT ELEVATION
- PROPOSED INDEX CONTOURS
- PROPOSED INTERMEDIATE CONTOURS
- EXISTING DRAINAGE BASIN
- PROPOSED DRAINAGE BASIN
- FLOW

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

BEL-AIR MIRAMONTES PARK
DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
City Project No.	Zone Map No.	Sheet	Of	
	H-17	5	18	

