

DRAINAGE DATA

CONDITION	BASIN	STORM RETURN PERIOD	TREATMENT TYPE	TREATMENT AREA	EXCESS PRECIPITATION	PEAK RUNOFF	RUNOFF VOLUME	RUNOFF RATE
		year		sq. ft.	inch	cfs/acre	cu. ft.	cfs
EXISTING	SITE	100	A	95000	0.44	1.29	3483	2.81
			TOTAL	95000			3483	2.81
DEVELOPED	SITE	100	A	66660	0.44	1.29	2444	1.97
			C	28340	0.99	2.87	2338	1.87
			TOTAL	95000			4782	3.84

ASSUMPTIONS

1. PARKING AREA AND ACCESS ROAD DRAIN VIA SHEET FLOW TO EAST AND WATER PONDS ON EXISTING NATURAL AREA.

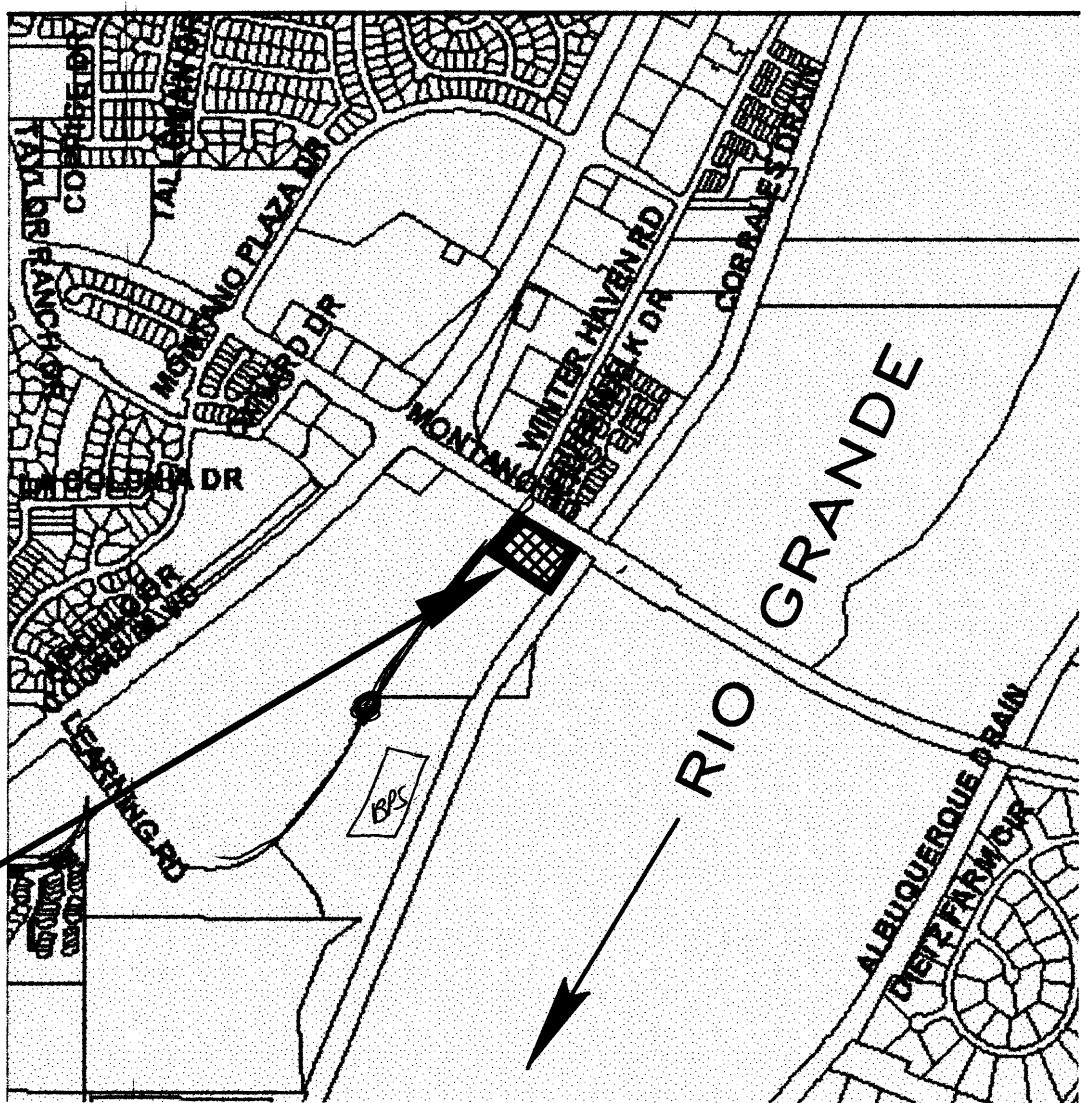
2. ONLY AREA EAST OF PROPOSED PARKING LOT AVAILABLE FOR PONDING.

PONDING

100 YEAR, 6 HOUR VOLUME FROM TABLE = 4782 C.F.

PONDING AREA = 56400 S.F.

AVERAGE DEPTH OF WATER = 0.08 FT.



VICINITY MAP
MAP NO. E12

PROJECT LOCATION

GENERAL NOTES:

- ALL DRAINAGE INFORMATION ON THIS DRAWING IS A DUPLICATION OF THE DRAINAGE INFORMATION AS SHOWN ON THE GRADING AND DRAINAGE PLAN BY BORDENAVE DESIGNS DATED 11-20-02.
- THE SITE IS TO BE USED FOR PARKING AND PICNICKING FOR THE GENERAL PUBLIC AND WILL BE A CITY OF ALBUQUERQUE FACILITY. THE INTENT IS TO DISTURB THE AREA AS LITTLE AS POSSIBLE BY INCORPORATING FACILITIES IN THE NATURAL ENVIRONMENT. TRAILS WILL BE CRUSHER FINES AND THE PARKING AREA WILL BE GRAVEL. NO BUILDINGS ARE PROPOSED FOR THE SITE.
- THE AREA IS A PART OF THE MASTER GRADING AND DRAINAGE PLAN PREPARED FOR ALL THE AREA BOUNDED BY THE SAN ANTONIO ARROYO, COORS BLVD., MONTANO RD. AND THE CORRALES RIVERSIDE DRAIN. THE PLAN WAS APPROVED FEBRUARY 6, 2002. THE PROPOSED PROJECT IS SHOWN TO UTILIZE WATER HARVESTING TO THE MAXIMUM EXTENT POSSIBLE WITH EXCESS STORM WATER RUNOFF TO EXIT THE SITE ALONG THE EASTERN BOUNDARY TO THE LOWER CORRALES RIVERSIDE DRAIN. IT IS NOT ANTICIPATED THAT OVERFLOWS WILL OCCUR IN THE 100 YEAR STORM.
- THERE ARE NO OFFSITE FLOWS TO THE PROPOSED FACILITY. FLOWS FROM THE WEST ARE DIVERTED SOUTH OF THE PROPOSED FACILITY BY THE ENTRANCE ROAD FROM MONTANO ROAD. THE ENTRANCE ROAD IS APPROXIMATELY TEN FEET ABOVE THE SITE AT MONTANO ROAD AND MEETS THE EXISTING GROUND NEAR THE SOUTH BOUNDARY OF THE PROPOSED FACILITY. A COMPACTED EARTH BERM IS PROPOSED ALONG THE SOUTH BOUNDARY OF THE SITE TO CONTAIN STORM WATER ONSITE.
- THE SITE IS SHOWN TO BE IN ZONE X PER FEMA FIRM PANEL NO. 118, DATED SEPTEMBER 20, 1996.
- PROPOSED FENCES FOR THE PROPERTY WILL BE OF AN OPEN TYPE AND WILL NOT IMPEDE STORM WATER RUNOFF.

All comments can be addressed at DRC

DMJMH+N

CITY OF ALBUQUERQUE
PARKS AND RECREATION DEPARTMENT
OPEN SPACE DIVISION

TITLE: COORS/MONTANO TRAILHEAD
GRADING AND DRAINAGE PLAN

Design Review Committee City Engineer Approval

Mo./Day/Yr. Mo./Day/Yr.

City Project No. 6767.02 Zone Map No. E12 Sheet 5 Of 8

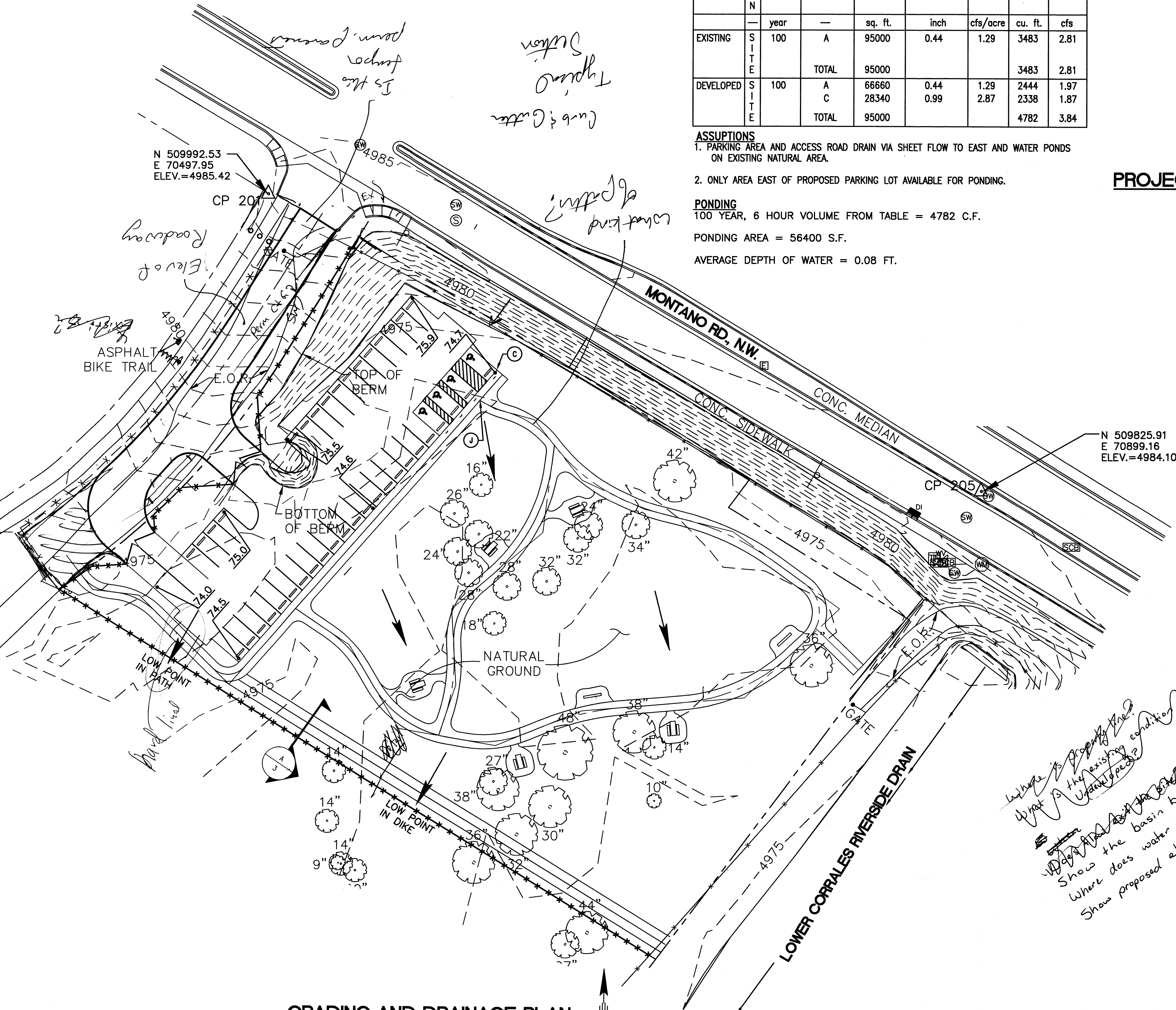
Elevations are in NGVD 29

LEGAL DESCRIPTION

PORTION OF TRACT 6, LANDS OF RAY A. GRAHAM,
OVENWEST CORP. AND CITY OF ALBUQUERQUE

GRADING AND DRAINAGE PLAN

SCALE: 1" = 30'



ENGINEER'S SEAL



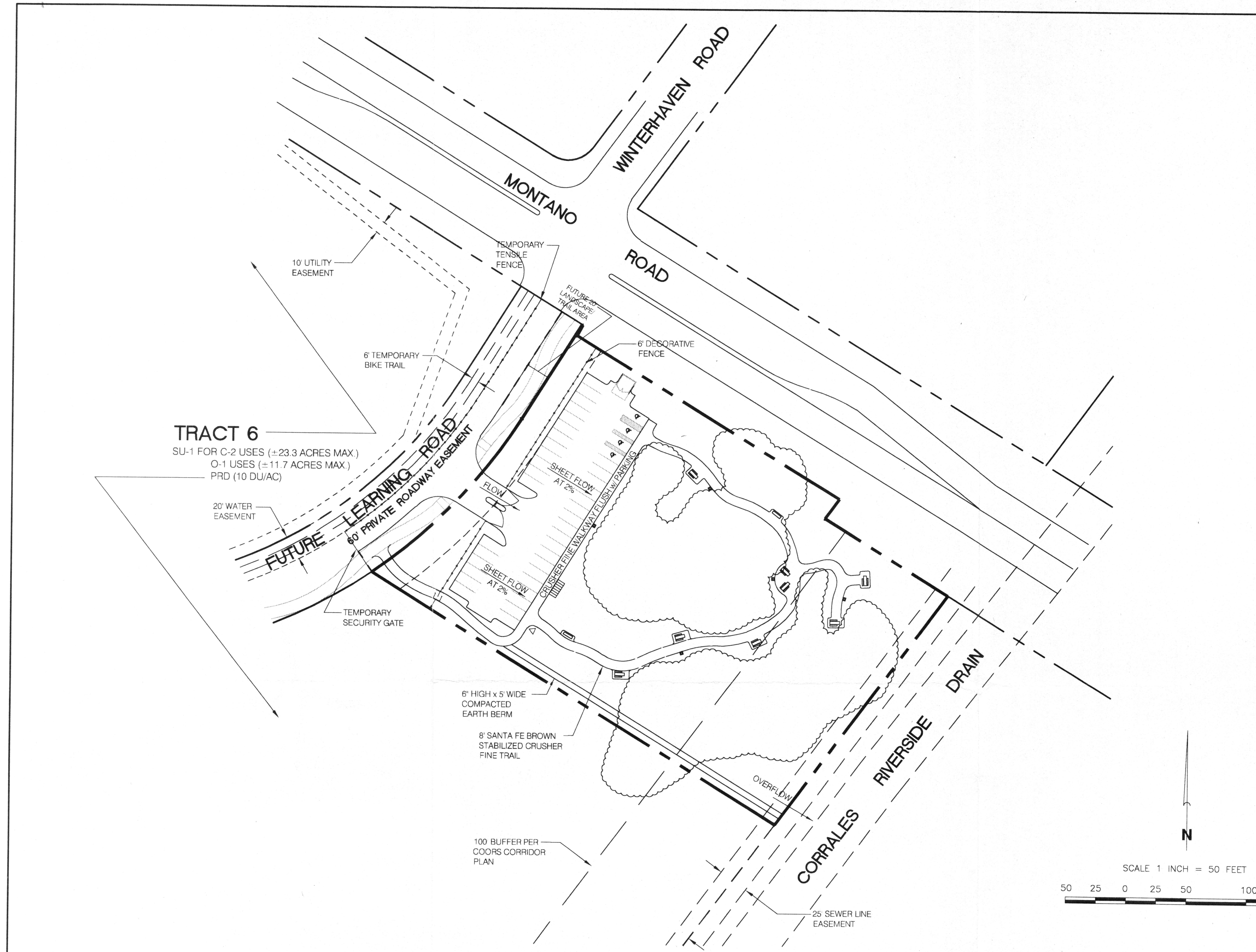
12.15.03

SURVEY INFORMATION

FIELD NOTES	DATE	BY
NO.		

AS BUILT INFORMATION

CONTRACTOR	INSPECTOR'S DATE	FIELD DATE	VERIFICATION DATE	CONNECTED BY	MICRO-FILM INFORMATION



LEGAL DESCRIPTION

PORTION OF TRACT 6, LANDS OF RAY A. GRAHAM, OVENWEST CORP. AND CITY OF ALBUQUERQUE

PERMANENT BENCHMARK

ACS NM448-N6A ELEVATION 5058.889

GRADING CERTIFICATION

I, Jean J. Bordenave, New Mexico Professional Engineer and Land Surveyor No. 5110, hereby certify that I have personally inspected the property shown hereon and that it appears that no grading, filling or excavation has occurred thereon since the contour map shown hereon was prepared.

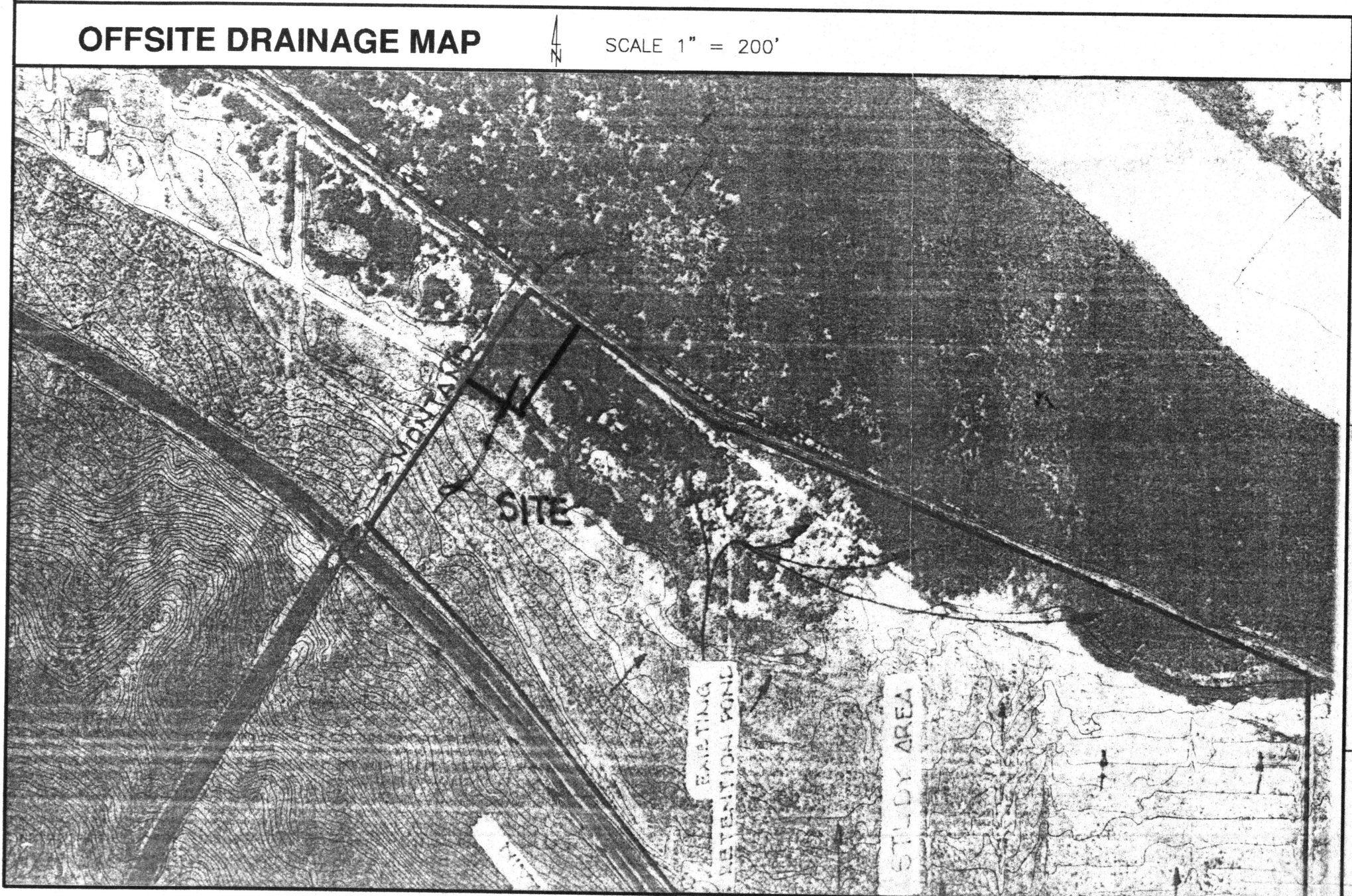
Jean J. Bordenave, NM PE & PS No. 5110

GENERAL NOTES

1. THE SITE IS TO BE USED FOR PARKING AND PICNICING FOR THE GENERAL PUBLIC AND WILL BE A CITY OF ALBUQUERQUE FACILITY. THE INTENT IS TO DISTURB THE AREA AS LITTLE AS POSSIBLE BY INCORPORATING FACILITIES IN THE NATURAL ENVIRONMENT. TRAILS WILL BE CRUSHER FINES AND THE PARKING AREA WILL BE GRAVEL. NO BUILDINGS ARE PROPOSED FOR THE SITE.
2. THE AREA IS A PART OF THE MASTER GRADING AND DRAINAGE PLAN PREPARED FOR ALL THE AREA BOUNDED BY THE SAN ANTONIO ARROYO, COORS BLVD., MONTANO RD AND THE CORRALES RIVERSIDE DRAIN. THE PLAN WAS APPROVED FEBRUARY 6, 2002. THE PROPOSED PROJECT IS SHOWN TO UTILIZE WATER HARVESTING TO THE MAXIMUM EXTENT POSSIBLE WITH EXCESS STORMWATER RUNOFF TO EXIT THE SITE ALONG THE EASTERN BOUNDARY TO THE LOWER CORRALES RIVERSIDE DRAIN. IT IS NOT ANTICIPATED THAT OVERFLOWS WILL OCCUR IN THE 100 YEAR STORM.
3. THERE ARE NO OFFSITE FLOWS TO THE PROPOSED FACILITY. FLOWS FROM THE WEST ARE DIVERTED SOUTH OF THE PROPOSED FACILITY BY THE ENTRANCE ROAD FROM MONTANO ROAD. THE ENTRANCE ROAD IS APPROXIMATELY TEN FEET ABOVE THE SITE AT MONTANO ROAD AND MEETS THE EXISTING GROUND NEAR THE SOUTH BOUNDARY OF THE PROPOSED FACILITY. A COMPACTED EARTH BERM IS PROPOSED ALONG THE SOUTH BOUNDARY OF THE SITE TO CONTAIN STORMWATER ONSITE.
4. THE SITE IS SHOWN TO BE IN ZONE X PER FEMA FIRM PANEL NO. 118, DATED SEPTEMBER 20, 1996.
5. PROPOSED FENCES FOR THE PROPERTY WILL BE OF AN OPEN TYPE AND WILL NOT IMPEDE STORMWATER RUNOFF.

VICINITY MAP NO. E-12

FEMA FIRM PANEL NO. 118



DRAINAGE DATA									
CONDITION	B I T E	STORM A RETURN PERIOD year	TREATMENT TYPE (table 4)	TREATMENT AREA sq. ft.	EXCESS PRECIPITATION (table 5) in.	PEAK RUNOFF (table 6) cfs/acre	RUNOFF VOLUME (table 7) cu. ft.	RUNOFF RATE cfs	
EXISTING	S I T E	10	A	95000	0.08	0.24	633	0.52	
			B	0	0.22	0.76	0	0.00	
			C	0	0.44	1.49	0	0.00	
			D	0	1.24	2.89	0	0.00	
			TOTAL	95000			633	0.52	
		100	A	95000	0.44	1.29	3483	2.81	
			B	0	0.67	2.03	0	0.00	
			C	0	0.99	2.87	0	0.00	
			D	0	1.97	4.37	0	0.00	
			TOTAL	95000			3483	2.81	
DEVELOPED	S I T E	10	A	66660	0.08	0.24	444	0.37	
			B	0	0.22	0.76	0	0.00	
			C	28340	0.44	1.49	1039	0.97	
			D	0	1.24	2.89	0	0.00	
			TOTAL	95000			1484	1.34	
		100	A	66660	0.44	1.29	2444	1.97	
			B	0	0.67	2.03	0	0.00	
			C	28340	0.99	2.87	2336	1.87	
			D	0	1.97	4.37	0	0.00	
			TOTAL	95000			4782	3.84	
A		100	A	0	0.44	1.29	0	0.00	
			B	1690	0.67	2.03	94	0.09	
			C	10200	0.99	2.87	842	0.67	
			D	0	1.97	4.37	0	0.00	
			TOTAL	11890			936	0.75	

ASSUMPTIONS

1. PARKING AREA AND ACCESS ROAD ROAD DRAIN VIA SHEET FLOW TO EAST AND WATER PONDS ON EXISTING NATURAL AREA.
2. ONLY AREA EAST OF PROPOSED PARKING LOT AVAILABLE FOR PONDING.

PONDING

100 YEAR, 6 HOUR VOLUME FROM TABLE = 4782 C.F.

PONDING AREA = 56400 S.F.

AVERAGE DEPTH OF WATER = 0.08 FT

LEGEND

TBM	TEMPORARY BENCHMARK
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FLOWLINE
TA	TOP OF ASPHALT
TCP	TOP OF CONCRETE
TC	TOP OF CURB
TP	TOP OF EARTH PAD
TS	TOP OF SIDEWALK
TW	TOP OF WALL
FH	FIRE HYDRANT
WM	WATER METER
WV	WATER VALVE
MH	MANHOLE
CB	CATCH BASIN GRATE
GM	GAS METER
GV	GAS VALVE
LP	LIGHT POLE
PP	POWER POLE
GW	GUY WIRE
PED	ELEC. OR TEL. PEDESTAL
RD	ROOF DRAINAGE POINT

GRADING NOTES

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE NEW MEXICO ONE CALL SYSTEM AT 260-1990 FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER 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 ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO PUBLIC RIGHT-OF-WAY OR PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY THE CONSTRUCTION OF TEMPORARY SOIL BERMS OR SILT FENCES AT PROPERTY LINES AND BY SOIL TO PREVENT 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 A 'TOPSOIL DISTURBANCE PERMIT' PRIOR TO BEGINNING CONSTRUCTION.

no.	date	remarks	by

project title
**CITY TRAILHEAD PARKING
LEARNING RD AT MONTANO RD
ALBUQUERQUE, NM**

sheet title
GRADING & DRAINAGE PLAN

sheet date 11/20/02	design by JJB	project no. 0214
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sheet
of

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