HYDROLOGY

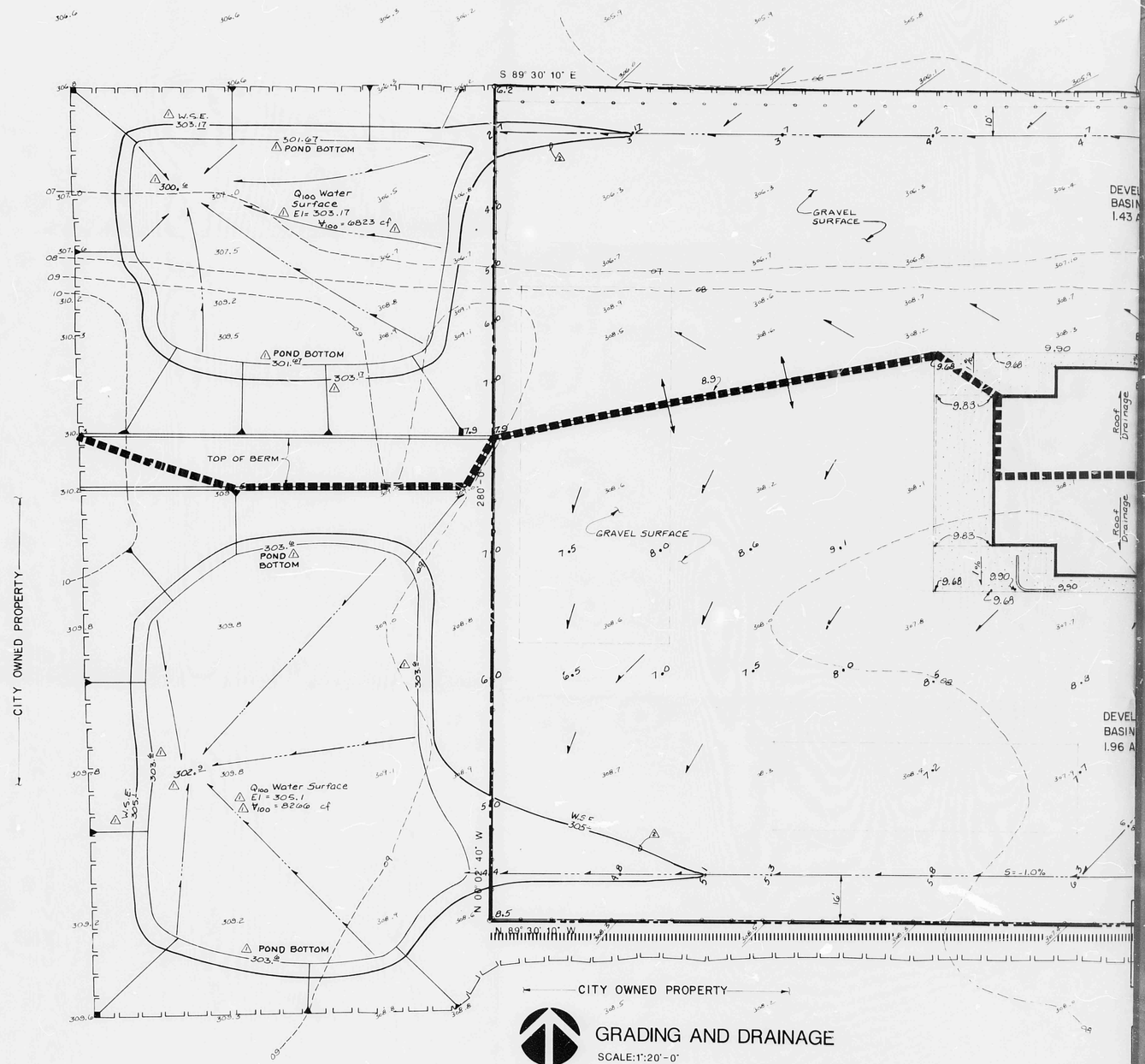
N15/D3
FOUR PLANS
ONE OF TWO

N 15/ D3

4 PLANS

PLAN SHOT IN TWO SECTIONS.

PROPERTY LEASED TO MARTIN ECKERT



GRADING AND DRAINAGE

SCALE: 1":20'-0"

⚠ DRAINAGE CALCULATIONS

Lot Size = 2.828 acres within fenced acres
Area out of fenced property = 1.332 acres
Total Site: 2.828 + 1.332 = 4.160 acres
Soils Type: Hydrologic Group B
Q_{100} - 6 Hr. Storm Rainfall = 2.35" per Plate 22.2 D1

Note: Developed drainage runoff concerning this project (4.160 Acres) shall be retained within 3 designed drainage basins. See General Note 4, this sheet.

RUNOFF CURVE NUMBER: Asphalt Surface = 98
Gravel Surface = 85
Roof Surface = 98
Undeveloped Surface = 70

Note: Runoff Curve Number (CN) taken from Plate 22.2 C-2

DRAINAGE BASIN AREA

	BASIN A	BASIN B	BASIN C	TOTALS
Asphalt	0.17	0	0.36	0.53
Gravel	0.71	1.20	0.06	1.97
Roof	0.16	0.22	0	0.38
Undeveloped	0.39	0.54	0.35	1.28
Total Acres	1.43 +	1.96 +	0.77 =	4.16 Ac

DRAINAGE RUNOFF

	CN	DIRECT RUNOFF Q
Asphalt	98	2.20
Gravel	85	1.10
Roof	98	2.20
Undeveloped	70	0.49

Note: Drainage Runoff taken from Plate 22.2 C-4

DRAINAGE BASIN A POND

Area of ponding area by Planimeter
$\frac{(18.150^{Sq} \times 20^2) + (22,750^{Sq} \times 20^2)}{2} \times 0.83 \text{ deep} = \underset{\text{Storage Capacity}}{6,823 \text{ Cu.Ft.}}$

6,823 Cu.Ft. ÷ 43,560 = 0.157 Ac.Ft.
Therefore, 73% Cu.Ft. or 0.017 Ac.Ft. minimum, extra ponding storage capacity.

DRAINAGE BASIN B POND

Area of ponding area by Planimeter
$\frac{(30,250^{Sq} \times 20^2) + (35,400^{Sq} \times 20^2)}{2} \times 0.63 \text{ deep} = \underset{\text{Storage Capacity}}{8,266 \text{ Cu.Ft.}}$

8,266 Cu.Ft. ÷ 43,560 = 0.19 Ac.Ft.
Therefore, 861 Cu.Ft. or 0.020 Ac.Ft. minimum, extra ponding storage capacity.

DRAINAGE BASIN C POND

Area of ponding area by Planimeter
$\frac{(7,750^{Sq} \times 20^2) + (10,700^{Sq} \times 20^2)}{2} \times 1.33 \text{ deep} = \underset{\text{Storage Capacity}}{4,800 \text{ Cu.Ft.}}$

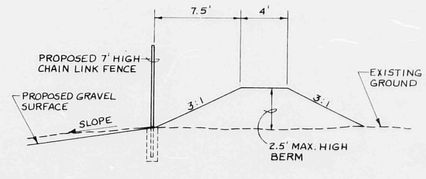
4,800 Cu.Ft. ÷ 43,560 = 0.11 Ac.Ft.
Therefore, 800 Cu.Ft. or 0.020 Ac.Ft. minimum, extra ponding storage capacity.

MINIMUM PONDING REQUIREMENTS

	BASIN A	BASIN B	BASIN C
Asphalt	$\frac{2.2^2}{12} \times .17 \times .03$	0	x .36 x .07
Gravel	$\frac{1.2^2}{12} \times .71 \times 0.7$	x 1.2 x .11	x .06 x .01
Roof	$\frac{2.2^2}{12} \times .16 \times .93$	x .22 x .04	0
Undeveloped	$\frac{0.4^2}{12} \times .39 \times .01$	x .54 x .02	x .35 x .01
Total Ac. Ft.	0.14	0.17	0.09

⚠ EROSION CONTROL PLAN

1. SEE LANDSCAPING SPECIFICATION UNDER SECTION 02455
2. SEE EXISTING GRASS SEEDING SPECIFICATION SECTION 02455



SECTION A-A
NTS

TB TB SP SP C2 C2

ECKERT

Match Existing Elevations @ Grading Limits

Property Line

DEVELOPED BASIN A
1.43 Ac.

Construct 8"x 2'x 3'H Concrete Cut Off Wall

Finish Pad 306.75

ASPHALT SURFACE

Access Road Details To be Provided By Bob Gill, City Aviation Dept.

Existing Chain Link fence

Roof Drainage

FF = 5310.00

MAINTENANCE BUILDING
F.F. ELEV.= 3510.00
REF. ELEV.= 100'-0"

DEVELOPED BASIN C
0.77 Ac.

Existing Dirt Road To Be Closed

S 00° 02' 40" E 280.00'

CITY OWNED PROPERTY

DEVELOPED BASIN B
1.96 Ac.

Proposed Concrete Pad

GRAVEL SURFACE

81.00'

Top of Berm

Qmax Water Surface El=306.17
V100 = 48.00 cf

306.17 W.S.E.

304.5

10' Min

SECTION B-B
NTS

Building Line
5' Apron
Gravel Surface
F.F.=10.00
2%
Expansion Joint
6x6 WWF
See Arch. Dwg. Sht. A-3.2

BERNALILLO COUNTY SOILS MAP 41
SCALE: 1" = 2000'

Project Location

KIRTLAND AFB

ZONE ATLAS MAP N-15 & N-16

Project Location

FEMA MAP NO. 350002-0041-C
SCALE: 1" = 500'

GENERAL NOTES

1. LEGAL - See Architectural Survey for Airport Maintenance Facility, Dated: March, 1986.
2. BENCH MARK - Sta. 1-N16, Established by ACS. Station is a standard C.O.A. brass cap set in concrete monument stamped, "1-N16" and projecting 0.1 ft. aboveground. EL = 5309.192.
3. The Maintenance Facility is not located within a flood hazard area. See FIRM Panel Number 350002-0041-C, Sheet 41 of 50.
4. The drainage control management for the Maintenance Facility is total retention of anticipated developed drainage runoff. The proposed ponding areas and berms shall be cared for and maintained by the City's Aviation Department. The ponds and berms shown on the plan are located in City owned property.

   Bob Gill from the City Aviation Department has assured Fred Aguirre that the Aviation Department will be expanding in the future with additional development in the area. When this occurs a storm drainage system will be engineered and developed. The development of this system will also include financial participation by the City Aviation Department for a portion of the downstream infrastructure costs.

   △ When the development of the storm sewer system occurs, the existing retention ponding areas will be removed if future outfall system allows free discharge, otherwise detention ponds will be required.

   The Maintenance Facility's developed drainage runoff will not flood or damage any existing property owners if the grading parameters are met. Also no upland drainage flows will cross our proposed site, therefore not taxing the ponding areas.

   △ Bob Gill is also to provide detailed paved access road details. The paved access road will be used to service the Maintenance Facility Building area.
5. All ponds shall be graded with a 3:1 back slope (min.).

LEGEND

EXISTING
- CONTOUR
- SPOT ELEVATION
- CHAIN LINK FENCE

PROPOSED
- GRADING LIMITS
- BACK SLOPE
- FINISH ELEVATION
- DRAINAGE SWALE
- DRAINAGE DIRECTION
- CHAIN LINK FENCE
- WATER BLOCK
- VEHICLE PARKING
- LANDSCAPED MEDIAN
- DRAINAGE BASIN
- BERM
- PROPERTY LINE

THE BURNS/PETERS GROUP
ARCHITECTS/PLANNERS
8000 PENNSYLVANIA CIRCLE N.E. ALBUQUERQUE, NM 87110 (505) 266-3645

STATE OF NEW MEXICO RONALD J. BURNS NO. 5181 REGISTERED ARCHITECT

4-22-86

AIRPORT MAINTENANCE FACILITY
ALBUQUERQUE INTERNATIONAL AIRPORT
ALBUQUERQUE NEW MEXICO

85-25-23

MAY 1986

RECEIVED MAY 28 1986 HYDROLOGY SECTION

C2

SHEET OF

GREINER JOB NO.: 0690570

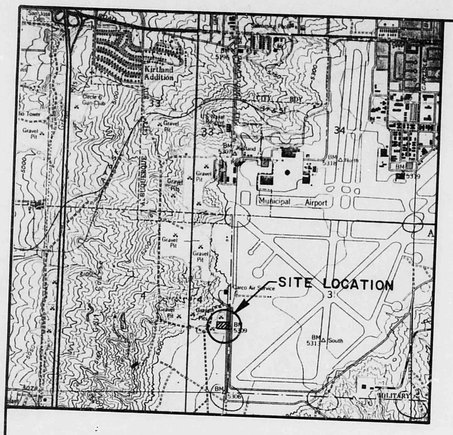
4-22-86 △ Revisions Per Roger Green's Letter, Dated 4-18-86
5-14-86 △ Revisions Per DRC Dated 5-13-86
5-22-86 △ Revisions to Erosion Control

DRAINAGE & GRADING PLAN BY:

GREINER ENGINEERING
2601 WYOMING BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87112
(505) 292-1936

DESIGNED BY: 4-3-86
DRAWN BY: 4-3-86

PLAN SHOT IN TWO SECTIONS.



VICINITY MAP
ZONE ATLAS NO. N-15

GENERAL NOTES

1. Bearing Basis: New Mexico State Plane Coordinate Grid, Central Zone,(Mean Alpha Delta = -00 12' 48")
2. Set 5/8" rebar w/cap stamped Greiner, LS 8324 at all property corners.
3. This does not constitute a title search by Greiner Engineering Sciences, Inc. to determine ownership or easements of record.
4. Water line location taken from South General Aviation Improvements, Part 4, Plan & Profile Sht. 4 of 7 by LEEDSHILL-HERKENHOFF, dated Jan., 1985.
5. Bench Mark: ACS brass cap Sta. 1-N16 (as shown). Elevation: 5308.73

LEGEND

- 306.4 SPOT ELEVATION
- 06 CONTOUR
- 6"SAS SAN. SEWER W/DIR
- SAN. SEWER MANHO
- WATER VALVE
- FIRE HYDRANT
- ELECTRIC MANHOL
- TELEPHONE MANH
- ELECTRICAL TRAN
- CHAIN LINK FENCE
- W WATER LINE

N

Scale: 0' 10' 20' 40' 60'

S 89° 30' 10" E
280.00
N 00° 02' 40" W
N 89° 30' 10" W

ARCHITECTURAL SURVEY

AIRPORT MAINTENANCE FACILITY

ALBUQUERQUE, NEW MEXICO

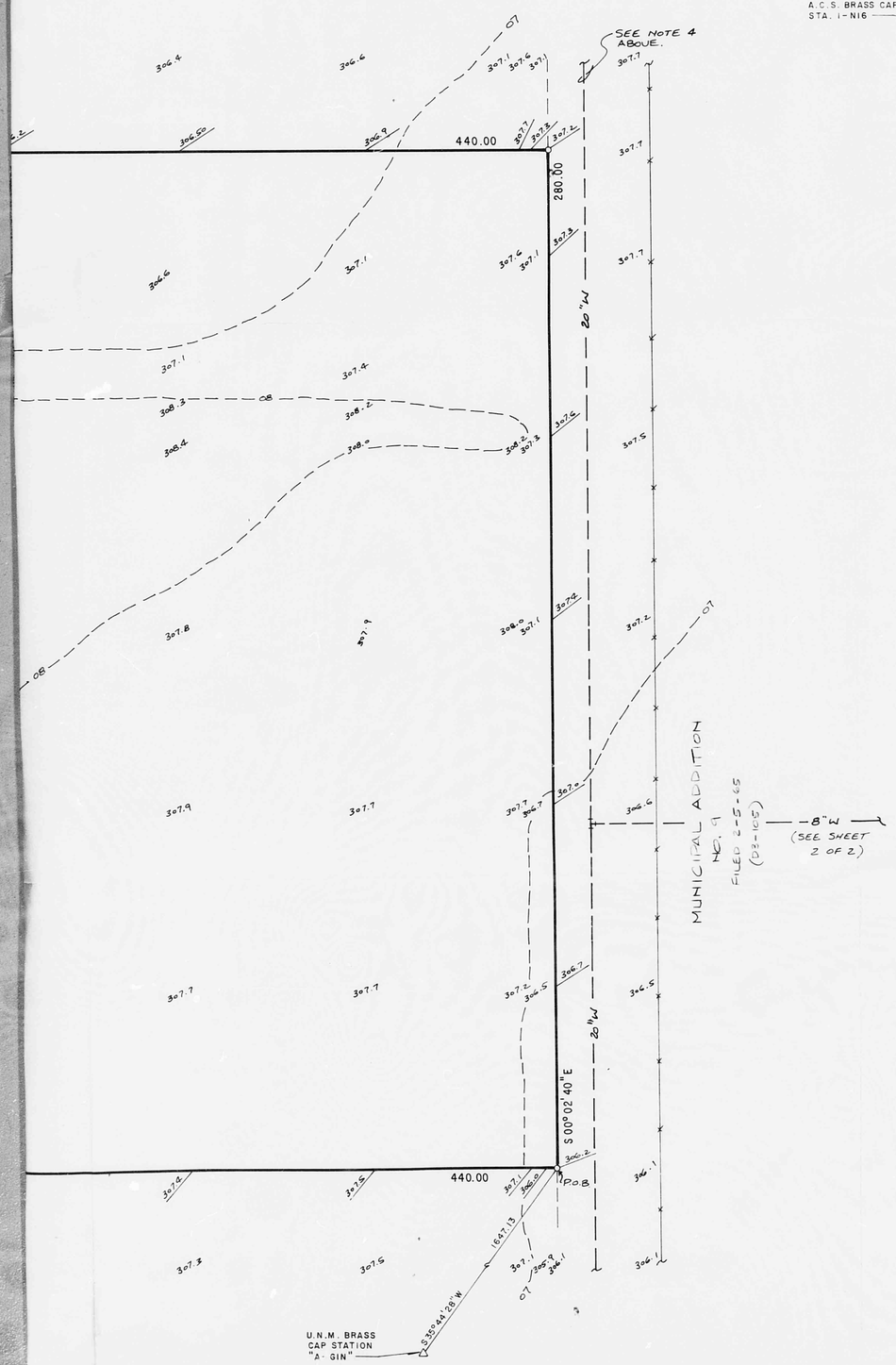
MARCH, 1986

SHEET 1 of 2

ATION

R W/ DIRECTION OF FLOW
R MANHOLE
ALVE
RANT
C MANHOLE
HE MANHOLE
CAL TRANSFORMER
NK FENCE
LINE

NOTE: SEE SHT 2 OF 2 FOR FENCES & UTILITIES EAST & NORTH OF THIS TRACT.



LEGAL DESCRIPTION

A Tract of land situate within Section 4, Township 9 North, Range 3 East, New Mexico Principal Meridian, being more particularly described as follows:

Beginning at the Southeast corner of the Tract herein described, being a point on the East line of the aforementioned Section 4, from whence U.N.M. brass cap Station "A-GIN" bears S 35° 44' 28" W, 1647.13 feet;

Thence leaving said Section line N 89° 30' 10" W, 440.00 feet to the Southwest corner;

Thence N 00° 02' 40" W, 280.00 feet to the Northwest corner;

Thence S 89° 30' 10" E, 440.00 feet to the Northeast corner, being a point on the East line of the aforementioned Section 4;

Thence along said line S 00° 02' 40" E, 280.00 feet to the Southeast and beginning corner of the Tract herein described and containing 2.828 acres (123,194 sq. ft.), more or less.

CERTIFICATION

I, Daniel L. Morehead, New Mexico Registered Land Surveyor No. 8324, do hereby certify that this map has been compiled under my supervision from a survey actually performed on the ground in February, 1986, that there are no encroachments, and that the same is true and correct to the best of my knowledge and belief.

Daniel L. Morehead
N.M.R.L.S. No. 8324

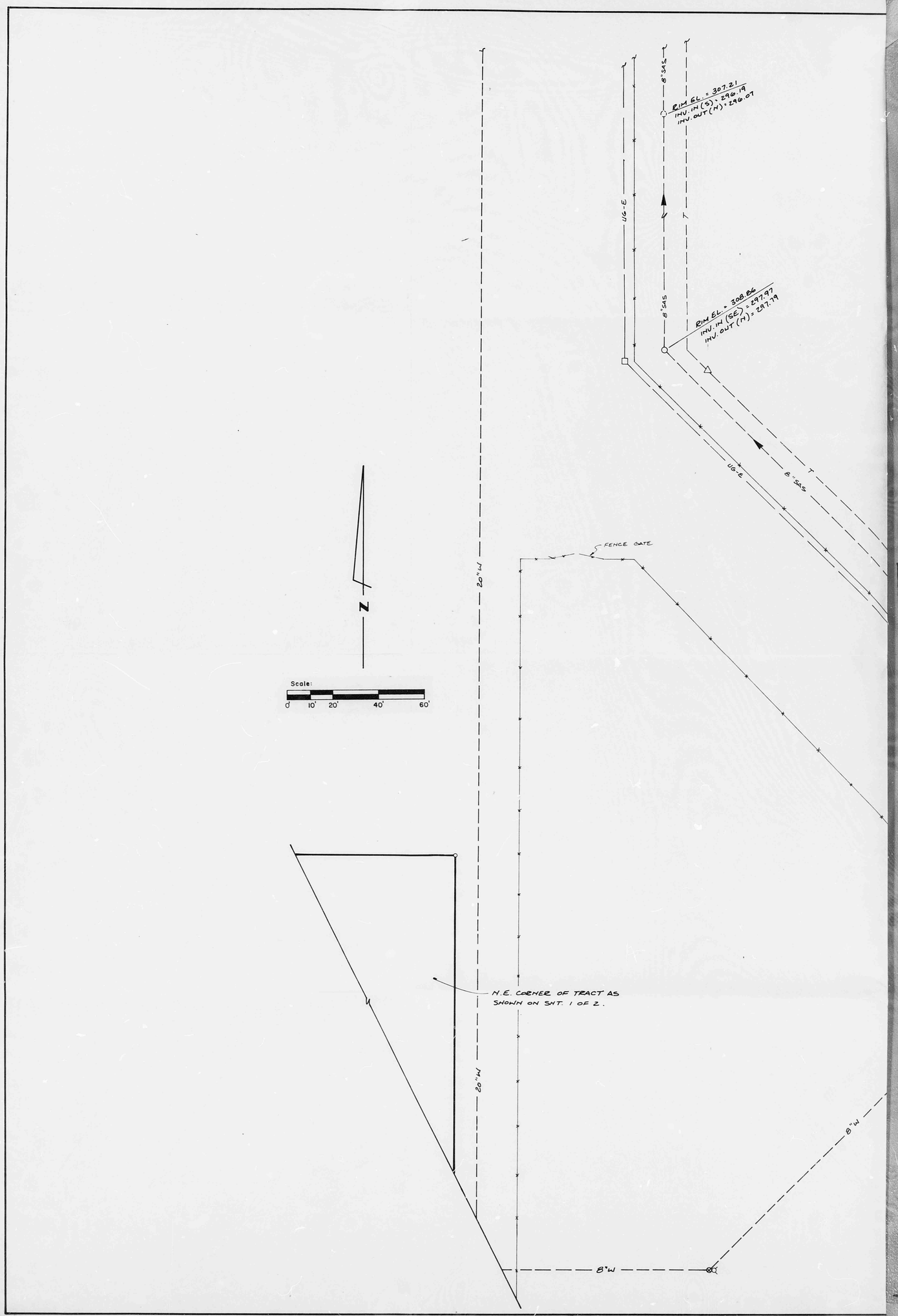
3-14-86
Date

RECEIVED
APR 04 1986
HYDROLOGY SECTION

GREINER ENGINEERING SCIENCES, INC.
CONSULTING ENGINEERS • SURVEYORS • PLANNERS
Formerly MSM Consultants Inc
A Greiner Engineering, Inc Company
2601 Wyoming Blvd., N.E. Albuquerque, New Mexico 87112
(505) 292-1936

DRAWN BY: KM		FILE NO. 0690571
FLD. BK. 1728		SCALE 1" = 20'
CHECKED BY: DRF		DATE 3-14-86
APPROVED BY:		SHEET NO. 1 of 2

PLAN SHOT IN TWO SECTIONS.



HYDROLOGY

N15/D3
FOUR PLANS
TWO OF TWO

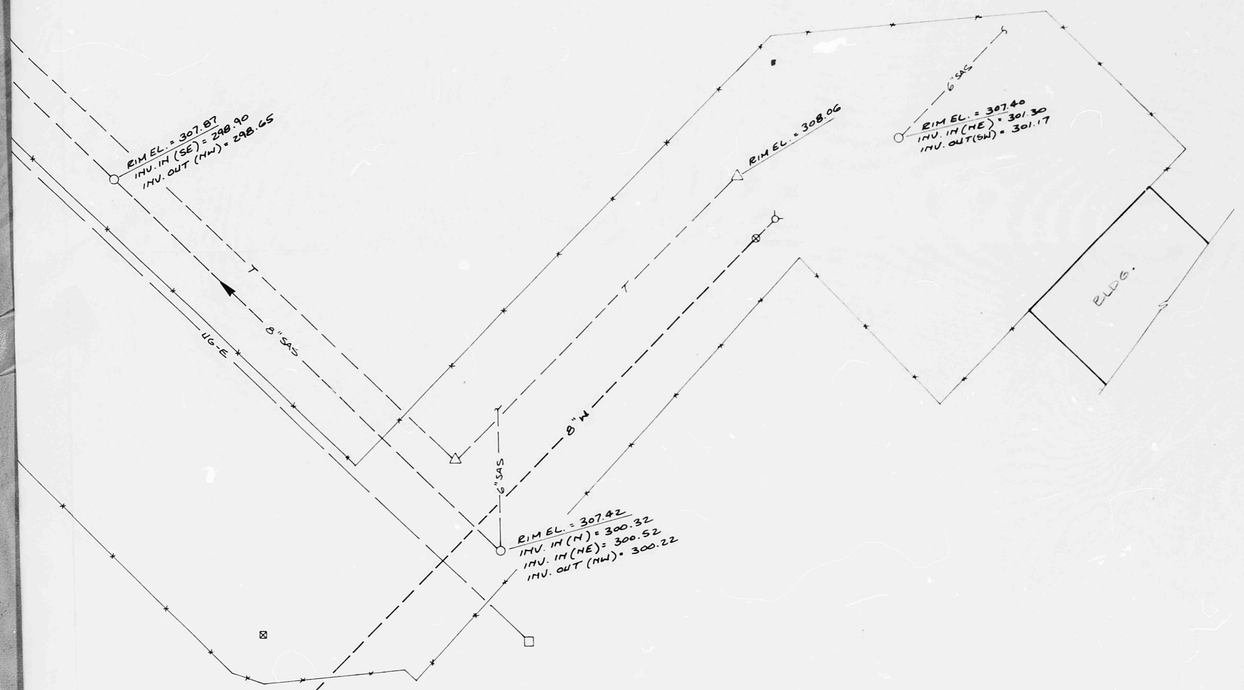
ARCHITECTURAL SURVEY

AIRPORT MAINTENANCE FACILITY

ALBUQUERQUE, NEW MEXICO

MARCH, 1986

SHEET 2 of 2



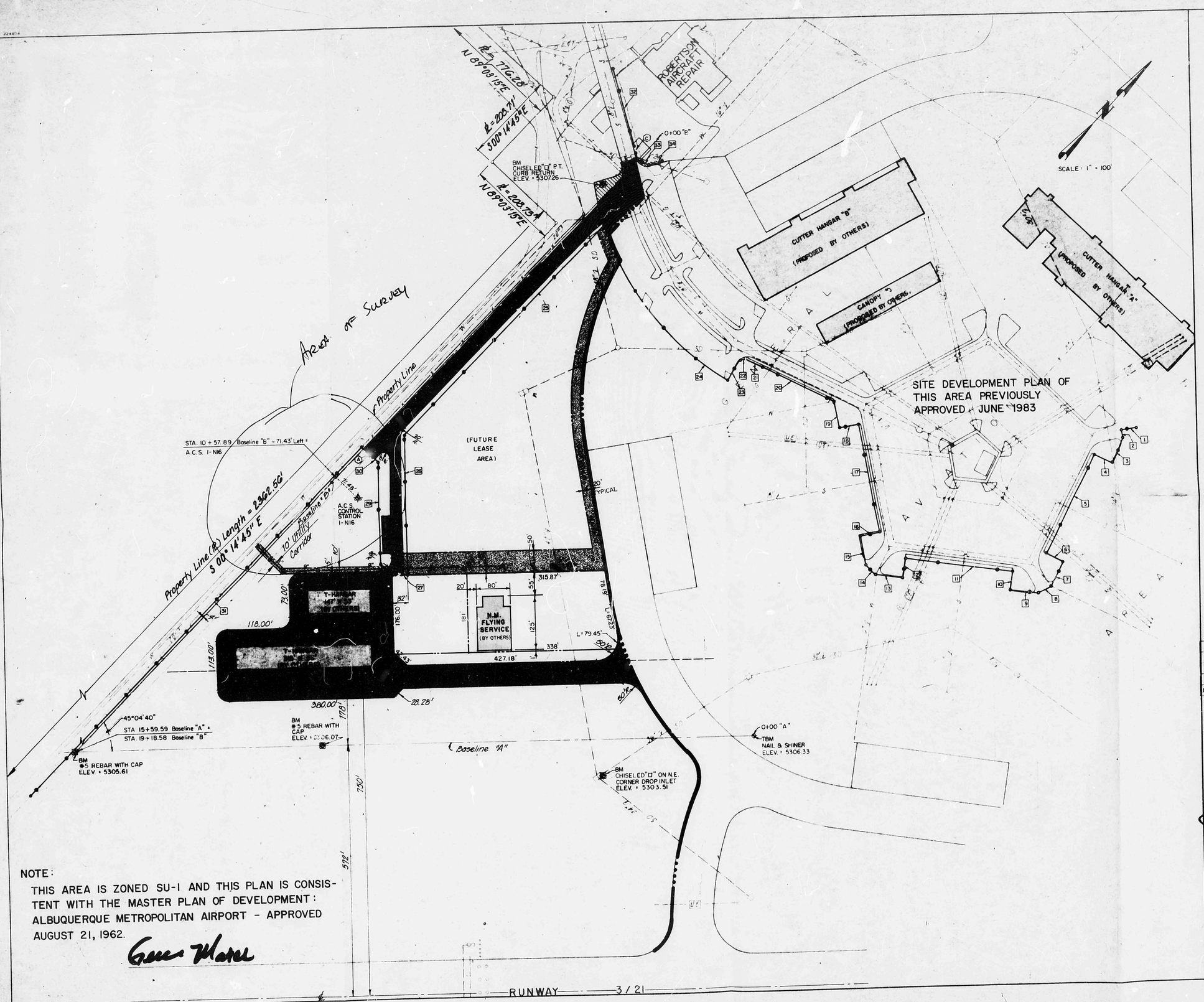
LEGEND

- 306.4 SPOT ELEVATION
- 306 CONTOUR
- 6" SAS SAN. SEWER W/ DIRECTION OF FLOW
- SAN. SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- ELECTRICAL TRANSFORMER
- CHAIN LINK FENCE
- W WATER LINE
- T UNDERGROUND TELEPHONE LINE
- UG-E UNDERGROUND ELEC. LINE

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(505) 292-1935

DRAWN BY: KM	FILE NO. 0690571
FLD. BK. 1728	SCALE 1" = 20'
CHECKED BY: DRF	DATE 3-14-86
APPROVED BY:	SHEET NO. 2 of 2



NOTE:

THIS AREA IS ZONED SU-1 AND THIS PLAN IS CONSISTENT WITH THE MASTER PLAN OF DEVELOPMENT: ALBUQUERQUE METROPOLITAN AIRPORT - APPROVED AUGUST 21, 1962.

Gene Morel

LEGEND

- CHAIN LINK FENCE *
- GATE *
- TO BE REMOVED
- NEW ASPHALT PAVEMENT
- W 8" NEW WATER LINE
- SAS 8" NEW SEWER LINE
- STRUCTURES BY OTHERS
- FIRE HYDRANT
- SANITARY SEWER MANHOLE
- CONTROL STATION (A.C.S.)
- BM SURVEY BENCHMARK
- TBM TEMPORARY BENCHMARK
- UTILITY CORRIDOR

*SEE FENCING SCHEDULE

AS BUILT INFORMATION

CONTRACTOR
WORK STARTED BY
INSPECTORS
ACCEPTANCE BY
VERIFICATION BY
CORRECTED BY
DATE

BENCH MARKS

Albuquerque City Survey Control Station Nilo, a Std. C.O.A. brass cap set in concrete monument stamped "1 I-N16" and projecting 0.1 Ft. above ground, located near the Southwest corner of Albuquerque International Airport, just east of the A. I. airport Fenceline.
Elev. = 5,309.192

MICRO-FILM INFORMATION

RECORDED BY
DATE
NO

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

Re-established 1985
Reset T 5306.73
1-N16

ENGINEER'S SEAL

NO.	REVISIONS	BY	DATE
1	N.M. FLYING SERVICE	KRH	2-1-85
No.	Revision	By	App. Date

REMARKS

DESIGNED BY — DATE
DRAWN BY — DATE
CHECKED BY — DATE

TRAFFIC ENGINEER — DATE 9/26/83
CITY ENGINEER — DATE 9/20/83
WATER RESOURCE — DATE 9/20/83
PARKS AND RECREATION — DATE 9-20-83
PLANNING DIRECTOR — DATE 9-20-83
DATE 2/1/85

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: ALBUQUERQUE INTERNATIONAL AIRPORT
SOUTH GENERAL AVIATION IMPROVEMENTS - PART 4

SITE DEVELOPMENT PLAN - LEASE PLOT AREA

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A C E - Design			Traffic		
A C E - Hydrology			Water		

DRAWING NO.
MAP NO.
SHEET 1 OF 2