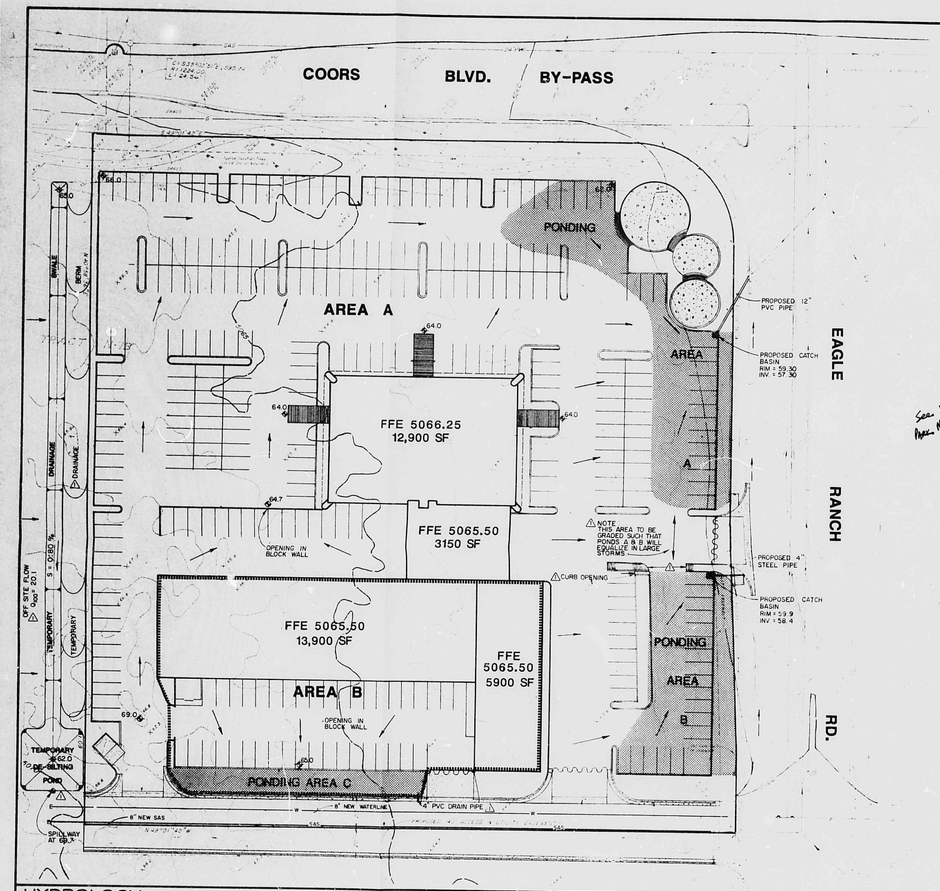
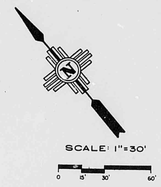
Hydrology File No. B-13/D003A





TEXT

EXISTING

THE 4.2814 ACRE SITE IS LOCATED AT THE SOUTHWEST CORNER OF COORS BOULEVARD BY-PASS AND EAGLE RANCH ROAD, N.W. THE PROPERTY IS CURRENTLY UNDEVELOPED AND SLOPES DOWN FROM THE WEST TO THE EAST AT APPROXIMATELY 2%. THERE ARE EXISTING STORM DRAIN FACILITIES IN EAGLE RANCH ROAD ADJACENT TO THE PROPERTY.

PROPOSED:

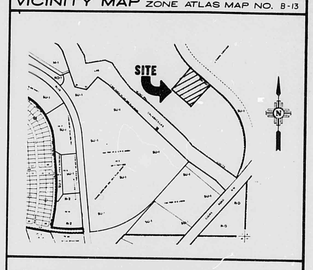
AN AUTO SALES AND SERVICE FACILITY IS PLANNED FOR THE SUBJECT PROPERTY. CONTROLLED RUNOFF TO PUBLIC RIGHT-OF-WAY WILL FLOW AT A RATE OF 1.9 CFS, AS INDICATED IN THE DRAINAGE MANAGEMENT PLAN FOR SEVEN BAR SECTOR PLAN AREA (FEBRUARY 1985 BY BOHANNAN-HUSTON, INC. AND EASTERLING & ASSOCIATES, INC.). SITE DRAINAGE WILL BE CONTAINED IN THREE PONDING AREAS. PONDING AREA A WILL DISCHARGE THROUGH A CATCH BASIN AND 12" PIPE TO EXISTING DROP INLET IN EAGLE RANCH ROAD. PONDING AREA B WILL DISCHARGE THROUGH A CATCH BASIN AND 4" PIPE TO THE GUTTER OF EAGLE RANCH ROAD AND FLOW TO EXISTING CATCH BASIN. PONDING AREA C WILL CONTAIN ALL FLOWS FROM DRAINAGE AREA B. ALL OF THE FLOWS FROM THE WEST WILL BE CONTAINED IN A TEMPORARY SWALE ALONG THE WEST PROPERTY LINE.

See V.T. Auto Mall Master Plan

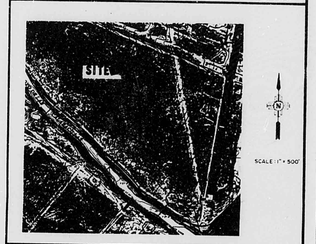
LEGEND

DESCRIPTION	NEW	EXISTING
CONTOURS		
SPOT ELEVATION	×64.1	×64.1
DRAINAGE AREA BOUNDARY		
DRAINAGE DIVIDE		
WATER BLOCK		
DIRECTION OF FLOW		
ASPHALT PAVING	ASPHALT	ASPHALT
LANDSCAPING		
RETAINING WALL		
GARDEN WALL		
SWALE		
PROPERTY LINE		
FENCE		
CATCH BASIN		
STORM DRAIN MANHOLE AND LINE	SD	SD
SANITARY SEWER MANHOLE AND LINE	SAS	SAS
FIRE HYDRANT AND WATER LINE		
REDUCERS		
WATER VALVES	W.V.	W.V.
WATER CONNECTIONS		
WATER JOINTS		
CONCRETE		
GAS LINE		
UNDERGROUND TELEPHONE	TELEPHONE	TELEPHONE
CABLE TELEVISION	CATV	CATV
POWER/TELEPHONE POLE	OPP	OPP
UNDERGROUND ELECTRICAL		
CURB ELEVATION	5,500.28 / 5,500.18	5,499.28 / 5,499.18
HYDROLOGICAL ANALYSIS POINT	AP	
DETAIL REFERENCE		
KEYED NOTES		
CITY ARG. DETAIL REFERENCE		

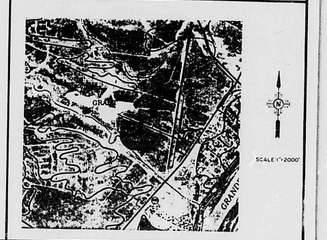
VICINITY MAP ZONE ATLAS MAP NO. B-13



FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.



SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.



HYDROLOGY

	AP NO	DA AC	K PT.	S FT/FT	L FT.	Tc MIN.	SOIL TYPE	% IMP	CN	C	P6 IN	P10 IN	P100 IN	1/2 IN/HR	1/3 IN/HR	1/6 IN/HR	VOL 6 C.F.	VOL 10 C.F.	VOL 100 C.F.	Q6 C.F.S.	Q10 C.F.S.	Q100 C.F.S.
EXISTING	1	4089	NA	NA	NA	10	A	0	54	.40	.98	1.45	2.20	2.07	3.06	4.64	0	0	445	3.4	5.0	7.6
DEVELOPED	A	37652				10	A	80	94	.80							6,834	12,301	21,595	6.2	9.2	14.0
DEVELOPED	B	3237				10	A	80	94	.80							588	1,058	1,857	.54	.79	1.2
OFFSITE																						

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

SOIL SERIES AND MAP SYMBOLS	DEGREE AND KIND OF LIMITATIONS FOR: SURFACE LAYER AND SUBSOIL FOR LOCAL ROADS AND STREETS	SEPTIC TANK LEACH FIELDS	SANITARY LANDFILL (AREA TYPE)	SANITARY LANDFILL (TRENCH TYPE)	SANITARY LANDFILL: COVER MATERIAL	LOCAL ROAD AND STREETS	SUITABILITY AS SOURCE OF: ROAD FILL	SAND	GRAVEL	TOPSOIL	SOIL FEATURES AFFECTING: HOME, RECREATION AREAS	DIKES, LEVEES, AND OTHER IMPROVEMENTS	HYDROLOGIC SOIL GROUP
*Bluepoint: Bh, BrA, BCC, BrD, BKD. For Wink part of BrD, see Wink series. For Nohon part of BrD see Nohon series.	Slight if slope is 1 to 6 percent, moderate if slope is 6 to 12.	Severe: seepage.	Severe: poor hauling.	Slight if slope is 1 to 6 percent, moderate if slope is 6 to 12.	Moderate: too sandy.	Slight if slope is 1 to 6 percent, moderate if slope is 6 to 12.	Good.....	Fair: coarse fines.	Unsuited...	Poor: too sandy.	Seepage.....	Piping; seepage...	A

BCC—Bluepoint loamy fine sand, 1 to 9 percent slopes. This soil is nearly level to moderately sloping. It has the profile described as representative of the series, but an about 10 percent of the acreage the surface layer is sand. Included in mapping are areas of Maljamar, Pajarito, and Wink soils, which make up about 15 percent of the unit. Runoff is slow, and the hazard of soil blowing is severe. This soil is used for range, watershed, wildlife habitat, recreation, and community development. Dryland capability subclass VIIc; native plant community 2.

LEGAL DESCRIPTION

TRACT N-1-B1 OF SEVEN BAR RANCH PLACE, AREA GRANT, CITY OF ALBUQUERQUE, BERNALILLO COUNTY N.M.

check status

BENCHMARK

ACS STA. BRASS CAP ATOP CONCRETE MONUMENT N.M.-449-N(2) ELEV 5325.41 LOCATED 550' SOUTH OF S.OF CORRALES RD N.W AND 60' WEST OF E. OF COORS RD N.W

NO	REVISIONS	BY	DATE
1	ADDRESSED HYDROLOGY COMMENTS	MPC	8-12-88

PITRE BUICK

CONCEPTUAL GRADING & DRAINAGE PLAN

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed: | Drawn: | Checked: | Sheet 3 of 10
Job No. 2221 | Date: MAY 1988

8-13/D003A

REF. 21 DATE 2-28-92 OF ETP

CITY OF ALBUQUERQUE

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Karen Acrey
CITY CLERK RECORDER

OFFICIAL SEAL NORIETA SANCHEZ NOTARY PUBLIC STATE OF NEW MEXICO
My Commission Expires May 8 1995
Norieta Sanchez

THIS PLAN SHOT TWICE ONCE ON LIGHT AND ONCE ON DARK.

CITY OF ALBUQUERQUE THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

PLANS/PLATS ON FILE

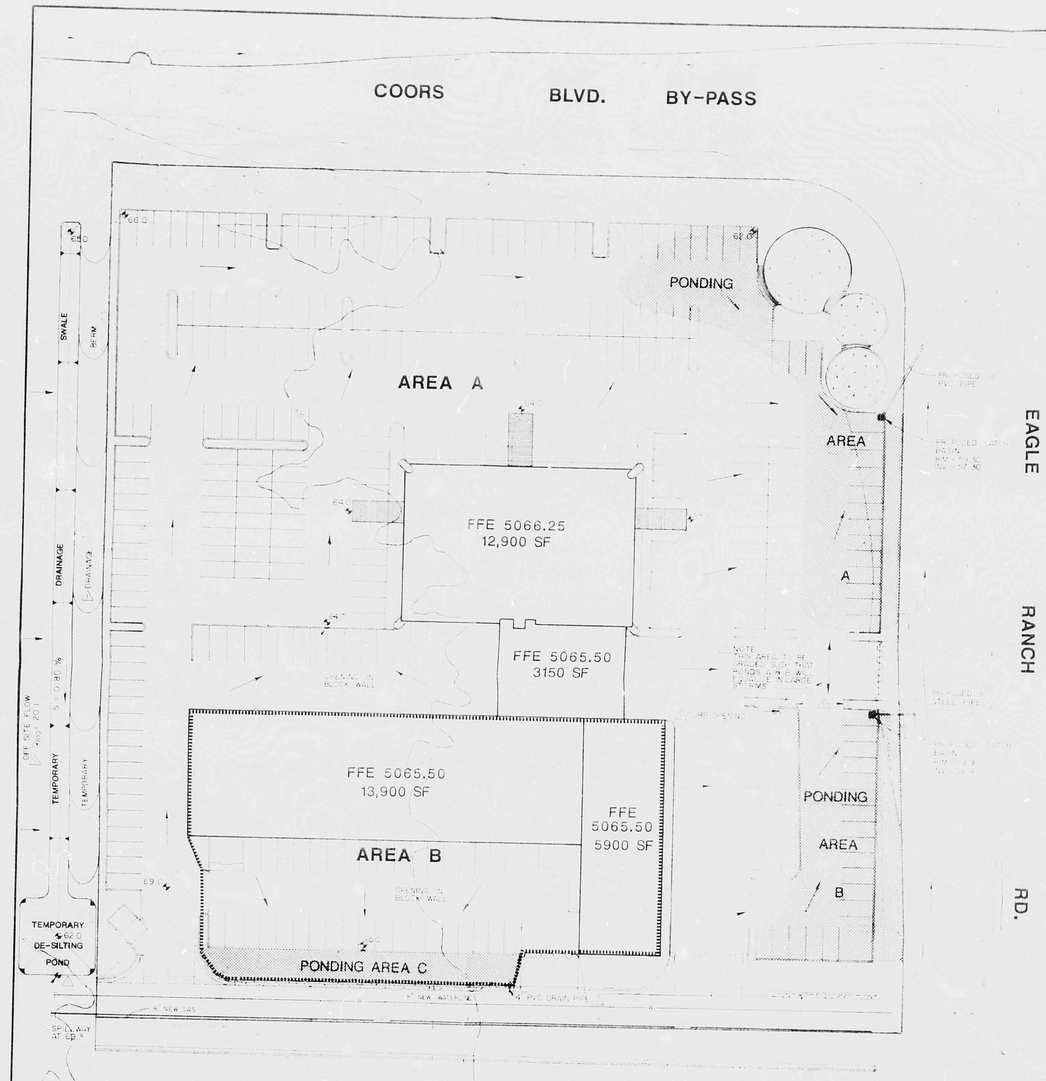
FILE DESC: B-13/D003A

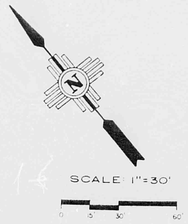
PLANS/PLATS 3

F 30 D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

C D F





TEXT

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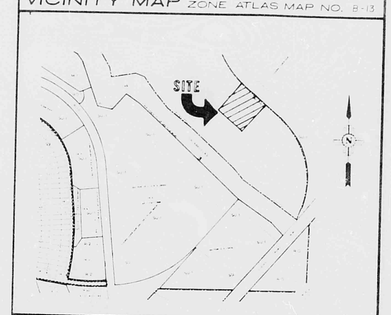
see V.T. Plan
Approx. Master Plan

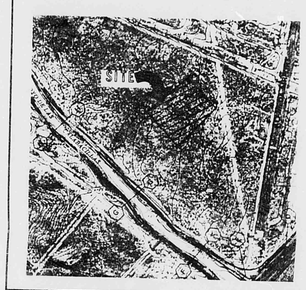
LEGEND

DESCRIPTION	NEW	EXISTING
CONTOURS	66	66
SPOT ELEVATION	66.5	66.5
DRAINAGE AREA BOUNDARY		
DRAINAGE DIVIDE		
WATER BLOCK		
DIRECTION OF FLOW		
ASPHALT PAVING	ASPHALT	ASPHALT
LANDSCAPING		
RETAINING WALL		
GARDEN WALL		
SWALE		
PROPERTY LINE		
FENCE		
CATCH BASIN		
STORM DRAIN MANHOLE AND LINE	30"	30"
SANITARY SEWER MANHOLE AND LINE	SAN	SAN
FIRE HYDRANT AND WATER LINE		
REDUCERS		
WATER VALVES		
WATER CONNECTIONS		
WATER JOINTS		
CONCRETE		
GAS LINE		
UNDERGROUND TELEPHONE		
CABLE TELEVISION		
POWER-TELEPHONE POLE		
UNDERGROUND ELECTRICAL		
CURB ELEVATION	TOS 66.78 TOC 66.78	TOS 66.78 TOC 66.78
HYDROLOGICAL ANALYSIS POINT		
DETAIL REFERENCE		
KEYED NOTES		
CITY ABU. DETAIL REFERENCE		

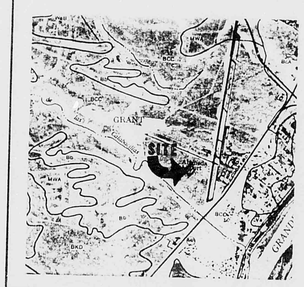
VICINITY MAP ZONE ATLAS MAP NO. B-13



FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.



SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.



HYDROLOGY

	AREA	DA	H	S																							
		AC																									
EXISTING	1	4.089	NA	NA	NA	10	A	0	54	40	98	45	220	207	1.06	464	0	0	445	3.4	5.0	7.6
DEVELOPED	A	3.7663	↓	↓	↓	10	A	80	94	80	↓	↓	↓	↓	↓	↓	1,834	12,301	21,595	6.2	9.2	14.0
DEVELOPED	B	3237	↓	↓	↓	10	A	80	94	80	↓	↓	↓	↓	↓	↓	566	1,058	1,857	3.4	5.0	7.2

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

Blue Point loamy fine sand, 1 to 9 percent slopes	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fine Wash, part of a wide wash, Wide wash, fan deposit, part of a fan terrace	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

BlA - Blue point loamy fine sand, 1 to 9 percent slopes. This soil is nearly level to moderately sloping. It is the profile described as representative of the series, but an inclusion of about 10 percent of the acreage has surface layer is sand. Included in mapping are areas of Madurez, Tejanito, and Wink soils, which make up about 15 percent of the unit. Runoff is slow and the hazard of soil blowing is severe. The soil is suitable for range, watershed, wildlife habitat, recreation, and community development. Dryland capability subclass VIIe; native pasture community.

LEGAL DESCRIPTION

check status

TRACT 1-A-1 OF SEVEN BAR RANCH
TOWN OF ALAMEDA GRANT, CITY OF
ALBUQUERQUE, BERNALILLO COUNTY, N.M.

BENCHMARK

ACS STA. BRASS CAP ATOP CONCRETE MONUMENT
N.M. 448 N12 ELEV. 5024 ft. LOCATED 550 FT. NORTH
OF CL OF CORRALES RD N.W. AND 40 WEST OF
EAGLE RD N.W.

PITRE BUICK

CONCEPTUAL GRADING & DRAINAGE PLAN

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEER
[illegible]

3
10

D-13/D003A

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

REF 21 DATE 2-3-92 OP 5772
CITY OF ALBUQUERQUE
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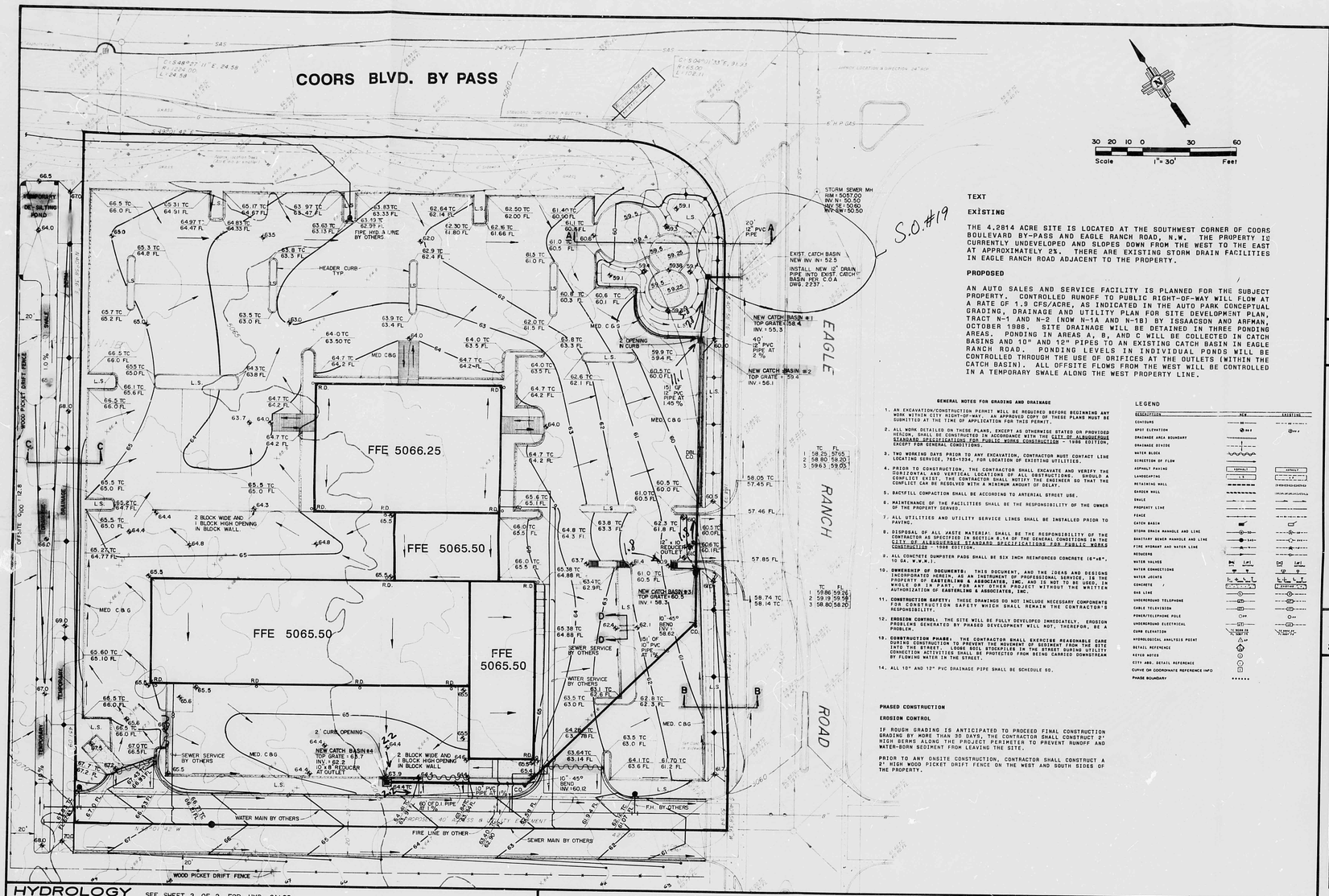
CITY CLERK RECORDER
OFFICIAL SEAL NORBERTA SANCHEZ NOTARY PUBLIC STATE OF NEW MEXICO My Commission Expires MAY 5, 1992

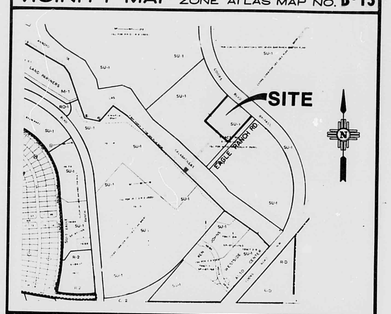
D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

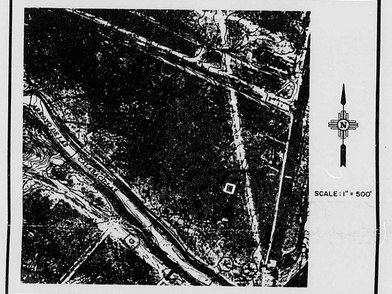
C D



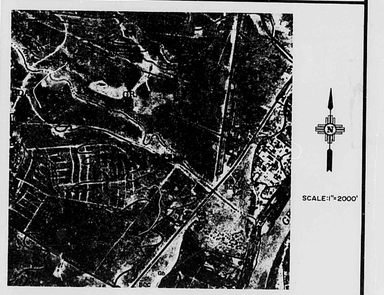
VICINITY MAP ZONE ATLAS MAP NO. B-13



FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.



SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.



TEXT

EXISTING

THE 4.2814 ACRE SITE IS LOCATED AT THE SOUTHWEST CORNER OF COORS BOULEVARD BY-PASS AND EAGLE RANCH ROAD, N.W. THE PROPERTY IS CURRENTLY UNDEVELOPED AND SLOPES DOWN FROM THE WEST TO THE EAST AT APPROXIMATELY 2%. THERE ARE EXISTING STORM DRAIN FACILITIES IN EAGLE RANCH ROAD ADJACENT TO THE PROPERTY.

PROPOSED

AN AUTO SALES AND SERVICE FACILITY IS PLANNED FOR THE SUBJECT PROPERTY. CONTROLLED RUNOFF TO PUBLIC RIGHT-OF-WAY WILL FLOW AT A RATE OF 1.9 CFS/ACRE, AS INDICATED IN THE AUTO PARK CONCEPTUAL GRADING, DRAINAGE AND UTILITY PLAN FOR SITE DEVELOPMENT PLAN, TRACT N-1 AND N-2 (NOW N-1A AND N-1B) BY ISSAACSON AND ARFMAN, OCTOBER 1988. SITE DRAINAGE WILL BE DETAINED IN THREE PONDING AREAS. PONDING IN AREAS A, B, AND C WILL BE COLLECTED IN CATCH BASINS AND 10" AND 12" PIPES TO AN EXISTING CATCH BASIN IN EAGLE RANCH ROAD. PONDING LEVELS IN INDIVIDUAL PONDS WILL BE CONTROLLED THROUGH THE USE OF ORIFICES AT THE OUTLETS (WITHIN THE CATCH BASIN). ALL OFFSITE FLOWS FROM THE WEST WILL BE CONTROLLED IN A TEMPORARY SWALE ALONG THE WEST PROPERTY LINE.

GENERAL NOTES FOR GRADING AND DRAINAGE

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION, EXCEPT FOR GENERAL CONDITIONS.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS 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.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
6. MAINTENANCE OF THE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
8. DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS SPECIFIED IN SECTION 8.14 OF THE GENERAL CONDITIONS IN THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION.
9. ALL CONCRETE DUMPSTER PADS SHALL BE SIX INCH REINFORCED CONCRETE (6"x6", 10 GA. W.W.M.).
10. OWNERSHIP OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF EASTERLING & ASSOCIATES, INC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF EASTERLING & ASSOCIATES, INC.
11. CONSTRUCTION SAFETY: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY.
12. EROSION CONTROL: THE SITE WILL BE FULLY DEVELOPED IMMEDIATELY. EROSION PROBLEMS GENERATED BY PHASED DEVELOPMENT WILL NOT, THEREFOR, BE A PROBLEM.
13. CONSTRUCTION PHASE: THE CONTRACTOR SHALL EXERCISE REASONABLE CARE DURING CONSTRUCTION TO PREVENT THE MOVEMENT OF DRIVING VEHICLES OFF SITE INTO THE STREET. LOOSE SOIL STOCKPILED IN THE STREET DURING UTILITY CONNECTION ACTIVITIES SHALL BE PROTECTED FROM BEING CARRIED DOWNSTREAM BY FLOWING WATER IN THE STREET.
14. ALL 10" AND 12" PVC DRAINAGE PIPE SHALL BE SCHEDULE 50.

PHASED CONSTRUCTION

EROSION CONTROL

IF ROUGH GRADING IS ANTICIPATED TO PROCEED FINAL CONSTRUCTION GRADING BY MORE THAN 30 DAYS, THE CONTRACTOR SHALL CONSTRUCT 2' HIGH BERMS ALONG THE PROJECT PERIMETER TO PREVENT RUNOFF AND WATER-BORN SEDIMENT FROM LEAVING THE SITE.

PRIOR TO ANY ONSITE CONSTRUCTION, CONTRACTOR SHALL CONSTRUCT A 2' HIGH WOOD PICKET DRIFT FENCE ON THE WEST AND SOUTH SIDES OF THE PROPERTY.

LEGEND

DESCRIPTION	NEW	EXISTING
CONTOURS	58	58
SPOT ELEVATION	⊗ 99.9	⊗ 99.9
DRAINAGE AREA BOUNDARY		
DRAINAGE DIVIDER		
WATER BLOCK		
DIRECTION OF FLOW		
ASPHALT PAVING	ASPHALT	ASPHALT
LANDSCAPING	L.S.	L.S.
RETAINING WALL		
BARBER WALL		
SWALE		
PROPERTY LINE		
FENCE		
CATCH BASIN		
STORM DRAIN MANHOLE AND LINE		
SANITARY SEWER MANHOLE AND LINE	S-S-S-	S-S-S-
FIRE HYDRANT AND WATER LINE		
REDUCERS		
WATER VALVES		
WATER CONNECTIONS		
WATER JOINTS		
CONCRETE		
GAS LINE		
UNDERGROUND TELEPHONE		
CABLE TELEVISION		
POWER/TELEPHONE POLE		
UNDERGROUND ELECTRICAL		
CURB ELEVATION		
HYDROLOGICAL ANALYSIS POINT		
DETAIL REFERENCE		
KEYED NOTES		
CITY ARD. DETAIL REFERENCE		
CURVE OR COORDINATE REFERENCE INFO		
PHASE BOUNDARY		

HYDROLOGY SEE SHEET 2 OF 2 FOR HYD. CALCS.

	A.P. NO.	D.A. AC.	H. FT.	S. FT/FT	L. FT.	T_c MIN.	SOIL TYPE	% IMP.	C.N.	C.	P_6 IN.	P_{10} IN.	P_{100} IN.	i_6 IN./HR.	i_{10} IN./HR.	i_{100} IN./HR.	VOL_{6} C.F.	VOL_{10} C.F.	VOL_{100} C.F.	Q_6 C.F.S.	Q_{10} C.F.S.	Q_{100} C.F.S.
OFFSITE TO SITE		6.9	N.A.	N.A.	N.A.	10	A	0	54	.40	.98	1.45	2.2	2.07	3.06	4.6	0	0	751	5.7	8.4	12.7
EXISTING		4.09						0	54	.40							0	0	445	3.4	5.0	7.5
DEVELOPED	A	3.01						80	89	.80							3,050	6,884	13,002	5.0	7.4	11.1
DEVELOPED	B	Q48						80	89	.80							488	1,098	2,073	80	1.2	1.8
DEVELOPED	C	0.60	↓	↓	↓	↓	↓	80	89	.80	↓	↓	↓	↓	↓	↓	610	1,372	2592	1	1.5	2.2
DEVELOPED TOTALS																	4,157	9,354	17,667	6.8	10.1	15.1

* OFFSITE Q_{100} TO ROAD = 10.6 CFS , VOL_{100} = 629 CF , STREET CAPACITY = 88 CFS.
* POND VOLUME PROVIDED = 5170 CF - REQUIRED = 4852 CF

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

SOIL SERIES AND MAP SYMBOLS	DEGREE AND KIND OF LIMITATIONS FOR					SUITABILITY AS SOURCE OF—				SOIL FEATURES AFFECTING—		HYDROLOGIC SOIL GROUP
	SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOONS	SHALLOW EXCAVATIONS	DWELLINGS WITHOUT BASEMENTS	SANITARY LANDFILL (TRENCH TYPE)	LOCAL ROAD AND STREETS	ROAD FILL	SAND	GRAVEL	TOPSOIL	POND RESERVOIR AREAS	DIKES, LEVEES, AND OTHER EMBANKMENTS	
*Bluepoint: Bb, BcA, BCC, BdD. For Wink part of BdD, see Wink series; for Kokan part of BKD, see Kokan series.	Slight if slope is 1 to 8 percent, moderate if 8 to 15.	Severe: seepage.	Severe: cut-banks cave.	Slight if slope is 1 to 8 percent, moderate if 8 to 15.	Moderate: too sandy.	Slight if slope is 1 to 8 percent, moderate if 8 to 15.	Good.....	Fair: excess fines.	Unsuited...	Poor: too sandy.	Seepage.....	Piping; seepage...	A

BCC—Bluepoint loamy fine sand, 1 to 9 percent slopes. This soil is nearly level to moderately sloping. It has the profile described as representative of the series, but on about 10 percent of the acreage the surface layer is sand. Included in mapping are areas of Madurez, Pajarito, and Wink soils, which make up about 15 percent of the unit.

Runoff is slow, and the hazard of soil blowing is severe.

This soil is used for range, watershed, wildlife habitat, recreation, and community development. Dryland capability subclass VIIe; native plant community 2.

LEGAL DISCRIPTION

TRACT N-1B-1 OF SEVEN BAR RANCH, TOWN OF ALAMEDA GRANT, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

BENCHMARK

ACS STA. BRASS CAP ATOP CONCRETE MONUMENT NM-448-N12, ELEV. 5023.41 LOCATED 550' SOUTH OF ℄ OF CORRALES RD. N.W. AND 60' WEST OF ℄ OF COORS RD. NW.

NO.	REVISIONS	BY	DATE

PITRE BUICK
GRADING AND DRAINAGE PLAN

CHARLES W. EASTERLING 6411 NEW MEXICO REGISTERED PROFESSIONAL ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque , New Mexico 87114

Designed: CME	Drawn: DEC	Checked: CME	Sheet 1
Job No: 2223	Date: 8-88		of 2

B-13/D003A

THIS PLAN SHOT TWICE ONCE ON LIGHT AND ONCE ON DARK.

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

R# 21 DATE 6-23-93 OP ETP
CITY OF ALBUQUERQUE

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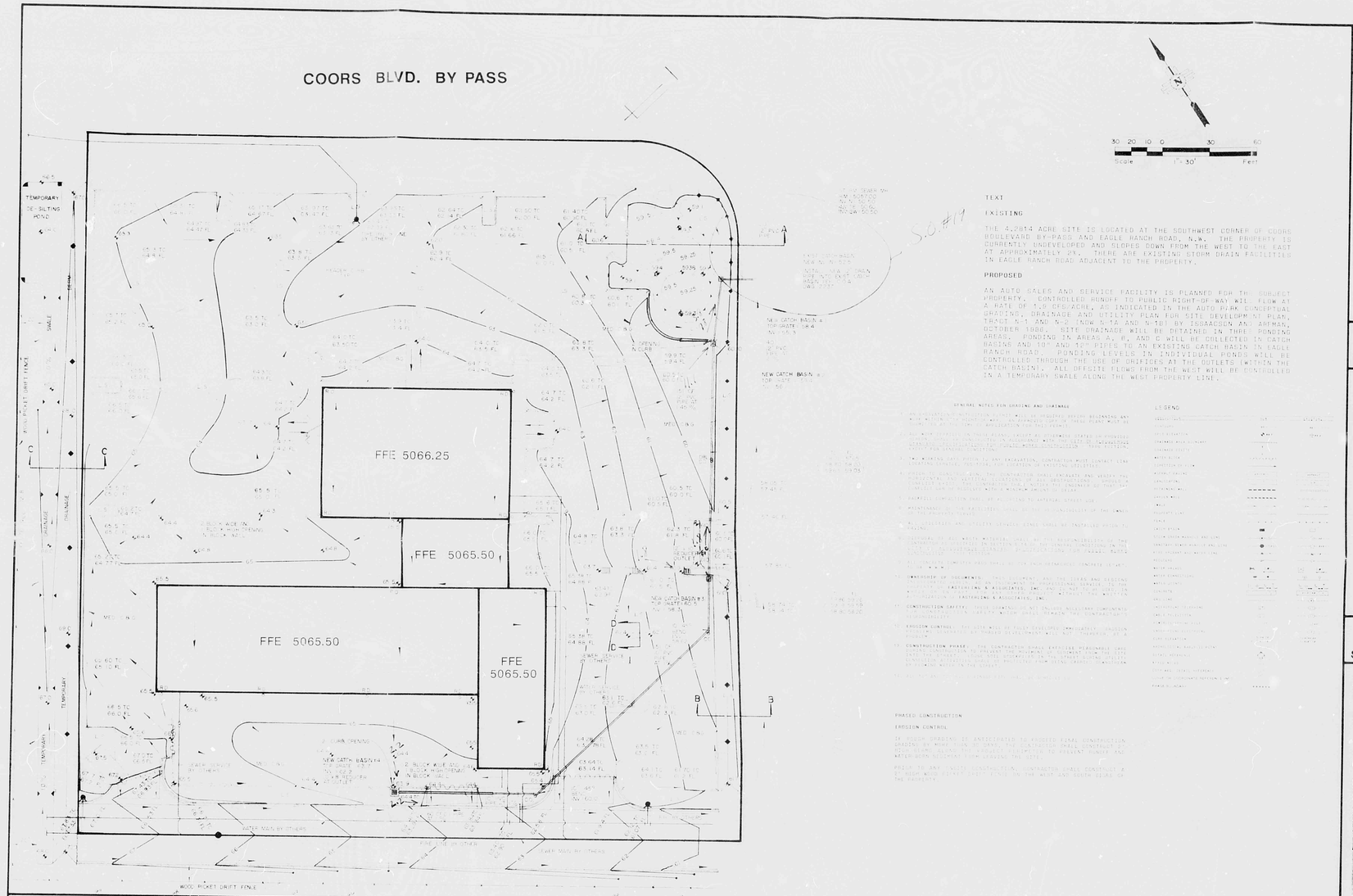
Karen Aaron
CITY CLERK RECORDER

OFFICIAL SEAL NORBERTA SANCHEZ NOTARY PUBLIC STATE OF NEW MEXICO My Commission Expires MAY 8 1995
Norberta Sanchez

D 24 C 20 B 16 A 12 | CITY OF ALBUQUERQUE C D



TEXT

EXISTING

THE 4.2814 ACRE SITE IS LOCATED AT THE SOUTHWEST CORNER OF COORS BOULEVARD BY-PASS AND EAGLE RANCH ROAD, N.W. THE PROPERTY IS CURRENTLY UNDEVELOPED AND SLOPES DOWN FROM THE WEST TO THE EAST AT APPROXIMATELY 2%. THERE ARE EXISTING STORM DRAIN FACILITIES IN EAGLE RANCH ROAD ADJACENT TO THE PROPERTY.

PROPOSED

AN AUTO SALES AND SERVICE FACILITY IS PLANNED FOR THE SUBJECT PROPERTY. CONTROLLED RUNOFF TO PUBLIC RIGHT-OF-WAY WILL FLOW AT A RATE OF 5.9 CFS/ACRE, AS INDICATED IN THE AUTO PARK CONCEPTUAL GRADING, DRAINAGE AND UTILITY PLAN FOR SITE DEVELOPMENT PLAN, TRACT N-1 AND N-2 (NOW N-1A AND N-1B) BY ISAACSON AND ARMAN, OCTOBER 1982. SITE DRAINAGE WILL BE DETAINED IN THREE PONDING AREAS. PONDING IN AREAS A, B, AND C WILL BE COLLECTED IN CATCH BASINS AND 18" AND 12" PIPES TO AN EXISTING CATCH BASIN IN EAGLE RANCH ROAD. PONDING LEVELS IN INDIVIDUAL PONDS WILL BE CONTROLLED THROUGH THE USE OF ORIFICES AT THE OUTLETS (WITHIN THE CATCH BASINS). ALL OFFSITE FLOWS FROM THE WEST WILL BE CONTROLLED IN A TEMPORARY SWALE ALONG THE WEST PROPERTY LINE.

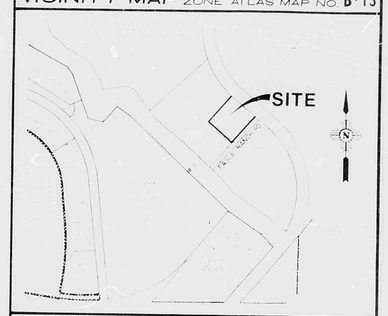
GENERAL NOTES FOR GRADING AND DRAINAGE

LEGEND

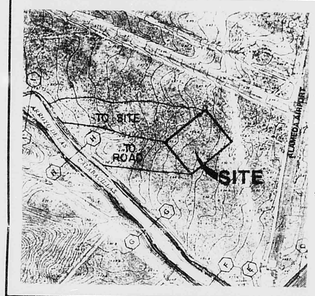
PHASED CONSTRUCTION

EROSION CONTROL

VICINITY MAP ZONE ATLAS MAP NO. B-13



FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.



SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.

HYDROLOGY SEE SHEET 2 OF 2 FOR HYD. CALCS.

	Δ P (in)	Q/A (cfs/ac)	H (ft)	S (ft/ft)	L (ft)	Tc (min)	SOIL TYPE	% (%)	CN	C	P5	P10	P100	Ya (in)	Yb (in)	Yc (in)	VOL100 (cf)	VOL100 (ac-ft)	Q5 (cfs)	Q100 (cfs)
OFFSITE ROUTE	6.5	N/A	N/A	N/A			A	0	54	40	1.96	2.45	2.27	3.05	4.16		0	0	7.6	5.7	8.4	2.7
EXISTING	4.9							0	54	40							0	0	4.5	3.4	5.0	7.5
DEVELOPED	A	3.0						80	89	80							3,159	0.884		7.4		
DEVELOPED	B	2.48						8	89	80							648	0.04	2.07A	8.0	1.2	8
DEVELOPED	C	0.7						12	89	80							610	0.37	0.9A		4	3.2
DEVELOPED TOTALS																	4,357	1.3	7	6.9	2	8

* OFFSITE FLOW TO ROAD = 10.6 CFS , VOL 100 = 629 CF , THEFT TARGET = 88 CFS
* POND VOLUME PROVIDED = 5170 CF , REQUIRED = 4,357 CF

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

SOIL SERIES AND MAP SYMBOLS	DEGREE AND KIND OF LIMITATIONS FOR: SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOONS	SHALLOW EXCAVATIONS	DWELLINGS WITHOUT BASEMENTS	SANITARY LANDFILL (TRENCH TYPE)	LOCAL ROADS AND STREETS	SUITABILITY AS SOURCE OF: ROAD FILL	SAND	GRAVEL	TOPSOIL	SOIL FEATURES AFFECTING: POND RESERVOIR AREAS	DIKES, LEVEES, AND OTHER EMBANKMENTS	HYDROLOGIC SOIL GROUP
BCC - Bluepoint loamy fine sand, 1 to 9 percent slopes. The soil is moderately deep to strongly sloping. It has the profile described as representative of the series, but up to 20 percent of the acreage the surface layer is sand. Included in mapping are areas of Madurez, Tejunite, and Wink soils, which make up about 15 percent of the unit. Runoff is slow to medium, and the hazard of soil loss is severe. Irrigated is used for range, watershed, wildlife habitat, recreation, and urban and industrial development. It is suitable for sidehill Ville native pasture grass.	Slight	Slight	Slight	Slight	Moderate (seepage)	Slight	Poor: too sandy	Fair: too sandy	Poor: too sandy	Poor: too sandy (small)	Rapid	Rapid	A

LEGAL DISCRIPTION

BENCHMARK

NO	REVISIONS	BY	DATE

PITRE BUICK

GRADING AND DRAINAGE PLAN

CHARLES M. EASTERLING NEW MEXICO 6411 REGISTERED PROFESSIONAL ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Engineer	Drawn	Checked	Sheet
CME	DEC	CME	1
Job No. 2223	Date 8-88		of 2

THIS PLAN SHOT TWICE ONCE ON LIGHT AND ONCE ON DARK.

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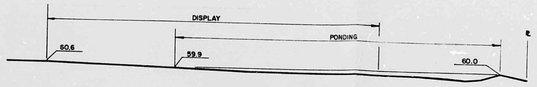
OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires

D 24 | C 20 | B 16 | A 12

CITY OF ALBUQUERQUE

C D



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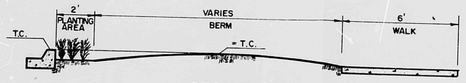
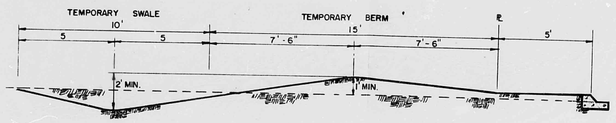


SECTION B-B



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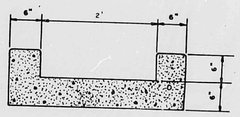

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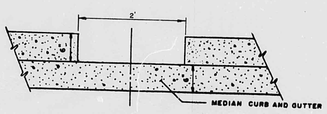
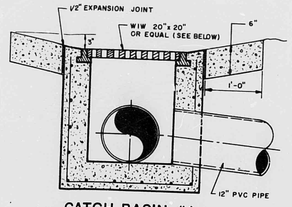
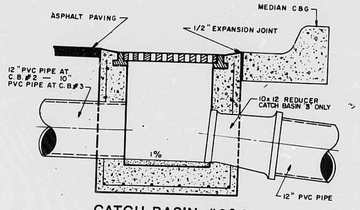


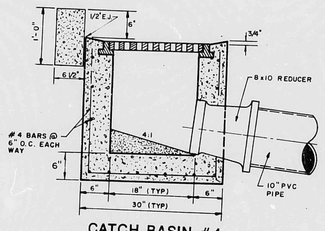
CURB OPENING



CATCH BASIN #1



CATCH BASIN #2&3



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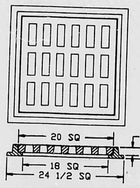
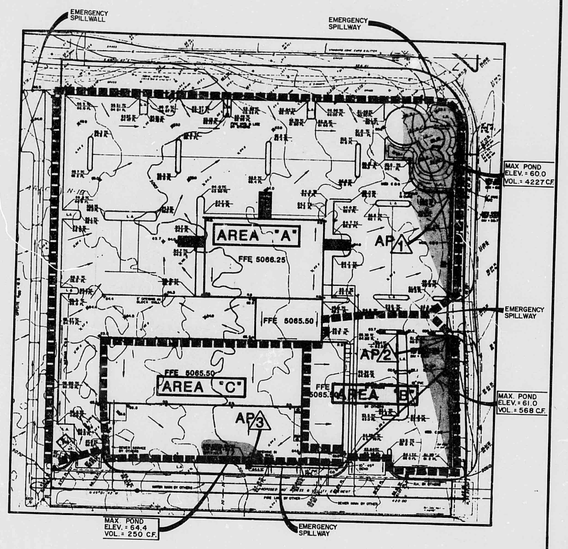


WESTER IRON WORKS
20" x 20" GRATE

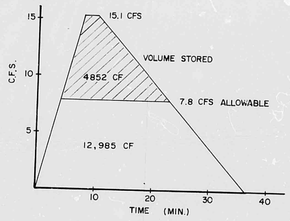
	CASTING	WEIGHT
GRATE	4133000	113 LBS
FRAME	4233000	111 LBS
SET		224 LBS

FRAME & GRATE



SYSTEM HYDRAULICS

Area	Q_{100}	V_{100}	Q_{OUT}	Pond Volume
A	11.1	1,3002	7.8	4,227
B	1.8	2,073	4.0	568
C	2.2	2,592	2.2	250
	15.1	17,667 ft^3		5,170 ft^3



POND VOLUME CALCULATIONS

A = 4.09 Acres i = 4.7 in./hr.

$C = \frac{[.9](35,850)+[.25](35,000)+[.95](107,310)}{178,160} = 0.80$

CN = 89 $V = \frac{178,160 \times 1.19}{12''/ft} = 17,667\ ft^3$

S = 1% L = 620' V = 1.35 ft/sec

$T_c = \frac{620}{1.35 \times 60} = 7.7$ min.

Q = (0.80)(4.7)(4.09) = 15.4 cfs

Allowable Discharge = 4.09 ac x 1.9 cfs/ac = 7.8 cfs

Required Ponding = 4,852 ft^3

CATCH BASIN HYDRAULICS

	H	Q	Orifice
CB #1	4.1	7.8	12"
CB #2	3.3	7.8	12"
CB #3	2.2	4.0	10"
CB #4	2.9	2.2	8"

NO.	REVISIONS	BY	DATE

PITRE BUICK
GRADING AND DRAINAGE PLAN DETAILS

CHARLES M. EASTERLING NEW MEXICO 6411 REGISTERED PROFESSIONAL ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed	Drawn	Checked	Sheet
CME	DEC	CME	2
Job No. 2223	Date 8-88		of 2

B-13/D003A

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ONCE ON LIGHT AND
ONCE ON DARK.

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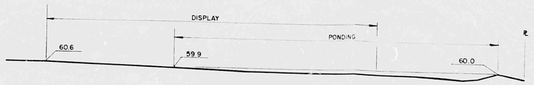
Karen Aiuwi
CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commision Expires: MAY 8 1995
Norberta Sanchez

D 24 | C 20 | B 16 | A 12

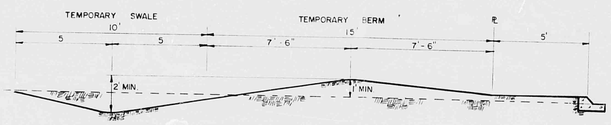
CITY OF ALBUQUERQUE

C D



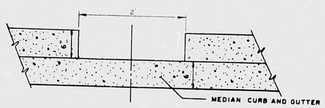
SECTION A-A

SECTION B-B



SECTION C-C

SECTION D-D



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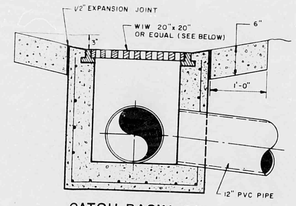
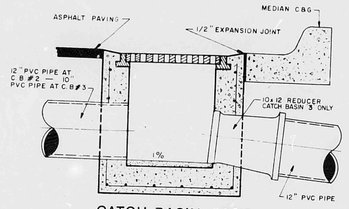
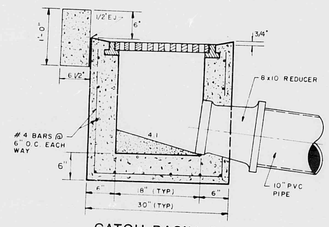


CATCH BASIN #1



CATCH BASIN #2&3



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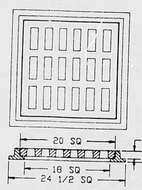
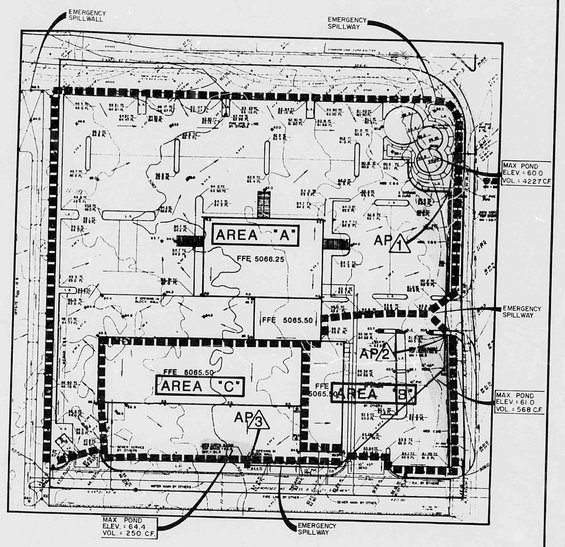


WESTER IRON WORKS
20" x 20" GRATE

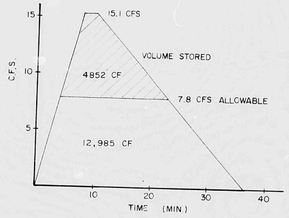
	CASTING	WEIGHT
GRATE	4133000	113 LBS
FRAME	4233000	111 LBS
SET		224 LBS

FRAME & GRATE



SYSTEM HYDRAULICS

Area	Q_{100}	V_{100}	Q_{OUT}	Pond Volume
A	11.1	1,300	7.8	4,227
B	1.8	2,073	4.0	568
C	2.2	2,592	2.2	250
	15.1	17,667 ft^3		5,170 ft^3



POND VOLUME CALCULATIONS

A = 4.09 Acres i = 4.7 in./hr.

$C = \frac{(.9)(35,850)+(.25)(35,000)+(.95)(107,310)}{178,160} = 0.80$

$Cn = 89$ $V = \frac{178,160 \times 1.19}{12''/ft} = 17,667\ ft^3$

$S = 1\%$ $L = 620'$ $V = 1.35\ ft/sec$

$T_c = \frac{620}{1.35 \times 60} = 7.7$ min.

$Q = (0.80)(4.7)(4.09) = 15.4$ cfs

Allowable Discharge = 4.09 ac x 1.9 cfs/ac = 7.8 cfs

Required Ponding = 4,852 ft^3

CATCH BASIN HYDRAULICS

	H	Q	Orifice
CB #1	4.1	7.8	12"
CB #2	3.3	7.8	12"
CB #3	2.2	4.0	10"
CB #4	2.9	2.2	8"

No.	REVISION	BY	DATE

PITRE BUICK
GRADING AND DRAINAGE PLAN DETAILS

CHARLES M. EASTERLING NEW MEXICO 6411 REGISTERED PROFESSIONAL ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5043 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

DESIGNED	DRAWN	REVIEWED	Sheet
CME	DEC	CME	2
JOB No.	DATE		of
2223	8-88		2

B-13/D&C 3A

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CITY OF ALBUQUERQUE

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CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires May 8, 1992

D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

C D