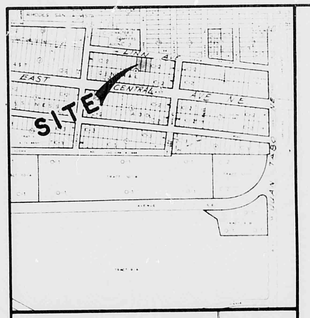
PUBLIC WORKS/HYDROLOGY

L21/D26

SITE
EAST CENTRAL AVE. S.E.
LINN AVE.
C-1
O-1
C-2
TRACT "D"
TRACT "E"
TRACT "F"
TRACT "G"
TRACT "H"
TRACT "I"
TRACT "J"
TRACT "K"
TRACT "L"
TRACT "M"
TRACT "N"
TRACT "O"
TRACT "P"
TRACT "Q"
TRACT "R"
TRACT "S"
TRACT "T"
TRACT "U"
TRACT "V"
TRACT "W"
TRACT "X"
TRACT "Y"
TRACT "Z"
AVENUE
S.E.
S.E.
S.E.

C B A



VICINITY MAP | L-21-Z

N

SCALE 1"=30'

PLAT
OF
TRACT "D", BLOCK 4
EAST CENTRAL BUSINESS ADDITION
BEING A REPLAT OF LOTS 24, 25 & 26

SECTION 28 T. 10 N., N., R. 4 E., N. M. P. M.

ALBUQUERQUE, NEW MEXICO

SEPTEMBER, 1985

RECEIVED SEP 18 1985 HYDROLOGY SECTION

4:15 p

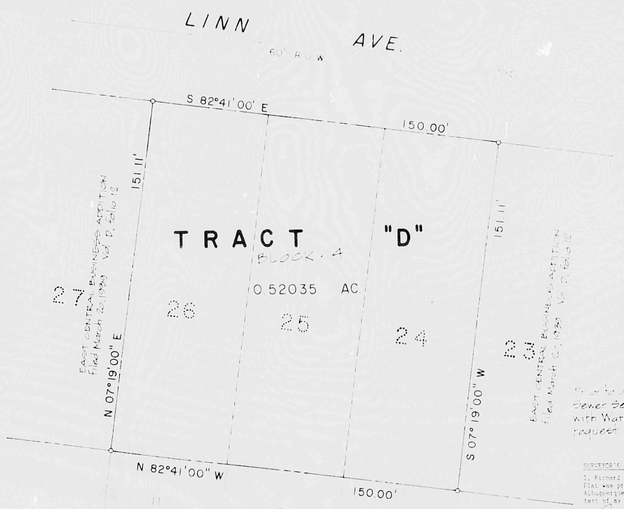
A certain tract of land situate in the City of Albuquerque, New Mexico being and comprising of Lots 24, 25 and 26, Block 4 of the East Central Business Addition as the same is shown and designated on the Plat thereof, filed in the office of the County Clerk of Bernalillo County, New Mexico on March 20, 1939, Book D-12, now comprising of Tract "D" and being more particularly described by metes and bounds as follows:

BEGINNING at the southwesterly corner of the tract herein described and running:

THENCE; N 07° 19' 00" E, a distance of 151.11 feet;
THENCE; S 82° 41' 00" E, a distance of 150.00 feet along the southerly right-of-way line of Linn Avenue;
THENCE; S 07° 19' 00" W, a distance of 151.11 feet;
THENCE; N 82° 41' 00" W, a distance of 150.00 feet along the northerly right-of-way line of East Central Avenue to the point of beginning and containing 0.52035 acres more or less.

the purpose of this plat is to vacate lot lines to create one tract.

BASIS OF BEARINGS is the Plat of East Central Business Addition filed in the office of the County Clerk of Bernalillo County, New Mexico on March 20th, 1939, Book D-12.



SP-85-384 DRB-85-625

CHAIRMAN, PLANNING DIRECTOR — DATE 9-10-85
CHIEF CITY SURVEYOR — DATE 091005
CITY ENGINEER — DATE 9-10-85
WATER RESOURCES — DATE
TRANSPORTATION — DATE 9-10-85
PARKS & RECREATION — DATE 9-10-85
PROPERTY MANAGEMENT — DATE 9-10-85
PUBLIC WORKS — DATE 9/10/85

For this development City of Albuquerque Water and Sanitary Sewer service is the responsibility of the developer. Water and Sanitary Sewer service must be verified and coordinated with Water Utilities Department, City of Albuquerque prior to request for a building permit or any other development application statement.

SURVEYOR'S CERTIFICATE

I, Richard V. Hall, New Mexico Registered Land Surveyor No. 7064, do hereby certify that this Plat was prepared by me or under my supervision, meets the minimum requirements of the Albuquerque Subdivision Ordinance, shows all easements of record, and is true and correct to the best of my knowledge and belief.

Richard V. Hall
N. MEXICO REGISTERED LAND SURVEYOR NO. 7064

FREE CONSENT AND DEDICATION:

The undersigned Owner(s) and Proprietor(s) of the property described hereon, do hereby consent to the replatting of said property as shown on the Plat, and the same is with their free consent and in accordance with their desires.

LEROY R. PETERSEN, PRESIDENT / SOUTHWESTERN ENTERPRISES

ACKNOWLEDGMENT
STATE OF NEW MEXICO)ss
COUNTY OF BERNALILLO)
On this 28 day of August, 1985 the foregoing instrument was acknowledged before me by LEROY R. PETERSEN. My commission expires 6-27-88
Jane Hudson
NOTARY PUBLIC

ACKNOWLEDGMENT
STATE OF NEW MEXICO)ss
COUNTY OF BERNALILLO)
On this 28th day of August, 1985 the foregoing instrument was acknowledged before me by Richard Hall. My commission expires 6-27-88
Jane Hudson
NOTARY PUBLIC

6-27-88

6-27-88

HALL ENGINEERING COMPANY INC.
337 EUBANK N.E., SUITE 103
ALBUQUERQUE, NEW MEXICO 87123
Phones: (505) 292-1115 & 292-1116

PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

CITY OF ALBUQUERQUE
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R# 28 DATE 3-27-02 OP EZP

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The photographic process used meets the Basic Microfilm Standards of the National Micrographics Association (MS16-1977)

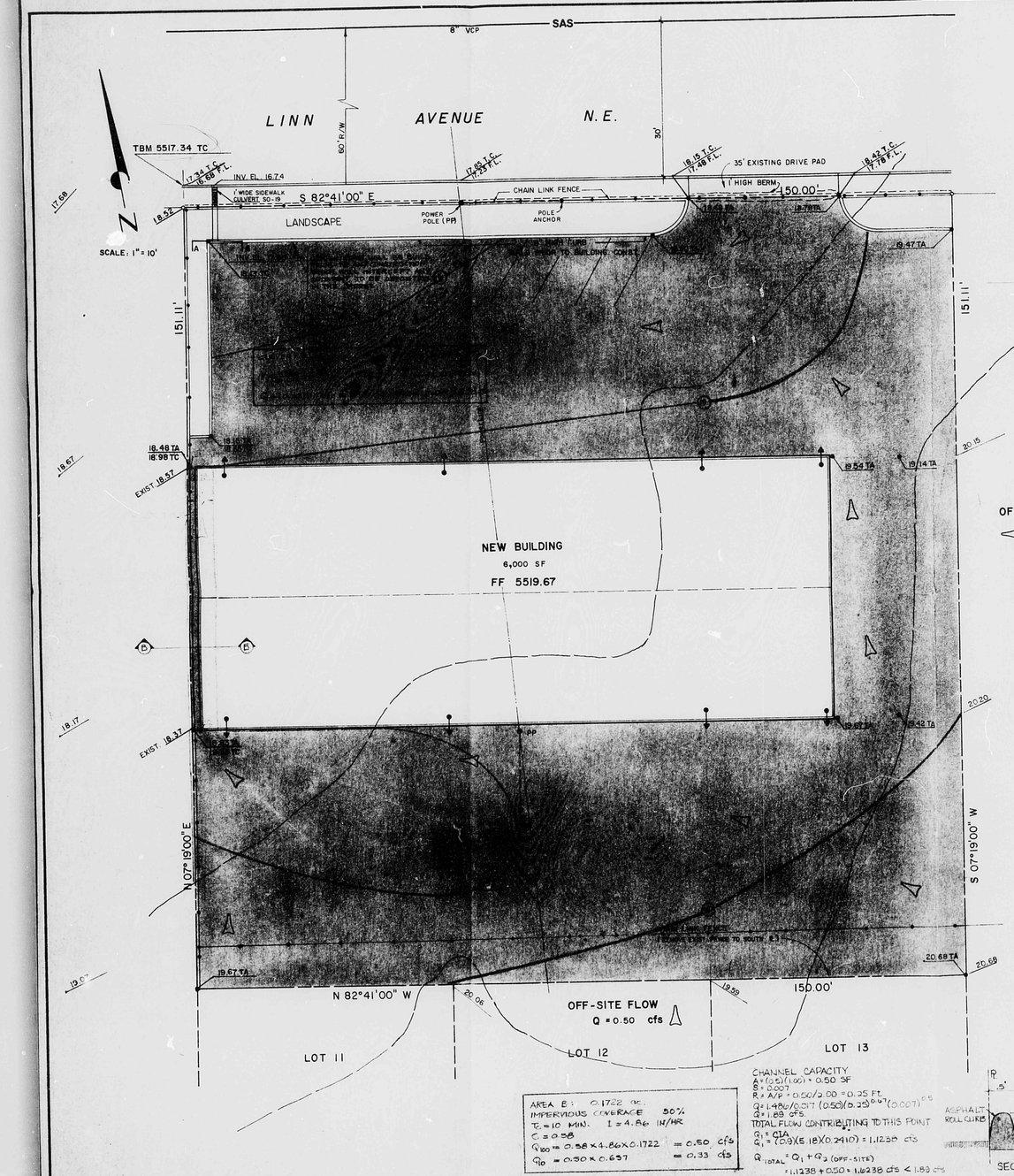
4/5/02
DIRECTOR

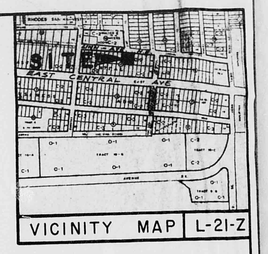
Roberta Duran
NOTARY PUBLIC

OFFICIAL SEAL
Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
07/02/02

C20 B16 A12
CITY OF ALBUQUERQUE
C

GRADING AND DRAINAGE PLAN
FOR
TRACT "D", BLOCK 4
EAST CENTRAL BUSINESS ADDITION
ALBUQUERQUE, NEW MEXICO
SEPTEMBER, 1985





VICINITY MAP | L-21-Z

DRAINAGE INFORMATION

A. City of Albuquerque, Development Process Manual (DPM), Volume 2, Design Criteria
B. Soil Survey of Bernalillo County and Parts of Sandoval and Valencia Counties, New Mexico, U.S. Soil Conservation Service, Sheet 42
C. Flood Insurance Rate Map, City of Albuquerque, New Mexico

II. General Information
A. Site Location and Elevation Data
1. Legal Description: Tract "D", Block 4
2. Total Site Area: 0.52035 ac.
3. City Address:
4. City Bench Mark: L-21
5. County Zone Atlas: L-21
6. Soil Type (Reference): TaB, EmB
7. Hydrologic Soils Group: B
8. 6-hour, 100-year rain, R_6 = 2.45 inches Reference , Plate 22.2 B-4
9. Runoff Coefficient ("C" Factor) Reference , Plate 22.2 C-1
Undeveloped "C" Factor, Curve is 0.34
Developed "C" Factor, assume the following values:
Buildings and concrete surfaces 1.00
Asphalt concrete paving 0.90
Landscaping, same as natural soil 0.34
Weighted "C" Factor

Type of Surface	"C"	Area (SF)	[illegible]
Buildings	1.00	6,000	[illegible]
Asphalt	0.90	15,650	[illegible]
Landscape	0.34	1,016	[illegible]

Weighted "C" Factor = $\frac{\Sigma ("C" \times A)}{\Sigma A}$ = 0.89 / 22,665

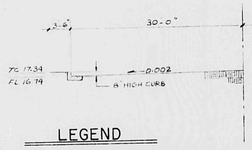
B. Time of Concentration - Developed Area
Watershed length L = 201 FT
Watershed change in elevation h = 1.58 FT
Watershed slope S = h/L = 0.0156 FT/FT
by Kirpich equation $T = 0.0078 (L^{0.77}/S^{0.385})$ < 10 minutes
T_c = 10 minutes minimum Tc = 1.34 min
C. Intensity Reference , Plate 22.2 B-1
$I = R_6 \times 6.84 \times T_c^{-0.51}$
= 5.18 in/hr
D. Peak Discharge - Rational Method: Q = CIA
Q = 0.90 x 5.18 x 0.52035
= 2.43 cfs

III. Existing Conditions (Undeveloped)
A. "C" Factor = 0.34 Plate 22.2 C-1
B. Time of Concentration
Watershed length L = 212 FT
Watershed change in elevation h = 2.16 FT
Watershed slope S = h/L = 0.0102 FT/FT
by Kirpich equation $T = 0.0078 (L^{0.77}/S^{0.385})$ < 10 minutes
T_c = 10 minutes minimum T_c = 2.82 min
C. Intensity Reference , Plate
$I = (R_6 \times 6.84)^{T_c^{-0.51}}$
= 5.18 in/hr
D. Peak Discharge - Rational Method: Q = CIA
Q = 0.34 x 5.18 x 0.52035
Q = 0.92 cfs

FREE DISCHARGE INTO LINN AVENUE:

1. Linn avenue is completely improved
2. Min. impact on downstream capacity is 1.59 %
3. The site is not in flood zone
4. Site does not drain into flood zone

FLOW WILL BE CONVEYED NORTH THROUGH THE CULVERT TO THE LINN AVE. THENCE WEST TO THE DOROTHY STREET, NORTH TO THE CHICO ROAD AND TO THE DROP INLET AT THE INTERSECTION OF DOROTHY AND CHICO ROAD.



LINN STREET CAPACITY AT POINT OF CULVERT
A = (0.60 x 30.00)/2 = 9.00 SF
S = 0.0082
R = A/P = 9.00/30.60 = 0.2941
$Q = \frac{1.486}{0.017}(9.00)(0.2941)^{0.67}(0.0082)^{0.50}$
Q = 27.59 cfs
TOTAL FLOW CONTRIBUTING TO THIS POINT
Q = 0.70 x 5.18 x 7.59 = 27.52 cfs
ADDITIONAL DISCHARGE DUE TO DEVELOPMENT = 1.51 cfs

LEGEND

19	EXISTING CONTOUR LINE
20	PROPOSED CONTOUR LINE
18.57	EXISTING SPOT ELEVATIONS
18.15 TA	PROPOSED SPOT ELEVATIONS
	DRAINAGE AREA DIVISION LINE
	FLOW DIRECTION
17.85 T.C.	TOP OF CURB (EXIST.)
18.65 TA	TOP OF ASPHALT
	DIRECTION OF ROOF DRAIN

BENCHMARK INFORMATION

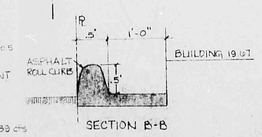
THE STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "I-L21 RESET 1974", CEMENTED IN A DRILL HOLE IN TOP OF CONCRETE CURB OF THE MEDIAN STRIP. IT IS FLUSH WITH THE TOP OF THE CURB.
ELEV. 5534.543.
THE STATION IS ON THE MEDIAN STRIP OF CENTRAL AVE. AT THE INTERSECTION OF CENTRAL AVE. AND JUAN TABO BLVD.

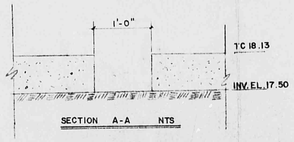
EROSION CONTROL STATEMENT

THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.

AREA B: 0.1722 AC
IMPERVIOUS COVERAGE 50%
Tc = 10 MIN. I = 4.86 IN/HR
C = 0.58
Q_{100} = 0.58 x 4.86 x 0.1722 = 0.50 cfs
Q_{10} = 0.50 x 0.657 = 0.33 cfs

CHANNEL CAPACITY
A = (0.5)(1.00) = 0.50 SF
S = 0.007
R = A/P = 0.50/2.00 = 0.25 FT
$Q = \frac{1.486}{0.017}(0.50)(0.25)^{0.67}(0.007)^{0.5}$
Q = 1.88 CFS
TOTAL FLOW CONTRIBUTING TO THIS POINT
Q_1 = CIA
Q_1 = (0.9)(5.18)(0.2410) = 1.1238 cfs
$Q_{(TOTAL)} = Q_1 + Q_2$ (OFF-SITE)
= 1.1238 + 0.50 = 1.6238 cfs < 1.88 cfs





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HYDROLOGY SECTION

Revised Oct. 2, 1985
Revised March, 1985
September 12, 1985

HALL ENGINEERING COMPANY INC.
337 EUBANK N.E., STE 103
ALBUQUERQUE, NEW MEXICO 87123
Phones: (505) 292-1115 & 292-1116

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ONCE ON DARK

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R# 28 DATE 3-27-02 OP E.G.P.

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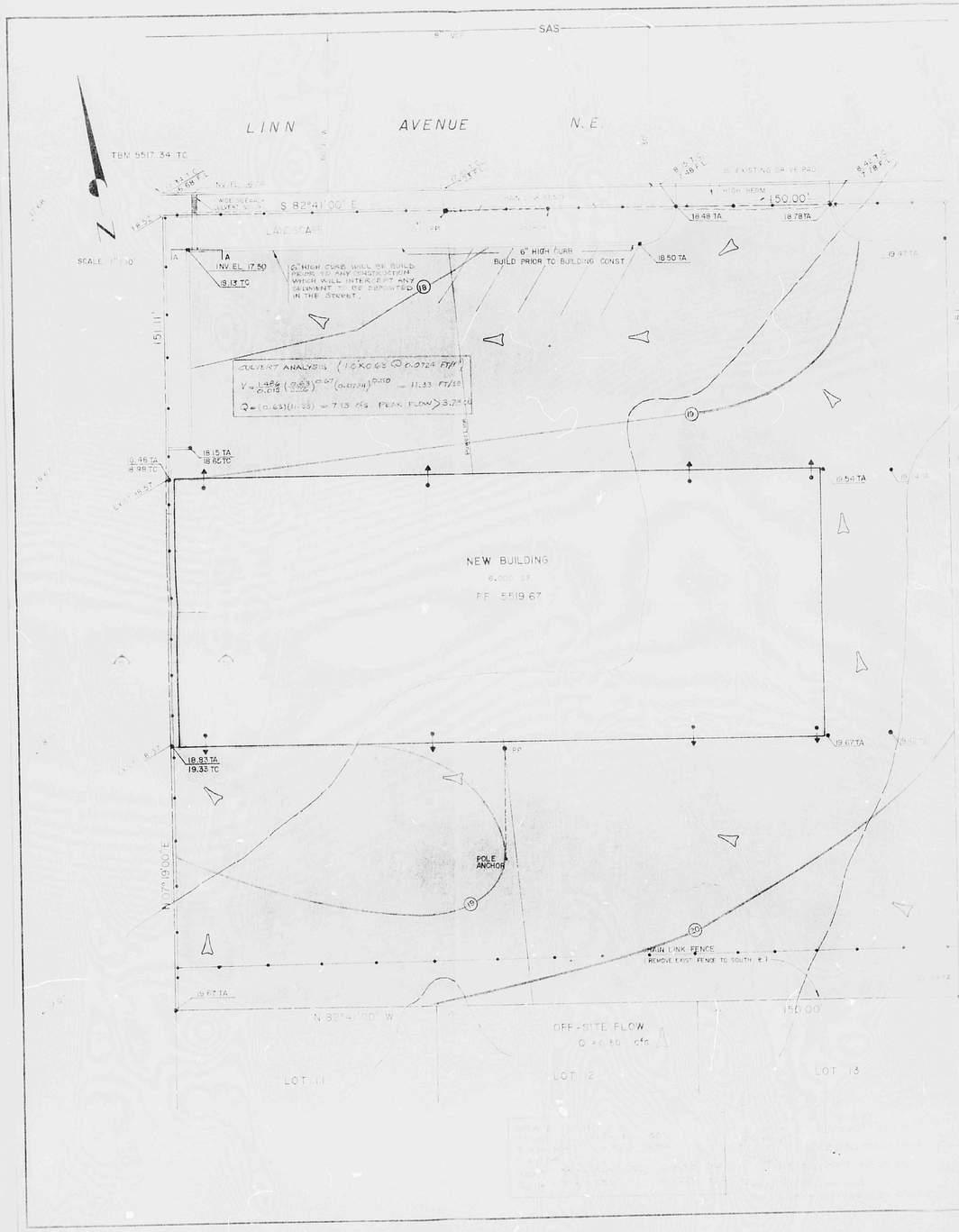
DIRECTOR

NOTARY PUBLIC
OFFICIAL SEAL
Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
01/02/02

D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE C D



GRADING AND DRAINAGE PLAN
FOR
TRACT "D", BLOCK 4
EAST CENTRAL BUSINESS ADDITION
ALBUQUERQUE, NEW MEXICO
SEPTEMBER, 1985

DRAINAGE INFORMATION

OFF-SITE FLOW
Q = 0.85 cfs

FREE DISCHARGE INTO LINN AVENUE
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3. The site is not in flood zone
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LEGEND

- EXISTING CONTOUR LINE
- PROPOSED CONTOUR LINE
- EXISTING SPOT ELEVATIONS
- PROPOSED SPOT ELEVATIONS
- DRAINAGE AREA DIVISION LINE
- FLOW DIRECTION
- TOP OF CURB (EXIST.)
- TOP OF ASPHALT
- DIRECTION OF ROOF DRAIN

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SECTION A-A NTS

HALL ENGINEERING COMPANY INC.
137 FUNK N.E. SUITE 103
ALBUQUERQUE, NEW MEXICO 87123
PHONE: (505) 292-1115 & 292-1116

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R# 3 DATE 2/1/92 OP# 21

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DIRECTOR

NOTARY PUBLIC
CITIZENS M.
Roberta Duran
07/07/92

D24 C20 B16 A12

CITY OF ALBUQERQUE C D