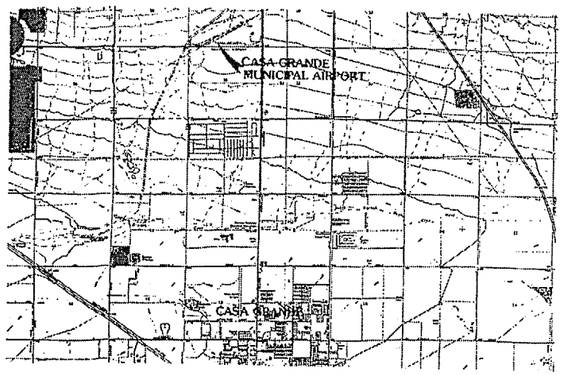
APPENDIX A

AIRPORT LAYOUT PLAN

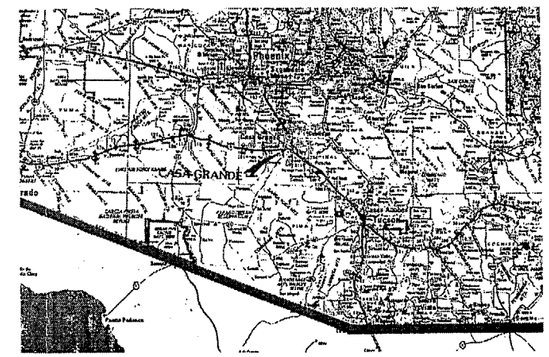
AT

CASA GRANDE MUNICIPAL AIRPORT

CASA GRANDE, ARIZONA



VICINITY MAP



LOCATION MAP

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	AIRPORT LAYOUT DRAWING
3	RUNWAY PROTECTION ZONE PLAN
4	AIRPORT AIRSPACE PLAN
5	TERMINAL AREA PLAN
6	LAND USE PLAN

NO.	DESCRIPTION	DATE	BY:
1			

REVISIONS

CASA GRANDE MUNICIPAL AIRPORT
CASA GRANDE, ARIZONA

TITLE SHEET

DRAWN BY: BJD
CHK'D. BY: JJH
APPR. BY: TFO
DATE: JAN. 1997
Q. A.
PEER REVIEW JJH

Morrison Maierle/CSSA INC.
An Employee-Owned Company
ENGINEERS
SCIENTISTS
SURVEYORS
PLANNERS
SINCE 1945
4521 North 16th Street, Ste. D401 Phoenix, AZ 85016 • Phone: (602) 277-2828

PROJECT NUMBER
1808.007-010-0113
SHEET NUMBER
1

AIRPORT DATA		EXISTING	ULTIMATE
AIRPORT CATEGORY		GENERAL UTILITY	BASIC TRANSPORT
DESIGN AIRCRAFT		KING AIR	GULF STREAM IV
AIRPORT REFERENCE CODE (ARC); RUNWAY CATEGORY/DESIGN GROUP		B-II	D-II
AIRPORT ELEVATION (ABOVE MEAN SEA LEVEL)		1462	1462
MEAN MAXIMUM TEMPERATURE OF HOTTEST MONTH (JULY)		106° F	106° F
AIRPORT REFERENCE POINT (ARP) COORDINATES (NAD 83)	Latitude	N 32° 57' 17.63"	N 32° 57' 10.11"
	Longitude	W 111° 46' 00.54"	W 111° 46' 18.24"
AIRPORT and TERMINAL NAVIGATIONAL AIDS		DME VOR (S) VORTAC ILS (S) GPS (S)	DME VOR (S) VORTAC ILS (S) GPS
GPS APPROACH		YES	YES
RUNWAY END COORDINATES (NAD 83)		---	---
RUNWAY 05		N 32° 57' 04.73"	N 32° 56' 49.83"
		W 111° 46' 26.97"	W 111° 46' 57.60"
RUNWAY 23		N 32° 57' 30.53"	N 32° 57' 30.53"
		W 111° 45' 34.15"	W 111° 45' 34.15"

RUNWAY DATA	RUNWAY 5-23	
	EXISTING	ULTIMATE
RUNWAY CATEGORY	GENERAL UTILITY	GENERAL TRANSPORT
AIRCRAFT DESIGN GROUP/APPROACH SPEED CATEGORY	B-II	D-II
RUNWAY DIMENSIONS	5200' x 100'	8540' x 100'
RUNWAY BEARING	N 59° 56' 15" E	N 59° 56' 15" E
RUNWAY INSTRUMENTATION	PRECISION	PRECISION
RUNWAY SAFETY AREA (RSA)	5400' x 300'	10,540' x 500'
RUNWAY SAFETY AREA LENGTH BEYOND RWY END	600'	1000'
OBJECT FREE AREA (OFA)	5400' x 500'	10,540' x 800'
OBSTACLE FREE ZONE (OFZ)	5600' x 400'	8940' x 400'
RUNWAY WIND COVERAGE	15 MPH = 99.6%	18 MPH = 99.9%
TOUCHDOWN ZONE ELEVATION (RWY 23)	1462	1462
TOUCHDOWN ZONE ELEVATION (RWY 5)	1448	1436
RUNWAY MAX ELEVATION (ABOVE MEAN SEA LEVEL)	1462	1462
RUNWAY APPROACH SURFACES	50:1/40:1, 20:1	50:1/40:1, 34:1
RUNWAY LIGHTING	MIRL	HIRL
RUNWAY MARKING	PRECISION	PRECISION
TAXIWAY LIGHTING	MITL	MITL
TAXIWAY MARKING (in %)	Centerline	Centerline
TAXIWAY SAFETY AREA WIDTH	79'	79'
TAXIWAY OBJECT FREE AREA WIDTH	131'	131'
EFFECTIVE RUNWAY GRADIENT	.33	.37
RUNWAY SURFACE MATERIAL	ASPHALT	ASPHALT
TAXIWAY SURFACE MATERIAL	ASPHALT	ASPHALT
PAVEMENT STRENGTH (in thousand lbs.) [1]	18.5(S) 65(D)	20(S) 72(D)
FAR PART 77 CATEGORY RWY 5	PRECISION/UTILITY	PRECISION/>UTILITY
FAR PART 77 CATEGORY RWY 23	VISUAL/UTILITY	NON-PRECISION/>UTILITY
NAVIGATIONAL AIDS	DME ILS (S) VOR VORTAC GPS (S)	DME ILS (S) VOR VORTAC GPS
VISUAL AIDS	MIRL VASI-2 MALSR (5)	HIRL PAPI-4 MALSR (5) REILS (23)

[1] Pavement strengths are expressed in single (S), dual (D), dual tandem (DT), and/or double dual tandem (DDT) wheel loading capacities.

GENERAL NOTES:

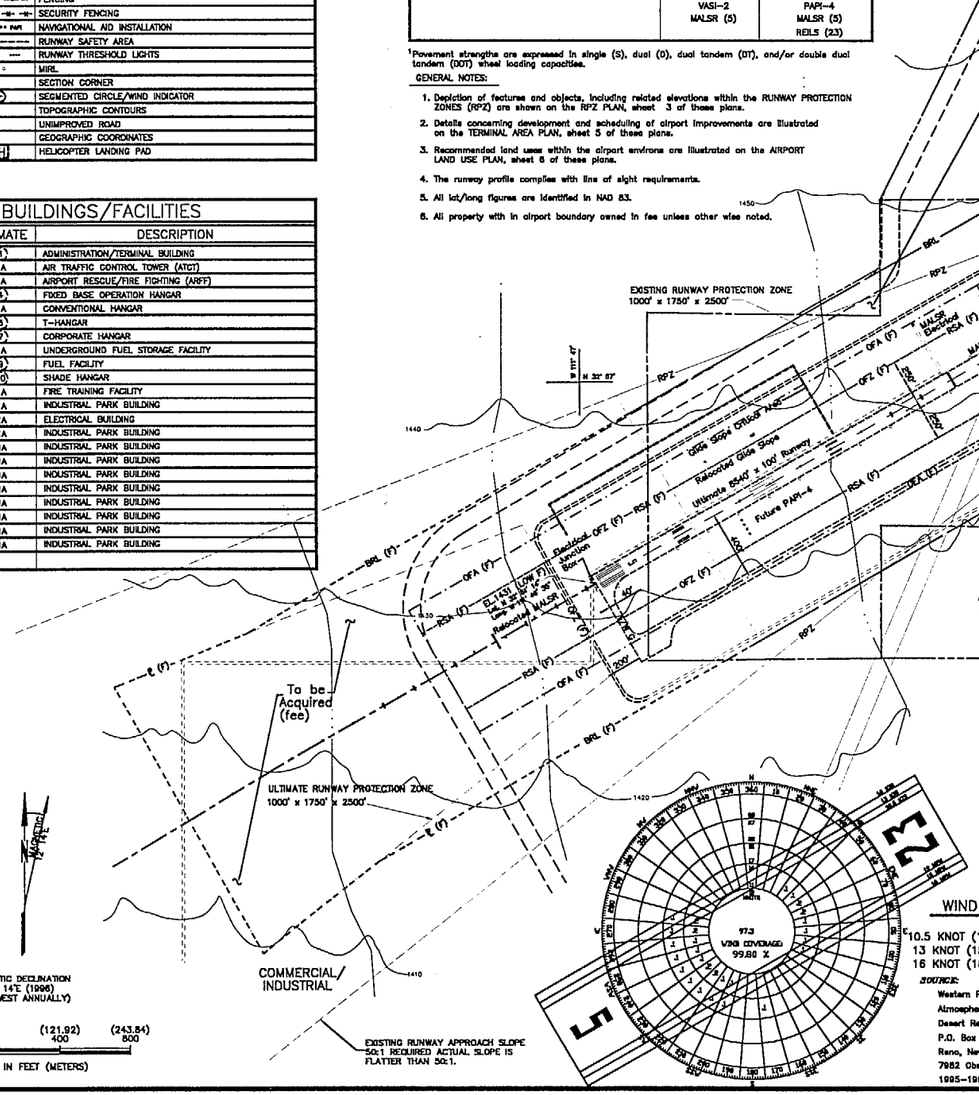
1. Depiction of features and objects, including related elevations within the RUNWAY PROTECTION ZONES (RPZ) are shown on the RPZ PLAN, sheet 3 of these plans.
2. Details concerning development and scheduling of airport improvements are illustrated on the TERMINAL AREA PLAN, sheet 5 of these plans.
3. Recommended land uses within the airport environs are illustrated on the AIRPORT LAND USE PLAN, sheet 6 of these plans.
4. The runway profile complies with line of sight requirements.
5. All lat/long figures are identified in NAD 83.
6. All property with in airport boundary owned in fee unless other wise noted.

LEGEND

EXISTING	ULTIMATE	DESCRIPTION
		AIRPORT PROPERTY LINE (P)
		AIRPORT REFERENCE POINT (ARP)
		AIRPORT ROTATING BEACON
		POWER POLE
		BUILDING CONSTRUCTION
BRL	BRL (F)	BUILDING RESTRICTION LINE (BRL)
		DRAINAGE
		FACILITY CONSTRUCTION
		FENCING
		SECURITY FENCING
VAS	PAPI	NAVIGATIONAL AID INSTALLATION
		RUNWAY SAFETY AREA
		RUNWAY THRESHOLD LIGHTS
		MIRL
		SECTION CORNER
		SEGMENTED CIRCLE/WIND INDICATOR
1080		TOPOGRAPHIC CONTOURS
		UNIMPROVED ROAD
		GEOGRAPHIC COORDINATES
H	H	HELICOPTER LANDING PAD

BUILDINGS/FACILITIES

EXISTING	ULTIMATE	DESCRIPTION
1	1	ADMINISTRATION/TERMINAL BUILDING
NA	NA	AIR TRAFFIC CONTROL TOWER (ATCT)
NA	NA	AIRPORT RESCUE/FIRE FIGHTING (ARFF)
4	4	FIXED BASE OPERATION HANGAR
5	NA	CONVENTIONAL HANGAR
6	6	T-HANGAR
7	7	CORPORATE HANGAR
8	NA	UNDERGROUND FUEL STORAGE FACILITY
NA	9	FUEL FACILITY
10	10	SHADE HANGAR
11	NA	FIRE TRAINING FACILITY
12	NA	INDUSTRIAL PARK BUILDING
13	NA	ELECTRICAL BUILDING
14	NA	INDUSTRIAL PARK BUILDING
15	NA	INDUSTRIAL PARK BUILDING
16	NA	INDUSTRIAL PARK BUILDING
17	NA	INDUSTRIAL PARK BUILDING
18	NA	INDUSTRIAL PARK BUILDING
19	NA	INDUSTRIAL PARK BUILDING
20	NA	INDUSTRIAL PARK BUILDING
21	NA	INDUSTRIAL PARK BUILDING
22	NA	INDUSTRIAL PARK BUILDING



WIND COVERAGE

10.5 KNOT (12 MPH) COVERAGE = 99.52%
13 KNOT (15 MPH) COVERAGE = 99.80%
16 KNOT (18 MPH) COVERAGE = 99.94%

SOURCE:
Western Regional Climate Center
Atmospheric Sciences Center
Desert Research Institute
P.O. Box 60220
Reno, Nevada
7952 Observations
1995-1996

FAA APPROVAL

The contents of this plan do not necessarily reflect the official views or policy of the FAA. Acceptance of this document by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted herein nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public laws.

APPROVAL	DATE
SPONSOR	

MODIFICATIONS TO STANDARD (APPROVAL DATE)

NO.	DESCRIPTION	DATE	BY:
1			

REVISIONS

CASA GRANDE MUNICIPAL AIRPORT

CASA GRANDE, ARIZONA

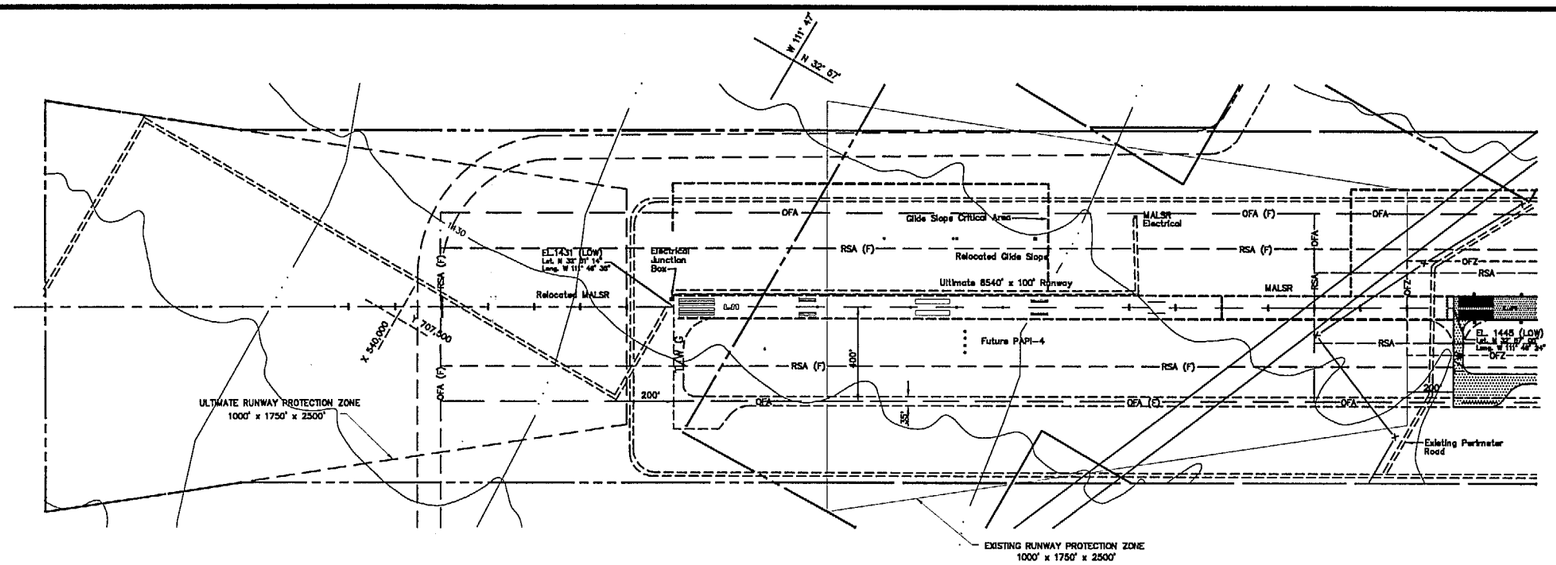
AIRPORT LAYOUT DRAWING

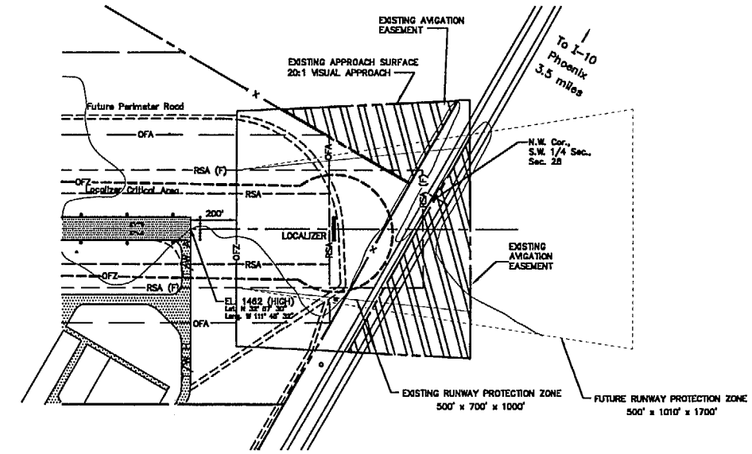
Morrison Maierle/CSSA INC.
An Employee-Owned Company
ENGINEERS SCIENTISTS SURVEYORS PLANNERS SINCE 1945
4621 North 16th Street Ste. D401 Phoenix, AZ 85016 • Phone: (602) 277-2828

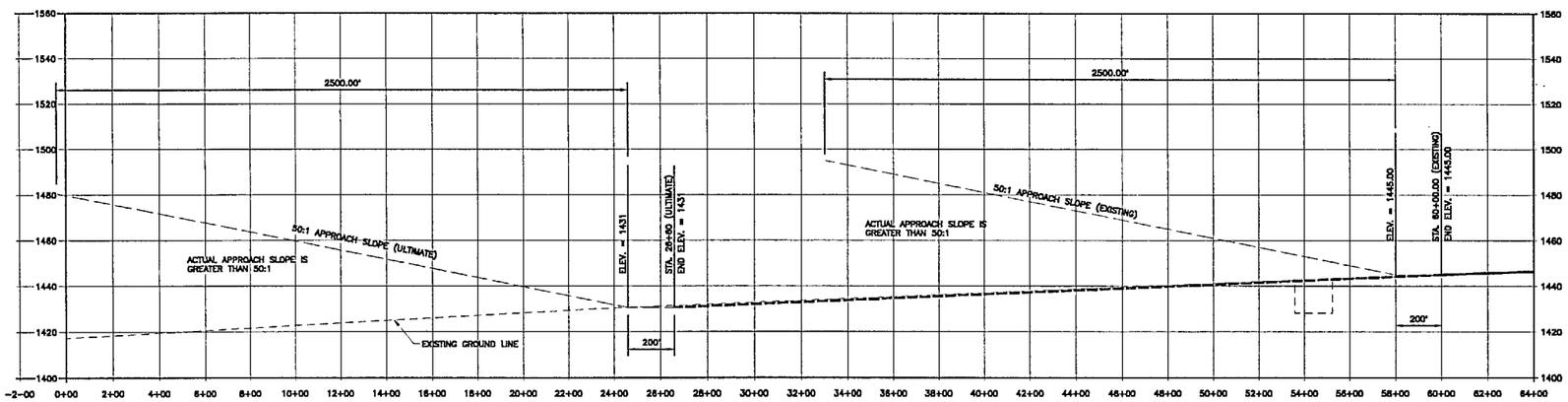
DRAWN BY: BJD
CHK'D. BY: JJH
APPR. BY: TFO
DATE: JAN. 1997
Q. A.
PEER REVIEW: JJH

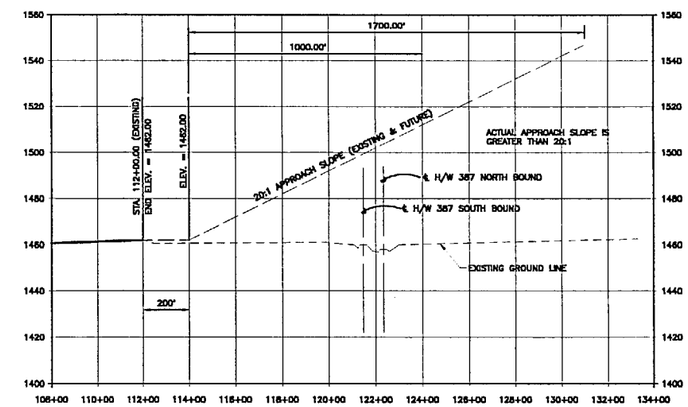
PROJECT NUMBER 1808.007-010-0113

SHEET NUMBER 2



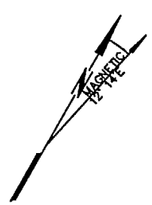






LEGEND

EXISTING	ULTIMATE	DESCRIPTION
		AIRPORT PROPERTY LINE (℄)
		AIRPORT REFERENCE POINT (ARP)
		AIRPORT ROTATING BEACON
		POWER POLE
		BUILDING CONSTRUCTION
BRL	BRL (F)	BUILDING RESTRICTION LINE (BRL)
		DRAINAGE
		FACILITY CONSTRUCTION
		FENCING
S VAR S	PAPI	NAVIGATIONAL AID INSTALLATION
		RUNWAY END IDENTIFICATION LIGHTS (REIL)
		RUNWAY THRESHOLD LIGHTS
		SECTION CORNER
		SEGMENTED CIRCLE/WIND INDICATOR
1080		TOPOGRAPHIC CONTOURS
		UNIMPROVED ROAD
N 30° 07'		GEOGRAPHIC COORDINATES
Y		ARIZONA STATE GRID COORDINATES (CENTRAL ZONE)



MAGNETIC DECLINATION
12° 14'E (1996)
(0.2' WEST ANNUALLY)

(91.44) 300 0 0 (91.44) 300 (182.88) 600

SCALE IN FEET (METERS)

NO.	DESCRIPTION	DATE	BY:
1			

REVISIONS

CASA GRANDE MUNICIPAL AIRPORT

CASA GRANDE, ARIZONA

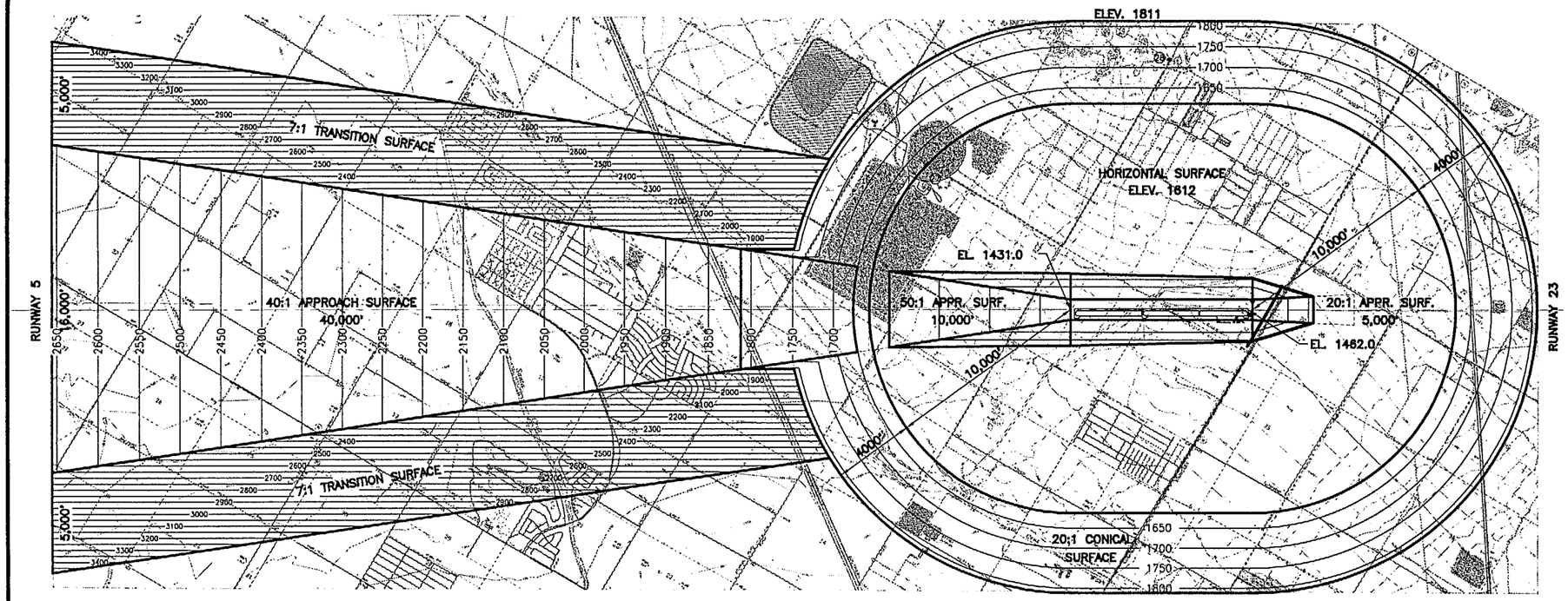
RUNWAY PROTECTION ZONE PLAN

DRAWN BY: BJD
CHK'D. BY: JJH
APPR. BY: TFD
DATE: JAN. 1997
Q. A.
PEER REVIEW: JJH

Morrison Maierle/CSSA INC.
An Employee-Owned Company
ENGINEERS
SCIENTISTS
SURVEYORS
PLANNERS
SINCE 1945
4821 North 16th Street Sta. D401 Phoenix, AZ 85016 • Phone: (602) 277-2828

PROJECT NUMBER
1808.007-010-0113

SHEET NUMBER
3



GROUND OBSTRUCTIONS

PLAN – PART 77 SURFACES

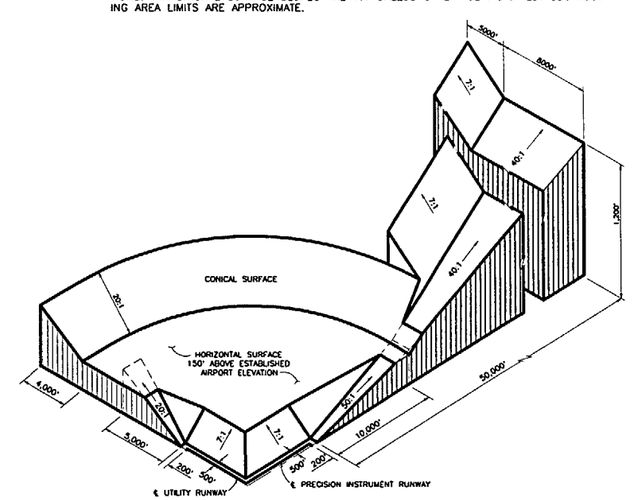
3000 0 3000 6000

SCALE IN FEET

OBSTRUCTIONS				
NO.	DESCRIPTION	ELEVATION	PENETRATION(±)	DISPOSITION
1	FENCE	1458	1'	NONE
2	BUSH	1458	12'	NONE
3	FENCE	1451	6'	NONE
4	FENCE	1452	7'	NONE
5	OL ON GLIDE SLOPE	1481	33'	OBSTRUCTION LIGHTED
6	GROUND	1454	4'	NONE
7	BUSH	1462	9'	NONE
7A	TREE	1463	10'	NONE
8	OL ON WINDSOCK AT WINDTEE	1482	27'	OBSTRUCTION LIGHTED
9	TREE	1467	10'	NONE
10	TREE	1479	20'	NONE
11	BUSH	1470	9'	NONE
12	WINDSOCK	1469	8'	NONE
13	BUSH	1467	5'	NONE
14	TREE	1476	14'	NONE
15	TREE	1472	7'	NONE
16	TREE	1479	12'	NONE
17	ROD ON BUILDING	1471	-3'	NONE
18	OL ON LOCALIZER	1469	-5'	OBSTRUCTION LIGHTED
19	ROAD (N)	1477	3'	NONE
20	ROAD (N)	1481	-3'	NONE
21	TREE	1475	NA	-
22	ANTENNA ON OL APT BEACON	1509	NA	-
23	FLOODLIGHT POLE	1507	NA	-
24	TREE	1482	NA	-
25	BUSH	1466	NA	-
26	POLE	1490	NA	-
27	POLE	1500	NA	-
28	ANTENNA ON TANK	1731	NA	-
29	TOWER	1804	NA	-

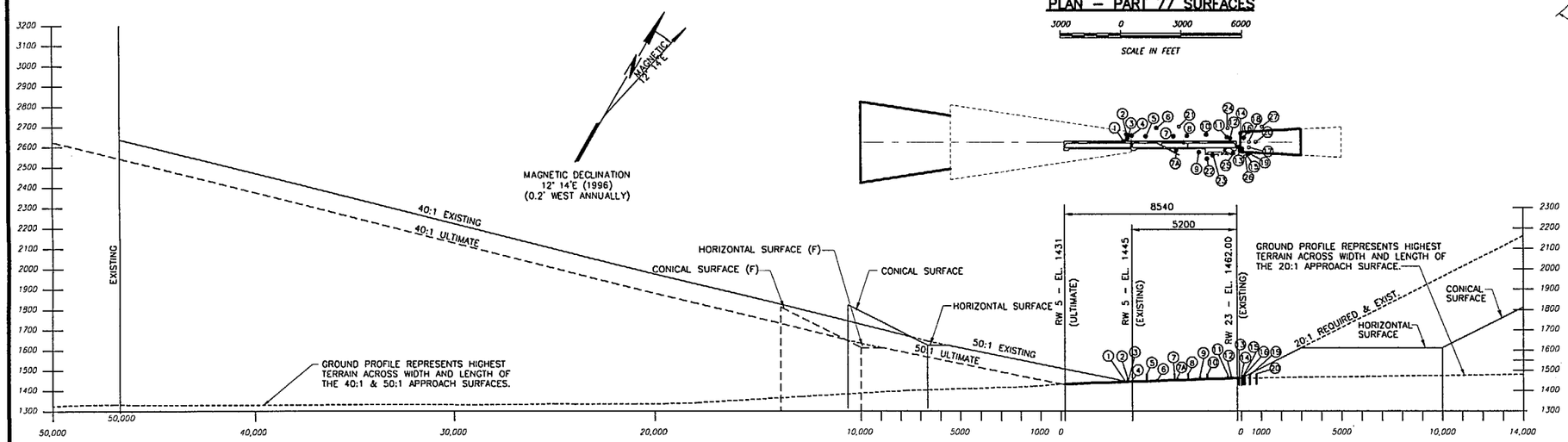
NOTES: THE OBSTRUCTION INFORMATION, SHOWN IN THE TABLES ABOVE, WAS TAKEN FROM THE OBSTRUCTION DATA SHEET ODS 6656, CASA GRANDE MUNICIPAL AIRPORT, CASA GRANDE, ARIZONA, DIGITIZED FROM OC 6656, SURVEYED OCT. 1990 2ND EDITION.

FIFTEEN FEET ADDED TO NONINTERSTATE ROAD ELEVATIONS. SEVENTEEN FEET ADDED TO INTERSTATE ROAD ELEVATIONS. TWENTY-THREE FEET ADDED TO RAILROAD TRACK ELEVATIONS. TRANSITIONAL SURFACE SLOPES ARE 7:1 UNLESS OTHERWISE INDICATED. OBSTRUCTING AREA LIMITS ARE APPROXIMATE.



TYPICAL CIVIL AIRPORT IMAGINARY SURFACES

NTS



PROFILE – RUNWAY 5/23

NO.	DESCRIPTION	DATE	BY:
1			

REVISIONS

CASA GRANDE MUNICIPAL AIRPORT

CASA GRANDE, ARIZONA

AIRPORT AIRSPACE PLAN

DRAWN BY: BJD
CHK'D. BY: JJH
APPR. BY: TFO
DATE: JAN. 1997
Q. A.
PEER REVIEW JJH

Morrison Maierle/CSSA INC.
An Employee-Owned Company
ENGINEERS SCIENTISTS SURVEYORS PLANNERS SINCE 1945
4621 North 16th Street Ste. D401 Phoenix, AZ 85016 • Phone: (602) 277-2828

PROJECT NUMBER
1808.007-010-0113

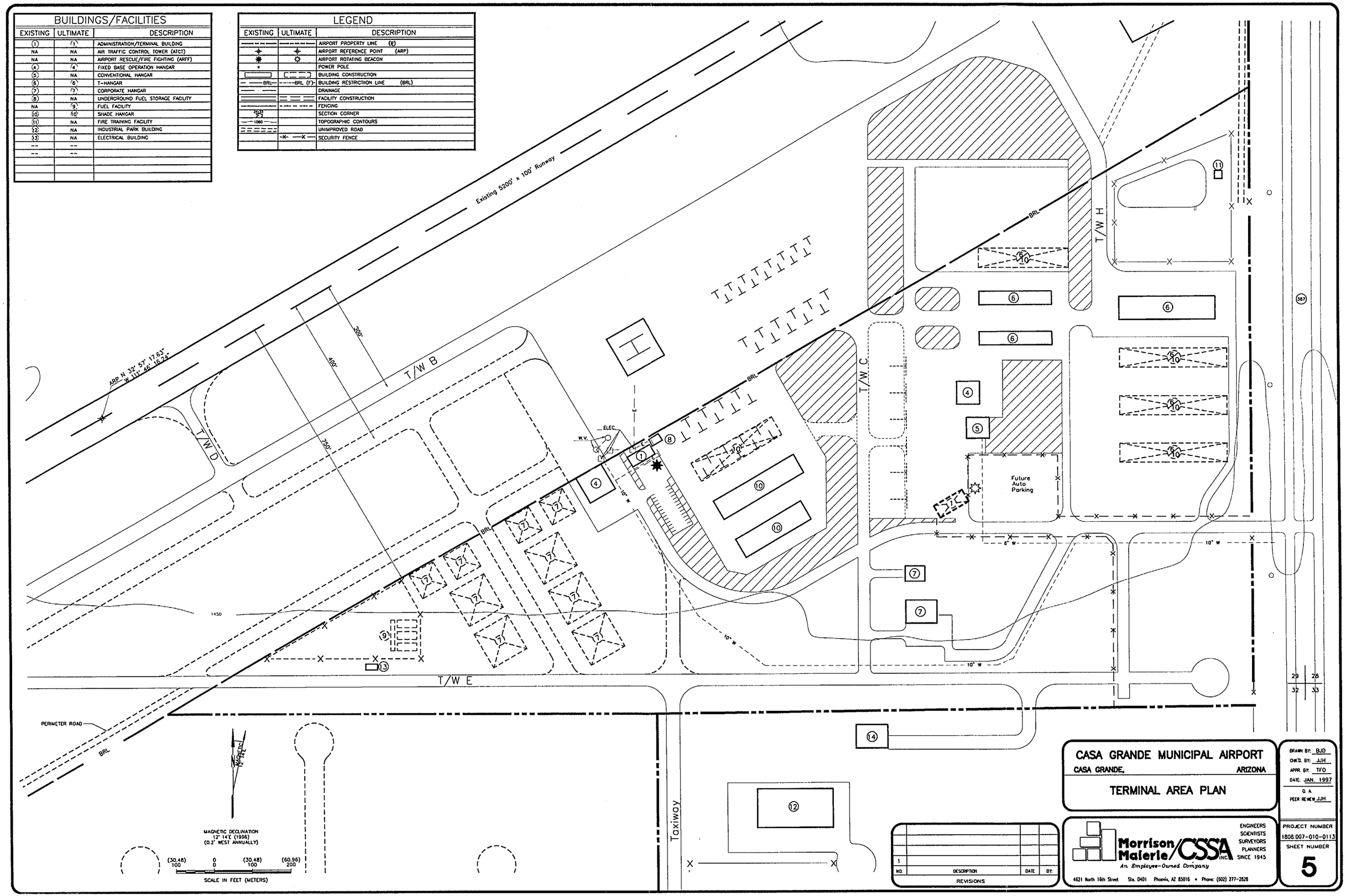
SHEET NUMBER
4

BUILDINGS/FACILITIES

EXISTING	ULTIMATE	DESCRIPTION
1	1	ADMINISTRATION/TERMINAL BUILDING
NA	NA	AIR TRAFFIC CONTROL TOWER (ATCT)
NA	NA	AIRPORT RESCUE/FIRE FIGHTING (ARFF)
4	4	FIXED BASE OPERATION HANGAR
5	NA	CONVENTIONAL HANGAR
6	6	T-HANGAR
7	7	CORPORATE HANGAR
8	NA	UNDERGROUND FUEL STORAGE FACILITY
NA	9	FUEL FACILITY
10	10	SHADE HANGAR
11	NA	FIRE TRAINING FACILITY
12	NA	INDUSTRIAL PARK BUILDING
13	NA	ELECTRICAL BUILDING
--	--	
--	--	

LEGEND

EXISTING	ULTIMATE	DESCRIPTION
		AIRPORT PROPERTY LINE (℄)
		AIRPORT REFERENCE POINT (ARP)
		AIRPORT ROTATING BEACON
		POWER POLE
		BUILDING CONSTRUCTION
BRL	BRL (F)	BUILDING RESTRICTION LINE (BRL)
		DRAINAGE
		FACILITY CONSTRUCTION
		FENCING
34+35 / 3+2		SECTION CORNER
1080		TOPOGRAPHIC CONTOURS
		UNIMPROVED ROAD
		SECURITY FENCE



CASA GRANDE MUNICIPAL AIRPORT

CASA GRANDE, ARIZONA

TERMINAL AREA PLAN

DRAWN BY: BJD
CHK'D. BY: JJH
APPR. BY: TFO
DATE: JAN. 1997
Q. A.
PEER REVIEW JJH

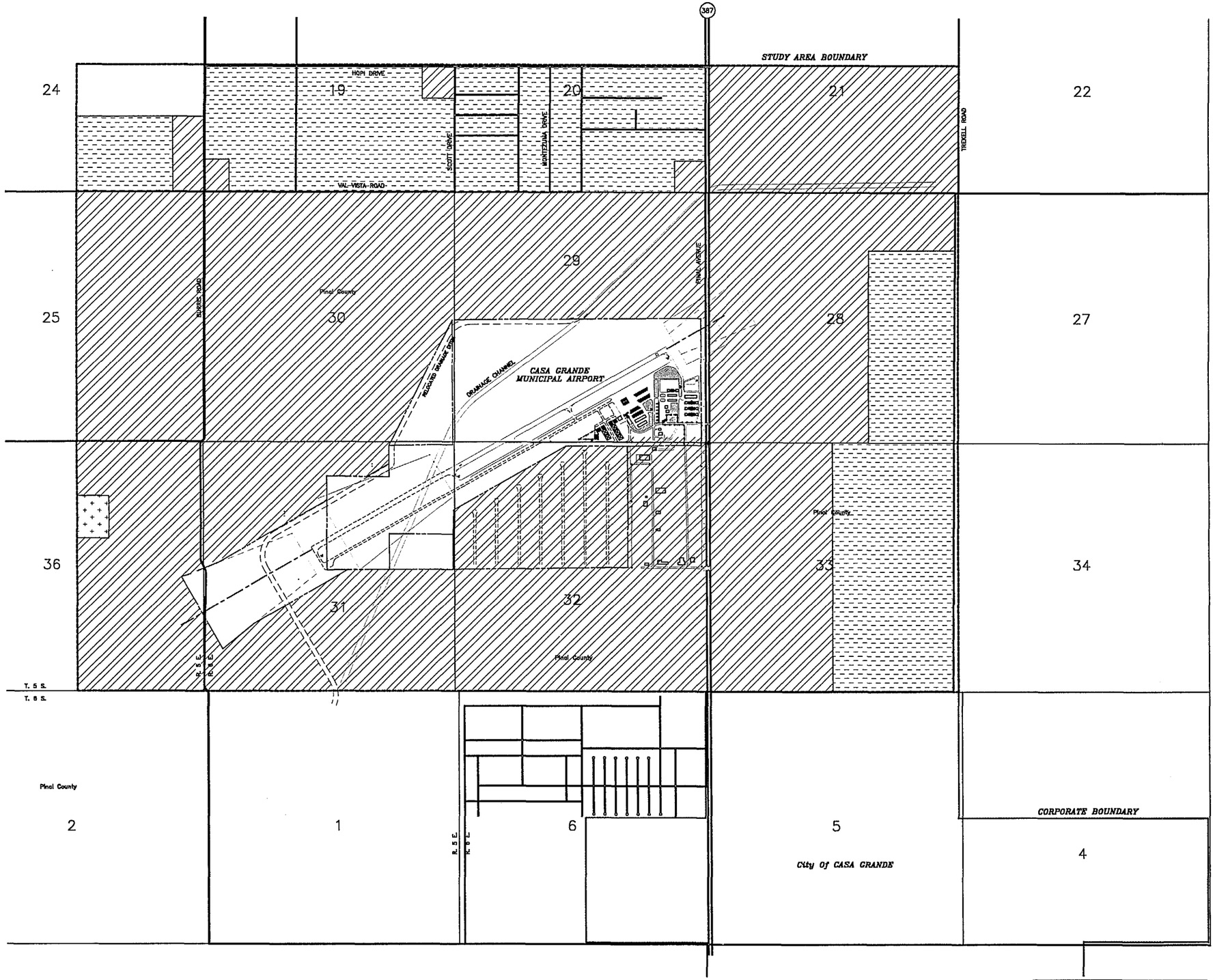
NO.	DESCRIPTION	DATE	BY:
1			

REVISIONS

Morrison Maierle/CSSA INC.
An Employee-Owned Company
ENGINEERS SCIENTISTS SURVEYORS PLANNERS SINCE 1945
4621 North 16th Street Ste. D401 Phoenix, AZ 85016 • Phone: (602) 277-2828

PROJECT NUMBER 1808.007-010-0113

SHEET NUMBER 5



LEGEND	
	DESCRIPTION
	RESIDENTIAL
	COMMERCIAL / INDUSTRIAL
	PUBLIC / RECREATIONAL
	OPEN SPACE
	EXISTING PROPERTY LINE
	ULTIMATE PROPERTY LINE

MAGNETIC DECLINATION
12° 14'E (1998)
(0.2' WEST ANNUALLY)

1000 0 1000 2000
SCALE IN FEET

NO.	DESCRIPTION	DATE	BY:
1			

REVISIONS

CASA GRANDE MUNICIPAL AIRPORT

CASA GRANDE, ARIZONA

LAND USE PLAN

DRAWN BY: BJD
CHK'D. BY: JJH
APPR. BY: TFD
DATE: JAN. 1997
G. A.
PEER REVIEW: JJH

Morrison Maierle/CSSA INC.
An Employee-Owned Company
ENGINEERS
SCIENTISTS
SURVEYORS
PLANNERS
SINCE 1945
4621 North 16th Street Ste. D401 Phoenix, AZ 85016 • Phone: (602) 277-2626

PROJECT NUMBER
1808.007-010-0113
SHEET NUMBER
6