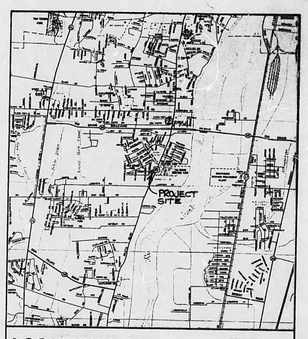
Hydrology File No. P-12/D003 1 of 1

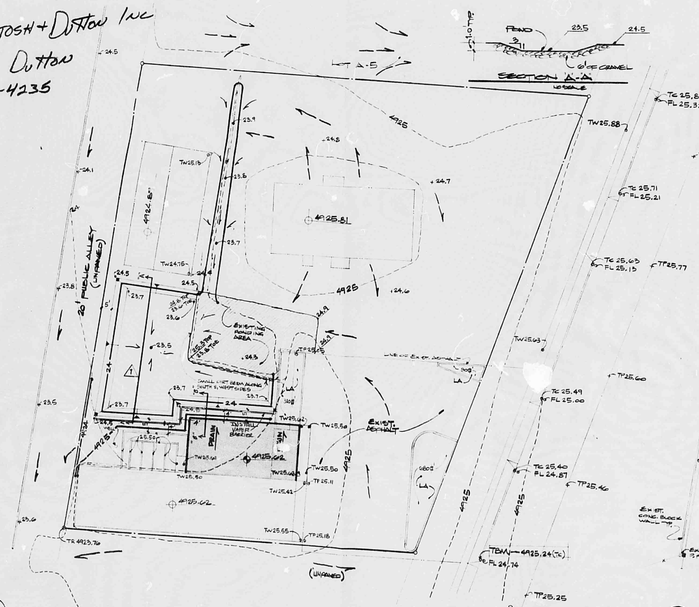
ADDITION TO COLE VETERINARY HOSPITAL

4021 ISLETA BLVD. S.W.
BERNALILLO, CO. N.M.

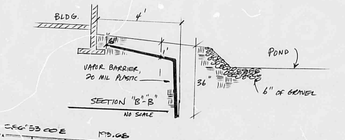
McINTOSH + DUTTON INC
ERIC DUTTON
345-4235

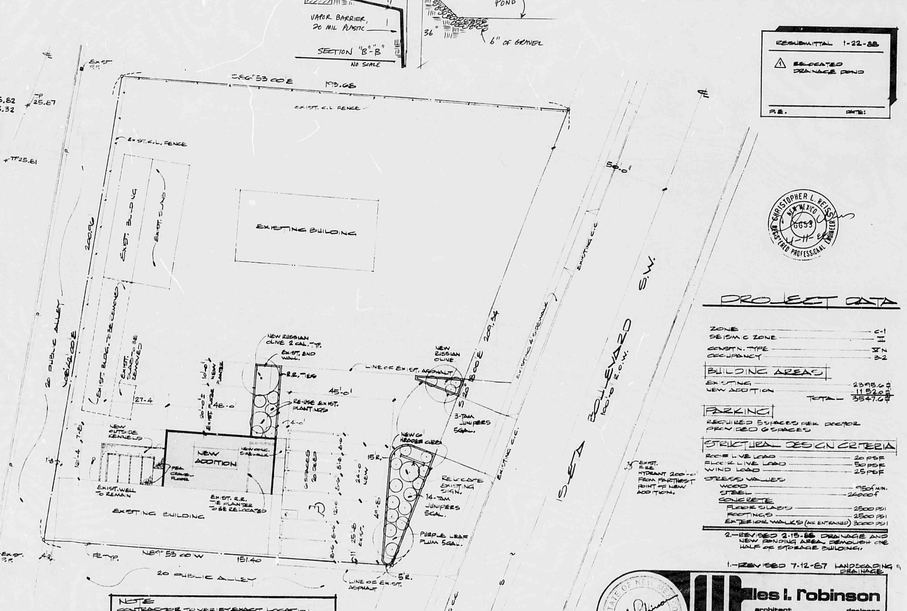


LOCATION PLAN NO SCALE



GRADING PLAN 1"=20'-0"





SITE PLAN 1"=20'-0"

LEGEND

- 4925 - EXISTING GRADE LINES
- 6445 EXISTING SPOT GRADES
- +34.6 EXISTING SPOT GRADES (DIRT)
- EXISTING FLOOR ELEVATIONS
- NEW FLOOR ELEVATION
- NEW GRADE LINES
- FL FLOW LINE
- TW TOP OF WALL
- TC TOP OF CURB
- TP TOP OF PARKING
- PROPOSED NEW PARKING AREA (TYPICAL)
- SURFACE FLOW DIRECTION
- PROPOSED CONTOUR

RESUBMITTAL 1-22-88
REVISED DRAINAGE POND
NO. DATE

PROJECT DATA

ZONE	C-1
SPECIAL ZONE	—
CONSTR. TYPE	V-N
OCCUPANCY	B-2
BUILDING AREAS	
EXISTING	2398.00
NEW ADDITION	1186.00
TOTAL	3584.00
PARKING	
REQUIRED SPACES PER ORDINANCE PER CBO GUIDANCE	
STRUCTURAL DESIGN CRITERIA	
SNOW LIVE LOAD	20 PSF
FLOOR LIVE LOAD	50 PSF
WIND LOAD	25 PSF
OTHER VALUES	
WOOD	750 psi
STEEL	24000 f
CONCRETE	
FLOOR SLABS	2500 PSI
FOOTINGS	2500 PSI
EXTERIOR WALKS (NO EXPANSION)	3000 PSI

2-REVISED 2-15-88 DRAINAGE AND NEW PARKING AREA DENOTED ON THE HALF OF ENTRANCE BUILDING.
1-REVISED 7-12-87 LANDSCAPING REVISED

ZONE ATLAS REF. P-12

Miles I. Robinson
architect designer
3420 Cuerno N.E.
albuquerque, n.m. 87110

ADDITION to COLE VET HOSPITAL
4021 ISLETA BLVD S.W. BERNALILLO CO.

job no.	issued	sheet
8640	31 MARCH 87	A1
drawn by HJE	checked by HJE	

REF 22 DATE 6-25-93 OPR
CITY OF ALBUQUERQUE
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CITY CLERK RECORDER
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My Commission Expires 11/14/ 1988
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: P-12/D003
PLANS/PLATS 2

F 30 D 24 C 20 B 16 A 12

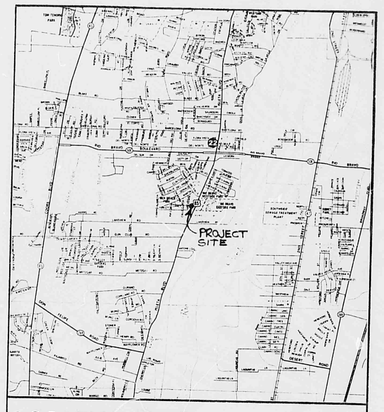
CITY OF ALBUQUERQUE

C D F

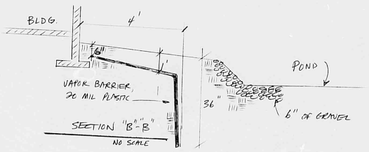
ADDITION TO COLE VETERINARY HOSPITAL

4021 ISLETA BLVD. S.W.
BERNALILLO, CO. N.M.

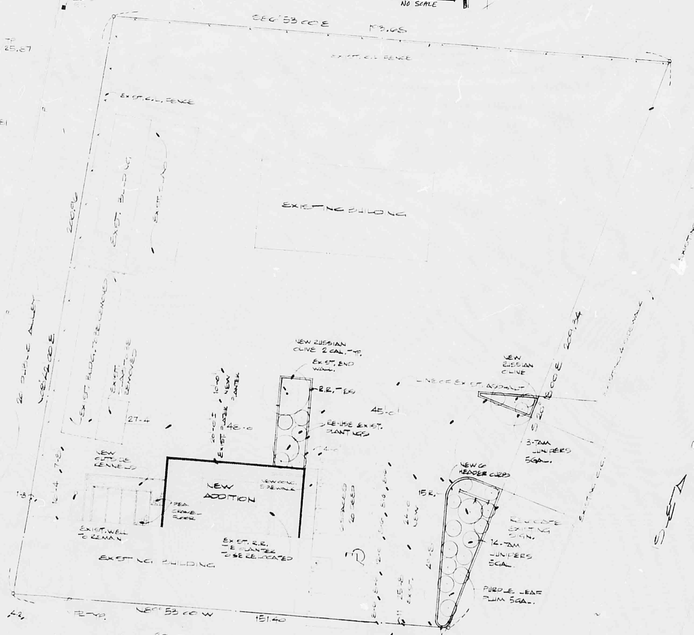
McINTOSH + DUTTON INC
ERIC DUTTON
346-4235



LOCATION PLAN NO SCALE



GRADING PLAN



SITE PLAN

NOTE
CONTRACTOR TO VERIFY EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO PROCEEDING WITH NEW WORK

PROJECT DATA

ZONE	C-1
SEISMIC ZONE	1
OCCUPANCY TYPE	B-1
OCCUPANCY	52
BUILDING AREAS	
EXISTING	2,775 SQ.FT.
NEW ADDITION	11,540 SQ.FT.
TOTAL	14,315 SQ.FT.
PARKING	
REQUIRED PARKING PER ZONING ORDINANCE	
STRUCTURAL DESIGN CRITERIA	
EXTERIOR WALLS	2 HR RATED
ROOF	1 HR RATED
UTILITIES VARIES	
WOOD	1 HR RATED
STEEL	
COLUMNS	2 HR RATED
BEAMS	2 HR RATED
EXTERIOR WALLS (NON BEARING)	2 HR RATED

2-REVISED 2-15-88 DRAINAGE AND NEW PARKING AREA REMOVED - NEW ADDITION REDUCED

1-REVISED 7-12-87 LANDSCAPING REMOVED

Charles I. Robinson
architect designer
3420 cuervo n.e.
albuquerque, n.m. 87110

ADDITION - COLE VET HOSPITAL
4021 ISLETA BLVD S.W. BERNALILLO CO.

job no.	issued	sheet
8620	31 MARCH 87	A1
drawn by TE	checked by TE	

ZONE ATLAS NO. E-12

REVISION FEB 1-22-88.
1 REVISED DRAINAGE PLAN
B.E. DATE:

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

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REF 22 DATE 2-25-88 OP

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Karen Aiken
CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 11/14/88

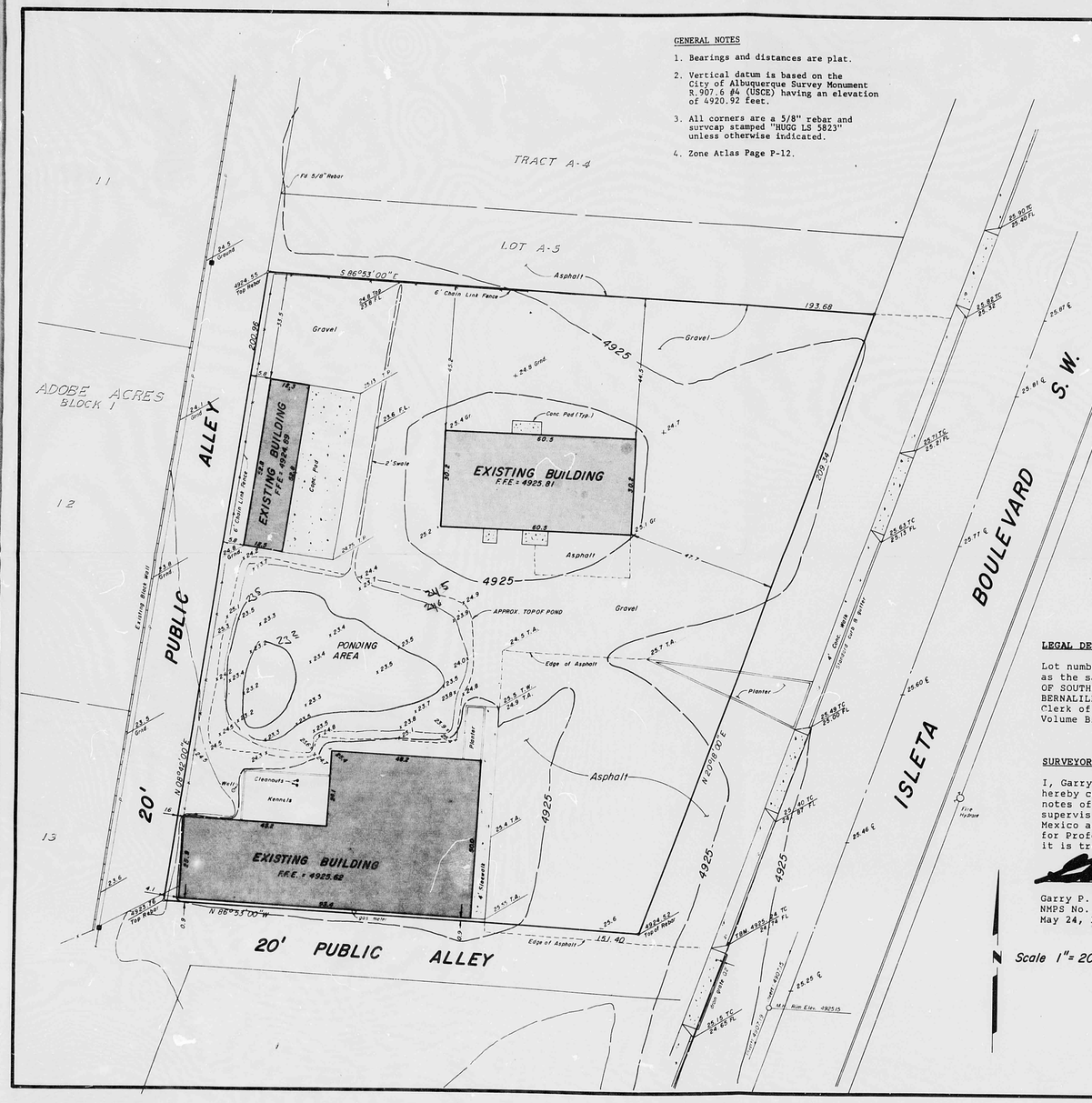
Norberta Sanchez

D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

C D

P12/D2



GENERAL NOTES

1. Bearings and distances are plat.
2. Vertical datum is based on the City of Albuquerque Survey Monument R.907.6 #4 (USCE) having an elevation of 4920.92 feet.
3. All corners are a 5/8" rebar and survcap stamped "HUGG LS 5823" unless otherwise indicated.
4. Zone Atlas Page P-12.

ASBUILT SURVEY
LOT A-6 , BLOCK A
ADOBE ACRES
BERNALILLO COUNTY , NEW MEXICO

MAY, 1988

As-Built Pond Vol.

Elev	Area	Avg	Vol
24 S	4200 ft²	> 3867 S	1934 ft³
24 U	3535	> 2822 S	1411 ft³
23 S	2110	> 1235 U	370 ft³
23 U	360		

Σ = 3716 ft³
> 3433 req'd

REVISED JUNE 30, 1988
To reflect changes in ponding area

*** 2nd REVISION AUGUST 1, 1988 TO REFLECT ADDITIONAL CHANGES TO PONDING AREA.**

LEGAL DESCRIPTION

Lot numbered A-6, in Block numbered One (1), Adobe Acres Unit 1, as the same is shown and designated on the plat entitled "REPLAT OF SOUTHERLY PORTION OF LOT "A", BLOCK 1, ADOBE ACRES UNIT 1, BERNALILLO COUNTY, NEW MEXICO", filed in the office of the County Clerk of Bernalillo County, New Mexico, on October 25, 1979, in Volume B17, folio 43.

SURVEYORS CERTIFICATION

I, Garry P. Hugg, New Mexico Professional Surveyor Number 5823, hereby certify that this plat of survey was prepared from field notes of an actual topographic survey performed by me or under my supervision; That it meets the Standards for Land Surveys in New Mexico as adopted by the New Mexico State Board of Registration for Professional Engineers and Professional Surveyors; and that it is true and correct to the best of my knowledge and belief.

Garry P. Hugg
NMPS No. 5823
May 24, 1988

RECEIVED AUG 08 1988 HYDROLOGY SECTION

REGISTERED LAND SURVEYOR STATE OF NEW MEXICO No. 5823 GARRY P. HUGG

hugg surveying co.
1701 Grande S.E. Rio Rancho, New Mexico 87124 Phone (505) 892 8800

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

CITY OF ALBUQUERQUE
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R# 22 DATE 6-28-93 OP

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 1995

C 20 B 16 A 12

CITY OF ALBUQUERQUE

C B A

P12/D2

GENERAL NOTES

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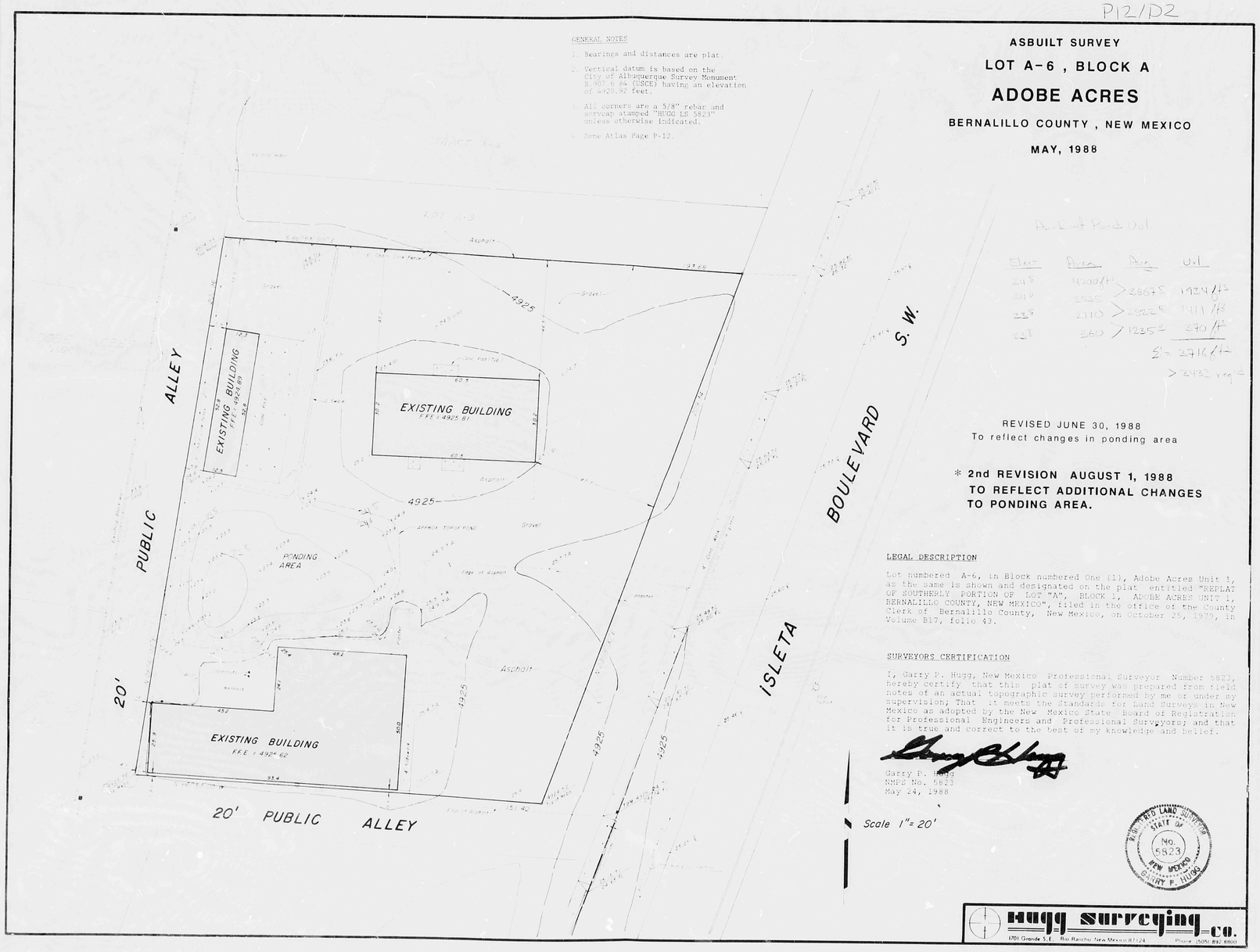
3. All corners are a 5/8" rebar and survcap stamped "HUGG LS 5823" unless otherwise indicated.
4. Zone Atlas Page P-12.



ASBUILT SURVEY

LOT A-6 , BLOCK A

ADOBE ACRES

BERNALILLO COUNTY , NEW MEXICO

MAY, 1988

Asbuilt Pond Vol

Elev	Area	Avg	Vol
21.5	4200 ft²		
		> 3867 ft²	1934 ft³
21.9	3535		
		> 2822 ft²	1411 ft³
22.5	2110		
		> 1235 ft²	590 ft³
23.5	360		

S = 3916 ft³

> 3432 req'd

REVISED JUNE 30, 1988
To reflect changes in ponding area

* 2nd REVISION AUGUST 1, 1988
TO REFLECT ADDITIONAL CHANGES
TO PONDING AREA.

LEGAL DESCRIPTION

Lot numbered A-6, in Block numbered One (1), Adobe Acres Unit 1, as the same is shown and designated on the plat entitled "REPLAT OF SOUTHERLY PORTION OF LOT "A5", BLOCK 1, ADOBE ACRES UNIT 1, BERNALILLO COUNTY, NEW MEXICO", filed in the office of the County Clerk of Bernalillo County, New Mexico, on October 25, 1979, in Volume B17, folio 43.

SURVEYORS CERTIFICATION

I, Garry P. Hugg, New Mexico Professional Surveyor Number 5823, hereby certify that this plat of survey was prepared from field notes of an actual topographic survey performed by me or under my supervision; That it meets the Standards for Land Surveys in New Mexico as adopted by the New Mexico State Board of Registration for Professional Engineers and Professional Surveyors; and that it is true and correct to the best of my knowledge and belief.

Garry P. Hugg
NMPS No. 5823
May 24, 1988

Scale 1"= 20'

REGISTERED LAND SURVEYOR STATE OF NEW MEXICO No. 5823 GARRY P. HUGG

hugg surveying co.
1701 Grande S.E. Rio Rancho New Mexico 87124 Phone (505) 892-8800

THIS PLAN SHOT TWICE
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ONCE ON DARK.

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R# 22 DATE 6-3-93 OP

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 1995

C 20 B 16 A 12

CITY OF ALBUQUERQUE

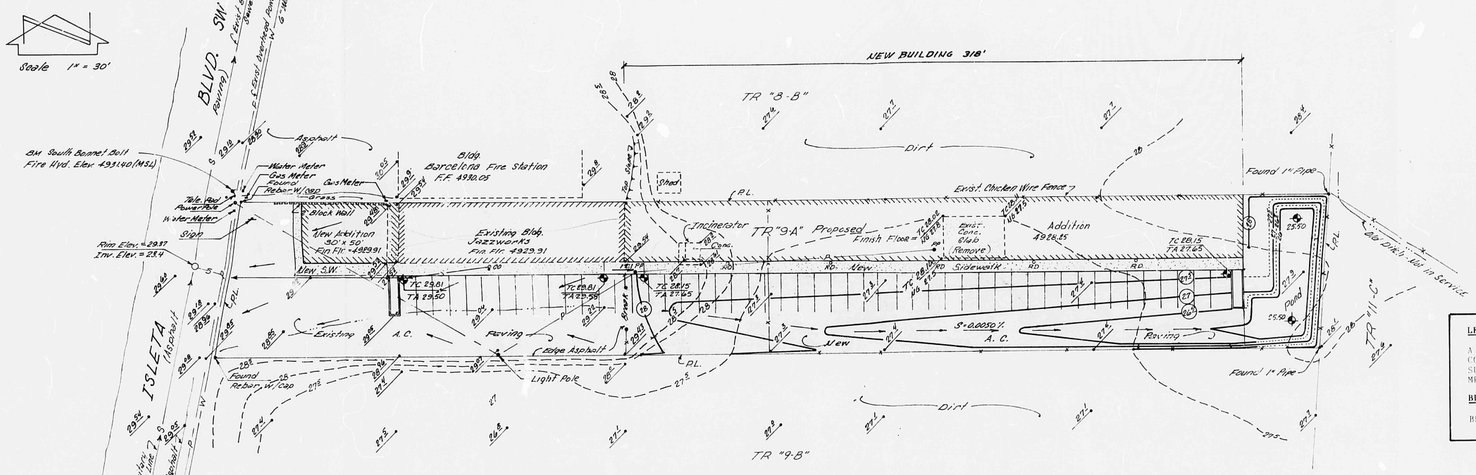
C

HYDROLOGY N12/D2 1 PLAN

N12/D2

1 Plan

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



VICINITY MAP - ZONE ATLAS PAGE NO. N-12-Z

LEGAL DESCRIPTION:

A CERTAIN TRACT OR PARCEL OF LAND LOCATED WITHIN BERNALILLO COUNTY, NEW MEXICO, BEING AND COMPRISING TRACT "9-A" , A.F.C. SUBDIVISION NUMBER 1, A SUBDIVISION OF BERNALILLO COUNTY, NEW MEXICO.

BENCH MARK:

BENCH MARKS ARE AS SHOWN ON THE PLAN HEREON.

GRADING & DRAINAGE PLAN

LEGEND:

DESCRIPTION	EXISTING	NEW
FLOW DIRECTION	←	→
CONTOUR	— — —	———
SPOT ELEVATION	•——	✧
PROPERTY LINE	As Noted	
ROOF DRAIN	RD	
SEWER LINE	—S—	
WATER LINE	—W—	

TA TOP OF ASPHALT
TC TOP OF CONCRETE
NG NATURAL GROUND

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 765-1234 FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL 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 APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN BERNALILLO COUNTY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE BERNALILLO COUNTY STANDARDS AND PROCEDURES.

GENERAL NOTES:

1. NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD WITHIN THE SUBJECT PROPERTY OTHER THAN ON THE MAP HEREON.
2. WATER LINE INFORMATION FURNISHED BY CITY ENGINEER'S OFFICE CITY OF ALBUQUERQUE, NEW MEXICO, AND FIELD SURVEY DATA.

NOTE: THERE IS NO INCREASE IN RUNOFF FOR THE BUILDING ADDITION ON THE WEST END OF THE EXISTING BUILDING SINCE THE AREA IS NOW PAVED. THEREFORE, THE RUNOFF WILL BE DISCHARGED DIRECTLY TO ISLETA BLVD. AS THE PRESENT RUNOFF DOES.

DRAINAGE CALCULATIONS & COMMENTS

I. REFERENCES:

A. City of Albuquerque Development Process Manual (DPM) Volume 2, Design Criteria, Chapter 22, Drainage, Flood Control and Erosion Control.

B. Soil Survey of Bernalillo County and Parts of Sandoval and Valencia Counties, New Mexico, United States Department of Agriculture, Soil Conservation Service.

II. GENERAL INFORMATION:

A. Soil type (Ref.B., Sheet No. 40) Soil type isGd, Gila loam moderate alkali, or Gm, Glendale clay loam; Both are hydrologic soil group "B".

B. Imperviousness:

Type of Surface	Existing Area Sq.Ft.	Existing Area Acres	Proposed Area Sq.Ft.	Proposed Area Acres
Building roof	3712		13912	
Concrete Surfaces	905		2249	
Asphalt Surfaces	12204		25077	
Landscaping			3239	
Undeveloped surface	27566			
Site total	44477	1.0211	44477	1.0211
Percent impervious		0.38%		0.93%

C. "C" Factor (See Ref. A., Plate 22.2 C-1)
1. Undeveloped "C" Factor = 0.52
2. Developed "C" Factor = 0.90

D. Rainfall, 100-year, 6-hour, R_6: (See Ref.A., Plate 22.2 D-1) $R_6 = 2.25$

E. Time of Consentration, T_c:By Kirpich Equation.

$T_c = 0.0078\ (L^{0.77}/S^{0.385})$ $L = (79' + 363')^1 = 371FT$

$S = (29.85 - 28)/371 = 0.005$

$T_c = 0.0078(371^{0.77}/0.005^{0.385}) = 5.7$ min. ; use 10min.

F. Rainfall Intensity, I: (See Ref. A, Plate 22.2 D-2)

$I = R_6 \times 6.84 \times T_c^{-0.51} = 2.25 \times 6.84 \times (10)^{-0.51}$

$I = 4.76$ inches per hour.

III. PEAK DISCHARGE:

A. Existing conditions. (Use Rational Equation)

$Q_{100} = 0.52 \times 4.76 \times 1.0211 = 2.53$ cfs

$Q_{10} = 0.657 \times 2.53 = 1.66$ cfs

B. Developed conditions.

$Q_{100} = 0.90 \times 4.76 \times 1.0211 = 4.37$ cfs

$Q_{10} = 0.657 \times 4.37 = 2.87$ cfs

VI. PEAK VOLUME:

A. Existing conditions.

$V_{100} = 0.52\ (2.25/12)44,477 = 4337$ cf

$V_{10} = 0.657 \times 4337 = 2849$ cf

B. Developed conditions.

$V_{100} = 0.90(2.25/12)44,477 = 7505$ cf

$V_{10} = 0.657 \times 7505 = 4931$ cf

V. REQUIRED POND VOLUME:

Total displacement of new facilities	3139 cf
Total excavation for pond and parking	6844 cf
Net increase in capacity to retain flood water	3705 cf
Increase in runoff volume due to development	3168 cf
Excess Volume	537 cf

DRAINAGE COMMENTS:

1. THE EXISTING PAVED AREA AND BUILDING DRAIN TOWARD ISLETA BOULEVARD. NO ATTEMPT WILL BE MADE TO CHANGE THIS PATTERN.
2. THE PROPOSED BUILDING AND PARKING, EVERYTHING EAST OF THE EXISTING BUILDING, WILL DRAIN TO A POND AT THE EAST END OF THE LOT.
3. THE SITE LIES WITHIN A FLOOD HAZARD AREA. THE FLOOD INSURANCE RATE MAP SHOWS THE AREA AS ZONE AH; HIGH WATER LEVEL ELEVATION IS 4928. (AH - AREAS OF 100-YEAR SHALLOW FLOODING WHERE DEPTHS ARE BETWEEN ONE(1) AND THREE (3) FEET; BASE FLOOD ELEVATIONS ARE SHOWN, BUT NO FLOOD HAZARD FACTORS ARE DETERMINED.)
4. THE FINISHED FLOOR ELEVATION OF THE PROPOSED BUILDING IS SET THREE (3) INCHES ABOVE THE FLOOD LEVEL SHOWN ON THE FIRM MAP.
5. TO AVOID INCREASING THE DEPTH OF EXISTING FLOOD ZONE, THE VOLUME OF WATER GENERATED BY THE PROPOSED DEVELOPMENT PLUS THE VOLUME OF DISPLACEMENT OF THE PROPOSED FACILITIES, MUST BE OFF-SET BY AN EQUAL OR GREATER AMOUNT OF EARTH REMOVAL FOR PARKING AND POND.
6. THE PROPOSED BUILDING WILL BE REQUIRED TO DRAIN TOWARD THE SOUTHERLY FACE. THE CONCRETE SIDEWALK SHOWN WILL BE COVERED BY ROOF OVERHANG.
7. OFF-SITE FLOWS ARE ACCEPTED.
8. THE TEN (10) YEAR STORM WILL BE CONTAINED WITHIN THE 27.5 CONTOUR LINE.

RECEIVED NOV 12 1985 HYDROLOGY SECTION

REVISED NOV. 11, 1985

2/8/85

GRADING & DRAINAGE PLAN
FOR
ISLETA PLAZA - DON MAESTAS COMMERCIAL PROPERTY
3248 Isleta Blvd. S.W.
Bernalillo County New Mexico

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D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

C D