

---

*Master Plan  
and  
Planned Area  
Development  
District*

*15 August 1990*

---

*Kortsen / Henness  
Site Development Plan*

---

*Arizona State Land Department*

Arizona  
State Land Department

June 11, 1990

Mr. Rick Miller, Director  
Planning & Development Department  
City of Casa Grande  
300 East Fourth Street  
Casa Grande, AZ 85222

Dear Mr. Miller:

It is with great pleasure that the Arizona State Land Department (ASLD) submits the Kortsen/Henness Site Development Plan and Development Guide for an approximate 480-acre parcel of State Trust land at the southwest corner of Kortsen and Henness Roads.

The Kortsen/Henness project site will be a mixed-use community combining a variety of residential, commercial, and office uses designed around an integrated recreational system. Open spaces include parks connected by pedestrian and bike paths which extend throughout the site and provide opportunities for linkage to neighboring properties.

The property has been master planned to provide a truly high-quality urban environment. To this end, this document provides a description of the land use concept and attendant circulation, landscaping, urban design and phasing concepts.

This document constitutes the application for the following planning and zoning approvals for the 487-acre project site, located at the southwest corner of Kortsen and Henness Roads in the City of Casa Grande and Pinal County, Arizona:

Master Development Plan Approval for the entire 487-acre project site.

General Plan Amendment Approval for the southern 163-acres of the project site in the City of Casa Grande.

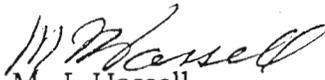
Planned Area Development (PAD) zoning approval for the southern 163-acres of the project site in the City of Casa Grande.

Mr. Rick Miller  
June 11, 1990  
Page 2

The Kortsen/Henness Development Guide is a document accompanying this application. This document describes in detail the unique urban design concepts and standards that will be implemented as a result of adoption of the Kortsen/Henness Site Development Plan. Although the Development Guide is not a formal part of the zoning application, it is submitted for City review and comment. The Development Guide can be a stipulation of zoning approval, but will actually be a part of the ASLD Kortsen/Henness Site Development Plan and will be attached to disposition of any property, subject to this planning and zoning applications.

We look forward to working with the City of Casa Grande in the review of this application.

Sincerely,

  
M. J. Hassell  
State Land Commissioner

MJH/MML/lfm

---

*Master Plan  
and  
Planned Area  
Development  
District*

*15 August 1990*

---

*Kortsen / Henness  
Site Development Plan*

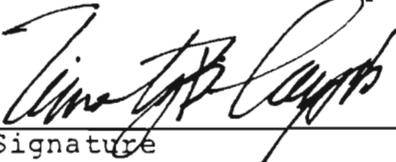
---

*Arizona State Land Department*



Zone Change Application  
Page Two

I have read the procedure for applying for a Change of Zone and understand that if my application is not complete in all respects, it will not be scheduled until such time as it is complete.

  
Signature \_\_\_\_\_ Date 11 June 1990

AREA BELOW FOR PLANNING DEPARTMENT USE ONLY

Filing Date:	Site Plan:
Mailing Date:	Site Plan:
Hearing Date:	List of Owners:
Action:	Application Fee:
Conditions:    No        Yes	

TO: Planning and Zoning Commission

ADDRESS: Casa Grande City Hall  
300 East Fourth Street  
Casa Grande, Arizona 85222

I, the undersigned, hereby petition for a Change of Zone as specified below:

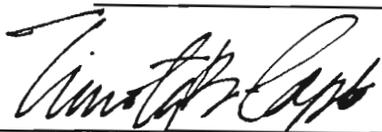
Applying for Planned Area Development (P.A.D.) Zoning

1. Explain why the subject property is suitable for the uses permitted in the proposed zone, in terms of access, size of parcel, relationship to similar or related uses.

See Attached Document

2. Explain why the granting of the change of zone at this time is necessary and that it will not be materially detrimental to the public welfare or injurious to the adjacent property.

See Attached Document

  
\_\_\_\_\_  
Applicant's Signature

11 June 1990  
\_\_\_\_\_  
Date

If there are any questions, contact the Planning Department, City Hall, 300 East Fourth Street, Casa Grande, AZ 85222, phone (602) 421-8600.



Arizona  
State Land Department

June 11, 1990

Richard Miller, Director  
Casa Grande Planning Department  
300 E. 4th St.  
Casa Grande, AZ 85222

Dear Mr. Miller:

The State Land Department hereby authorizes John McNamara, Tim Campbell and Laura Shell to file the following for State Trust land in Sections 15 and 22, Township 6 South, Range 6 East:

- \* Master Development Plan approval for the entire 487-acre project site (Sections 15 and 22)
- \* General Plan Amendment approval for the southern 163 acres (Section 22).
- \* Planned Area Development (PAD) zoning approval for the southern 163 acres (Section 22).

The firm of BRW, Inc. has the Department's permission to act as its representative in the above listed matter.

Sincerely,



Nicki A. Hansen, Director  
Urban Planning Division

NAH/MML/ms

C: Melinda Lewis, Project Manager

# Table of Contents

<u>Chapter</u>	<u>Page</u>
A	PURPOSE OF KORTSEN/HENNESSY SITE DEVELOPMENT PLAN . . . . . 1
	A.1 Purpose . . . . . 1
	A.2 List of Planning and Zoning Applications . . . . . 1
	A.3 Document Contents Summary . . . . . 2
	A.4 Development Guide Description . . . . . 2
	A.5 Project Location . . . . . 3
	A.6 Additional Planning Documentation . . . . . 3
B	AUTHORITY AND SCOPE . . . . . 5
C	LEGAL DESCRIPTION . . . . . 6
	C.1 Legal Description of Master Development Plan Area Application . . . . . 6
	C.2 Legal Description of General Plan Amendment and Planned Area Development Zoning Application . . . . . 6
D	APPROVAL PROCESS AND IMPLEMENTATION . . . . . 7
	D.1 Background . . . . . 7
	D.2 Overview of Planning and Zoning Application . . . . . 7
	D.3 Master Development Plan Process . . . . . 8
	D.4 General Plan Amendment Process . . . . . 8
	D.5 Planned Area Development (PAD) Zoning Process . . . . . 8
	D.6 ASLD Site Development Plan Process . . . . . 9
	D.7 Development Guide . . . . . 9
E	PRELIMINARY DEVELOPMENT PLAN . . . . . 10
	E.1 Land Use/Zoning/Development Densities . . . . . 10
	E.2 Circulation . . . . . 15
	E.3 Public Utilities . . . . . 16
	E.4 Landscape Concept . . . . . 16
	E.5 Parks and Open Space . . . . . 18
	E.6 Drainage . . . . . 18
	E.7 Urban Design Elements . . . . . 19
	E.8 Building Development Concepts . . . . . 19
	E.9 Phasing Concept . . . . . 19
F	PRELIMINARY STATE PLAT . . . . . 22
G	APPENDICES . . . . . 23

## *List of Figures*

<u>Figure</u>		<u>Page</u>
1	Regional Location . . . . .	4
2	Land Use and Circulation Plan . . . . .	11
3	Conceptual Landscape Plan . . . . .	17
4	Conceptual Phasing Diagram . . . . .	20

## *List of Tables*

<u>Table</u>		
1	Project-Wide Development Statistics . . . . .	12
2	PAD Zoning Statistics . . . . .	14
3	Public Improvements Responsibility Schedule . . . . .	21

## ***A. Purpose of Kortsen/Henness Site Development Plan***

### **A.1 Purpose**

The purpose of the **Kortsen/Henness Site Development Plan** is to establish a market based, compatible land use framework for the ultimate disposition of 487-acres of lands held by the Arizona State Land Department (ASLD) in trust for the beneficiaries of the State of Arizona. The ASLD is responsible for managing State Trust Lands granted to the State of Arizona. Revenues generated by the lease or sale of these lands are distributed to the Trust's beneficiaries, the primary beneficiary being the common schools.

The **Kortsen/Henness Site Development Plan** is the result of the Arizona Governor's Office program for stimulating economic development in incorporated rural areas throughout Arizona. The Arizona Department of Commerce has been working extensively with the ASLD in implementing the program within the framework of the State of Arizona's Urban Lands Act. That legislation mandates a process to examine the development potential of the subject site and to recommend a physical and economic land use mix that achieves the highest and best use within the framework of guidelines adopted by a local jurisdiction.

### **A.2 List of Planning and Zoning Applications**

According to the Urban Lands Act, local jurisdiction planning and zoning approvals must be secured by the ASLD prior to any disposition of State Trust Lands. This document constitutes the application for the following planning and zoning approvals for the 487-acre project site, located at the southwest corner of Kortsen and Henness Roads in the City of Casa Grande and Pinal County, Arizona:

- Master Development Plan Approval for the entire 487-acre project site.
- General Plan Amendment Approval for the southern 163-acres of the project site in the City of Casa Grande.
- Planned Area Development (PAD) zoning approval for the southern 163-acres of the project site in the City of Casa Grande.

The actual measures to implement these land use planning and zoning controls are discussed in detail in Section D, Approval Process and Implementation, of this document.

### A.3 Document Contents Summary

The application for these planning and zoning approvals is constituted by this document. This document includes the following six sections:

- *Chapter B, Authority and Scope:* This section addresses the State of Arizona and City of Casa Grande provisions under which this effort is being conducted.
- *Chapter C, Legal Description:* Includes a legal description of the project site and the area specifically receiving underlying zoning.
- *Chapter D, Approval Process and Implementation:* This chapter includes an overview of approvals being secured through this application, plus an overview of the subsequent approval processes necessary for site development to occur.
- *Chapter E, Preliminary Development Plan:* This section describes in a graphics and text format the development concept for the 487-acre project site. Included in this chapter are the concepts relative to land use, circulation, landscaping, urban design and phasing. Furthermore, the detailed development density and intensity information necessary for the area to receive underlying zoning is included in this section.
- *Chapter F, Preliminary State Plat:* This section includes a preliminary state plat with appropriate land use information necessary as part of the PAD zoning application.
- *Chapter G, Appendicies:* This section includes a letter from the Casa Grande Elementary School District indicating the comments made by the District have been incorporated into the plan; an archaeological site clearance letter from the Arizona State Park Department and the Executive Summary from the **Kortsen/Hennes Soil Sampling and Analyses, Pinal County, Arizona**, indicating no development constraints relative to soil toxicity or presence of pesticides, herbicides, etc.

### A.4 Development Guide Description

The **Kortsen/Hennes Development Guide** is a document accompanying this application. This document describes in detail the unique urban design concepts and standards that will be implemented as a result of adoption of the **Kortsen/Hennes Site Development Plan**. Although the Development Guide is not a formal part of the zoning application, it is submitted for City review and comment. The Development Guide can be a stipulation of zoning approval but will actually be a part of the ASLD **Kortsen/Hennes Site Development Plan** and will be attached to disposition of any property, subject to this planning and zoning application.

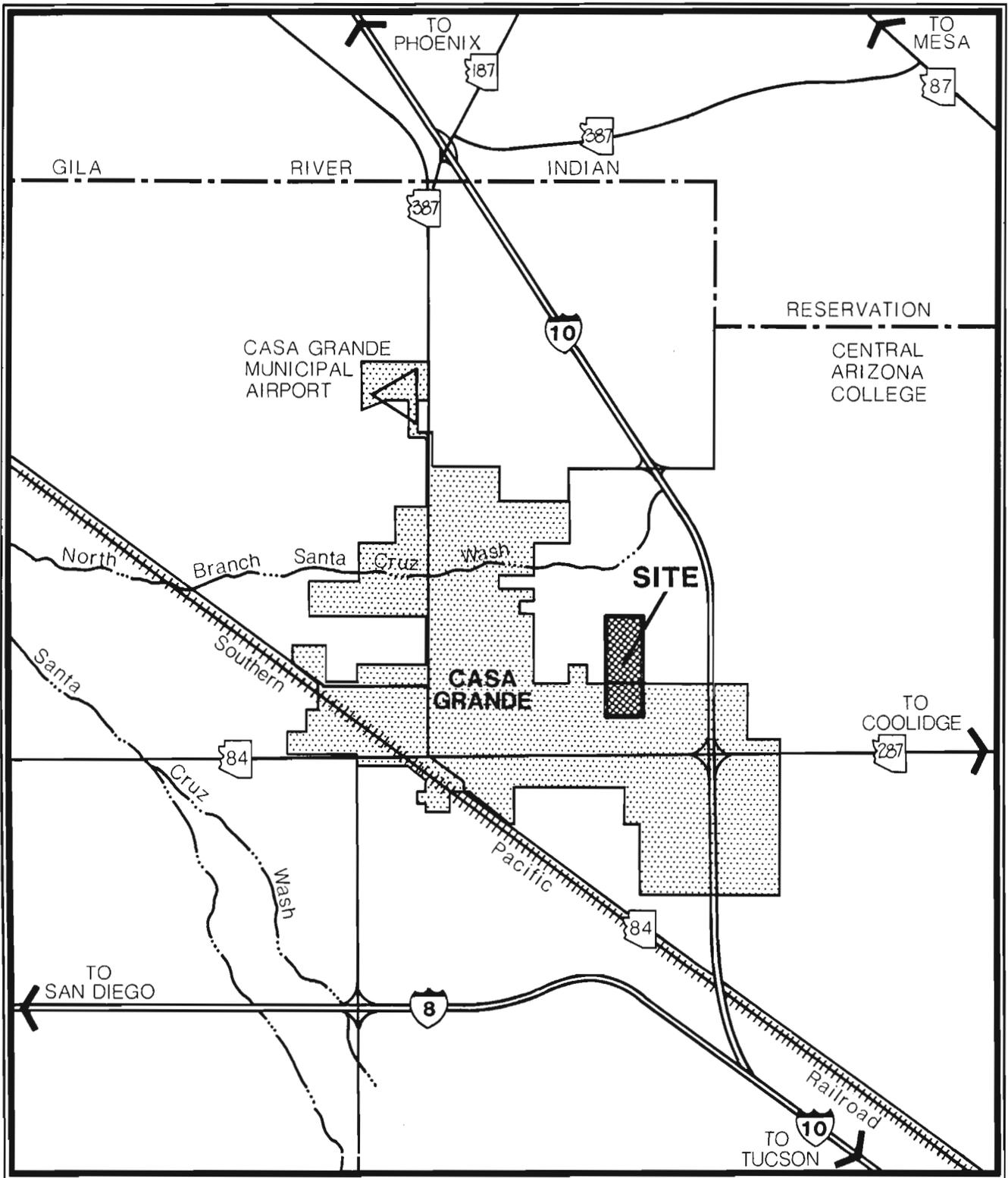
#### A.5 Project Location

As illustrated on Figure 1, Regional Location, the **Kortsen/Henness Site Development Plan** project site consists of 487.484 acres located south of Kortsen Road, east of Arizola Road, west of Henness Road and north of the mid-section line of Section 22, T6S, R6E, G&S.R.M in the City of Casa Grande and Pinal County, Arizona.

#### A.6 Additional Planning Documentation

Other information used in preparation of the **Kortsen/Henness Site Development Plan** includes the following documents:

- Site and Area Analysis
- Kortsen/Henness Soil Sample Plan
- Kortsen/Henness Soil Sampling and Analyses, Pinal County, Arizona
- An Archaeological Survey of 480-acres of Arizona State Lands near Casa Grande Pinal County, Arizona
- Kortsen/Henness Market Analysis
- Kortsen/Henness Marketability Study
- Kortsen/Henness Feasibility Study



## Regional Location

# Kortsen/Henness Casa Grande Site Development Plan

Arizona State Land Department



## ***B. Authority and Scope***

The **Kortsen/Henness Site Development Plan** has been prepared pursuant to the provisions of Ordinance 1178, as amended, of the City of Casa Grande, Arizona, otherwise known as the **Casa Grande Zoning Ordinance**, and Arizona Revised Statutes § 37-331 et seq.

## ***C. Legal Description***

### C.1 Legal Description of Master Development Plan Area Application

The east 1/2 of Section 15, Township 6 South, Range 6 East of the Gila and Salt River Meridian, Pinal County, Arizona, and the Northeast 1/4 of Section 22, Township 6 South, Range 6 East of the Gila and Salt River Meridian.

### C.2 Legal Description of General Plan Amendment and Planned Area Development Zoning Application

The northeast 1/4 of Section 22, Township 6 South, Range 6 East of the Gila and Salt River Meridian.

## ***D. Approval Process and Implementation***

### D.1 Background

This chapter is important in understanding the process necessary for planning, zoning and developing the 487-acre project site. The chapter provides an overview of the procedures which will be used to implement the **Kortsen/Henness Site Development Plan**.

Certain regulatory conditions exist which affect the overall approach used to plan and zone this property. They include:

- The project site is entirely comprised of Arizona State Trust Land. The processes mandated by the Urban Lands Act governing the disposition of Trust Lands are time-consuming and compensation for these properties must be based on an assessment of fair market value, as determined by an appraisal. Compensation must be received for all properties, including street rights-of-way, park land, schools, etc.
- Trust Lands cannot be encumbered in any way that affects their value. This includes not only property dedications but also the attachment of liens and other encumbrances on the property.
- The project site is located in two jurisdictions: the southern 163 acres is the City of Casa Grande while the northern 324 acres is in Pinal County.
- The **Casa Grande Zoning Ordinance** Planned Area Development (PAD) District includes a zoning reversion clause which would prohibit the ASLD from securing this type of zoning within the time limitations allowed by the Ordinance.

As a result of these conditions, the special procedures outlined in this chapter have been developed which allow the property to be planned and zoned within the requirements of the Urban Lands Act and consistent with the policies of the City of Casa Grande.

### D.2. Overview of Planning and Zoning Application

This document constitutes the application for the following planning and zoning approvals sought from the City of Grande:

- Master Development Plan Approval for the entire 487-acre project site.
- General Plan Amendment Approval for the southern 163-acres of the project site currently annexed in the City of Casa Grande.
- Planned Area Development (PAD) Zoning Approval for the 163-acres of the project site currently annexed in the City of Casa Grande.

An overview of each process is described below.

### D.3 Master Development Plan Process

Because the entire project site is in two jurisdictions and the applicant wishes to plan the property within a consistent land use and development framework, Master Development Plan approval is being sought for the entire site. City Council approval of the master development plan would allow the entire project to be planned within a similar land use and development concept. Although the northern 324-acres of the project site are in Pinal County, it is anticipated that at annexation into the City of Casa Grande the Master Development Plan for the northern 324-acres would become an amendment to the City's General Plan at that time. Subsequent to annexation, the appropriate zoning will be secured within the guidelines of the Master Development Plan.

### D.4 General Plan Amendment Process

Master Development Plan approval for the entire 487-acre project site will result in immediate **Casa Grande General Plan** amendment approval of the 163-acres currently in the City of Casa Grande. This approval will defer amendment of the General Plan for the northern 324-acres until annexation, at which time the General Plan amendment will become effective.

### D.5 Planned Area Development (PAD) Zoning Process

PAD zoning approval is being sought for the southern 163-acres of the project site currently in the City of Casa Grande. As a result of the unique characteristics of planning and zoning State Trust Lands, certain provisions have been made to insure that the approved zoning will not revert to its original classification as a result of the time necessary to complete Urban Lands Act planning requirements. Furthermore, provisions described in this section establish requirements that the purchaser of the State Trust Land will have to follow in order to develop the property. These provisions are described below:

- As described in Section 7.8, Procedure for Planned Area Development (P.A.D) Approval, of the **Casa Grande Zoning Ordinance**, recording of a final subdivision plat within one year of the date of zoning approval taken by the City Council will eliminate the possibility of the approved zoning from reverting to its former zoning classification. Because the Urban Lands Act procedures typically exceed one year, filing of the "State Plat" with the City of Casa Grande will secure the approved zoning until such time that a final subdivision plat prepared by the purchaser of the Trust Land can be recorded. The "State Plat" will include appropriate land use designations, densities, acreages, locations of proposed easements and rights-of-way. The "State Plat" will refer to the City's Zoning Case Number and the ASLD **Kortsen/Henness Site Development Plan**.
- The purchaser of the State Trust Land will be required to pursue the provisions of Section 7.8.5, Final Development Plan, of the **Casa Grande Zoning Ordinance**.

- The purchaser of the State Trust Land will be required to pursue the provisions of Section 5.13.2.M, Operating and Maintenance Requirements for Planned Area Development Common Facilities, of the Casa Grande Zoning Ordinance, for common area landscaping and signage.

#### D.6 ASLD Site Development Plan Process

Subsequent to securing the planning and zoning approvals discussed above from the City of Casa Grande, the ASLD will complete preparation of the **Kortsen/Henness Site Development Plan** for the entire project site. This Site Development Plan will allow the 163-acres zoned PAD to be disposed per usual ASLD processes. Adoption of the Site Development Plan for the entire project site will essentially place a planning "framework" or "umbrella" over the northern 324-acres which will guide specific zoning of the property at a future date. Development of the northern 324-acres will not occur until the acreage is zoned.

As part of the Site Development Plan process a public hearing will be held and a final "State Plat" will be completed and signed by the Arizona State Land Commissioner. The final "State Plat" will include the appropriate densities, acreages, land uses and references to the City of Casa Grande Zoning Case Number for the 163-acres receiving PAD zoning, and references to the **Kortsen/Henness Development Guide**. A copy of the final "State Plat" will be transmitted to the City of Casa Grande.

Approval of the Site Development Plan by the State Land Commissioner will allow the ASLD to complete the disposition process. Any sale or long term lease (10+ years) will be disposed of at public auction after a ten week public advertising period. The purchase or lease price of the property will be based on an appraisal. Any purchaser and/or lessee of the property will be required to abide by the provisions of the Site Development Plan, which incorporate the planning and zoning requirements as presented herein.

#### D.7 Development Guide

The **Kortsen/Henness Development Guide** will be included by the Arizona State Land Commissioner as part of the ASLD Site Development Plan for the 487-acre project site. The Development Guide describes in text and graphics the unique urban design standards and concepts that will be implemented in this project.

## ***E. Preliminary Development Plan***

### E.1 Land Use/Zoning/Development Densities

The proposed land use arrangement for the **Kortsen/Henness Site Development Plan** is presented on Figure 2, Land Use and Circulation Plan. The land use mix presented on Figure 2 is the result of extensive market analyses conducted as part of the Site Development Plan. A summary of the market analyses results is presented below, while the specific details are presented in the **Kortsen/Henness Market Study** and the **Kortsen/Henness Marketability Study**.

#### E.1.1 Market Analyses Overview

The market analyses indicated a current and projected strong demand for traditional, low density residential uses ranging from four to five dwelling units per acre. Furthermore, a strong demand for single family uses on smaller lots was also projected. The market analyses also indicated a demand for convenience and neighborhood uses necessary to serve the residential uses. These smaller convenience commercial uses would probably be in demand concurrently with and subsequent to development of the residential uses.

The longer term analyses forecast a continuation of a similar development pattern with opportunities for commercial uses increasing with a linkage provided to the regional transportation system. Both short and longer term forecasts indicated a probable demand and market window for a quality, yet affordable mixture of uses in communities with distinct identities.

#### E.1.2 Master Development Plan Overview

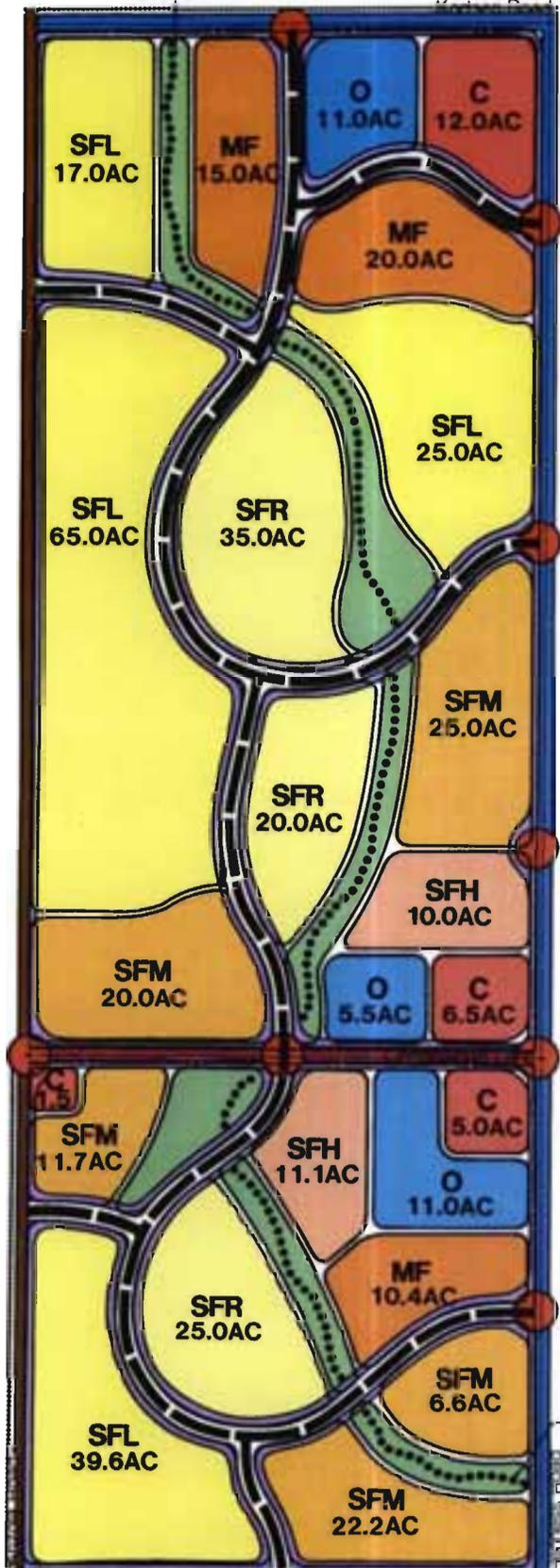
In response to the market analyses, input received from the City of Casa Grande Planning Department, the Casa Grande Elementary School District and other community officials, the proposed land use plan presented on Figure 2 is designed to result in a unique community with an appropriate mix of uses arranged to capitalize on a phased market demand.

Major commercial uses are located only at arterial street intersections, except for one convenience commercial parcel located at Arizola Road and Cottonwood Lane in anticipation of near term market demands. These commercial uses are surrounded by either office, multi-family or higher density single-family uses. Development densities lessen in intensity with increasing distance from the major arterial streets and commercial uses. Lower density single-family uses are planned to be located near the interior of the project site, buffered by a linear open space corridor and wider street landscaping setbacks.

The proposed land use mix for the entire project site is summarized on Table 1, Project-Wide Development Statistics.

PARK/OPEN SPACE 37.1 AC

# Land Use and Circulation Plan



McMurray Boulevard

## Land Use

Land Use	Section 15		Section 22		Total Acres	Total Dev.
	Gross Acres	Dev.	Gross Acres	Dev.		
Single Family Rural (Min. 10,000 S.F. Lots)	55.0	240 DU	25.0	110 DU	80.0	350 DU
Single Family Low (Min. 7,000 S.F. Lots)	107.0	665 DU	39.6	246 DU	146.6	911 DU
Single Family Medium (Min. 5,000 S.F. Lots)	45.0	392 DU	40.5	353 DU	85.5	745 DU
Single Family High (11,500 S.F. Lots)	10.0	145 DU	11.1	161 DU	21.1	306 DU
Multi-Family (1/2,000 S.F. Lots)	35.0	763 DU	10.4	227 DU	45.4	990 DU
Office	16.5	216,000SF	11.0	144,000SF	27.5	360,000SF
Commercial	18.5	201,500SF	6.5	71,000SF	25.0	272,500SF
Park/OpenSpace	37.1		19.3		56.4	
<b>TOTAL</b>	<b>324.1</b>	<b>2,205DU/ 417,500SF</b>	<b>163.4</b>	<b>1,097DU/ 215,000SF</b>	<b>487.5</b>	<b>3,302DU 632,500SF</b>

## Circulation

- Major Arterial Street (Kortsen Rd., Hennessy Rd.)  
130' Right-of-Way
- Minor Arterial Street (Cottonwood Ln.)  
110' Right-of-Way
- Major Collector (Arizola Rd.)  
80' Right-of-Way
- Secondary Collector Street  
80' Right-of-Way
- Potential Signalized Intersection Locations
- Pedestrian Circulation System
- Pedestrian/Bicycle Path System
- Class III : Bike Route

Source: BRW Inc., August 1990

# Kortsen/Hennessy Casa Grande Site Development Plan

Arizona State Land Department

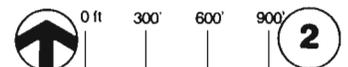


Table 1  
Project-Wide Development Statistics

Land Use/ Min. Lot Size	Gross Acres	Section 15		Section 22		Gross Acres	Total Project Net Acres	Gross Acres	Total Project Net Acres	Development Magnitude***
		Net Acres	Development Magnitude***	Net Acres	Development Magnitude***					
Single Family Rural (Min. 10,000 SF Lots)	55.0	55.0	200-240 DU**	25.0	25.0	90-110 DU	80.0	80.0	290-350 DU	
Single Family Low (Min. 7,000 SF Lots)	107.0	104.5	550-665 DU	39.6	36.7	194-246 DU	146.6	141.2	744-911 DU	
Single Family Med. Detached (Min. 5,000 SF Lots)	45.0	40.6	304-392 DU	40.5	35.9	266-353 DU	85.5	76.5	570-745 DU	
Single Family High Attached (Min. 1 DU/ 3,000 SF Lot Area)	10.0	9.3	115-145 DU	11.1	10.4	128-161 DU	21.1	19.7	243-306 DU	
Multi-Family (Min. 1 DU/ 2,000 SF Lot Area)	35.0	33.5	670-763 DU	10.4	9.6	178-227 DU	45.4	43.1	848-990 DU	
Office (0.30 F.A.R.***)	16.5	14.8	216,000 SF	11.0	10.0	144,000 SF	27.5	24.8	360,000 SF	
Commercial (0.25 F.A.R.)	18.5	14.0	201,500 SF	6.5	5.0	71,000 SF	25.0	19.0	272,500 SF	
Park/Open Space	37.1	36.6	-	19.3	19.3	-	56.4	55.9	-	
Arterial Street Rights-of-Way	-	15.8	-	-	11.5	-	-	27.3	-	
<b>Total</b>	<b>324.1</b>	<b>324.1</b>	<b>1,839-2,205 DU/ 417,500 SF</b>	<b>163.4</b>	<b>163.4</b>	<b>856-1,097 DU/ 215,000 SF</b>	<b>487.5</b>	<b>487.5</b>	<b>2,695-3,302 DU/ 632,500 SF</b>	

Source: BRW, Inc., August 1990

\*SF - Square Feet

\*\*DU - Dwelling Units

\*\*\*F.A.R. - Floor Area Ratio

\*\*\*\*Range of development when calculating dwelling units based on gross acreage and vs. calculating density on 85% of net acres.

As indicated on Table 1, land use allocations for parks and open spaces have been made. Discussions with the Casa Grande Elementary School District indicated that elementary school sites are not necessary to be located on the project site (see Appendices). It is anticipated that school children will walk to their respective schools planned to be located off-site.

#### E.1.4 General Plan Interface

The Casa Grande General Plan Update 1985 - 2000 and Casa Grande/I-10 Corridor Area Plan assisted in guiding preparation of the Kortsen/Henness Site Development Plan. Both General Plans originally included over ~~50 acres of parks and~~ 22 acres of elementary schools on the project site. As a result of discussions with the school district the planned school uses have been converted to residential uses. ~~while 42 acres of the originally planned 50 acres in parks have been planned as open space uses.~~ Additional commercial uses have been planned, especially near the corner of Kortsen and Henness Roads, in anticipation of a future interchange at Interstate 10 and Kortsen Road. Smaller neighborhood commercial areas have been planned at the intersection of Henness Road and Cottonwood Lane to respond to more residentially - driven shopping area needs within a time frame consistent with the residential build-out of the project.

#### E.1.5 Planned Area Development (PAD) Zoning Statistics

The southern 163 acres of the project site currently in the City of Casa Grande will receive PAD zoning at this time. Table 2, PAD Zoning Statistics, provides an overview of the specific land use information, including gross and net acreages and the most nearly equivalent zoning categories for the 163 acres being zoned PAD. The gross acres column in Table 2 includes the actual acreages of each land use being zoned. The arterial street rights-of-way and park and open space acreages will receive underlying zoning based on the adjacent residential or commercial land use.

Table 2  
PAD Zoning Statistics

Land Use	Acres Gross <sup>(1)</sup>	Net	General Development Magnitude <sup>(4)</sup>	Minimum Lot Size
Single Family Rural	25.0	25.0	90-110 DU <sup>(2)</sup>	10,000 SF <sup>(3)</sup>
Single Family Low	39.6	36.7	194-246 DU	7,000 SF
Single Family Medium	40.5	35.9	266-353 DU	5,000 SF
Single Family High	11.1	10.4	128-161 DU	1 DU/3,000 SF
Multi-Family	10.4	9.6	178-227 DU	1 DU/2,000 SF
Office <sup>(5)</sup>	11.0	10.0	144,000 SF	0.30/F.A.R.
Commercial <sup>(6)</sup>	6.5	5.0	71,000 SF	0.25/F.A.R.
Park/Open Space	19.3	19.3	-	N/A
Arterial Street Right- of-Way	-	11.5	-	N/A
<b>Total</b>	<b>163.4</b>	<b>163.4</b>	<b>856-1,097 DU/ 215,000 SF</b>	

(1) Includes perimeter street rights-of-way acreage.

(2) DU - Dwelling Units

(3) SF - Square Feet

(4) Range of development when calculating dwelling units based on gross acres vs. 85% of net acres.

(5) The following uses, maximum floor to lot area ratio and building heights are permitted in areas designated office:

● Uses Permitted

- Office uses (e.g. lawyers, engineers, insurance, real estate, doctors, dentists, accountants, architects, etc.) with accessory uses comprising no more than 15% of building area. Accessory uses must be intended to serve primarily office users with no external advertising allowed (e.g. restaurants, coffee shop, snack/sundry shop, gift shop).

● Maximum Floor Area Ratio (FAR)

- 0.30 based on gross site area

● Maximum Building Height

- 3 Stories or 40 feet

(6) The following uses, maximum floor to lot area ratio and building heights are permitted in areas designated commercial:

Table 2 (continued)  
PAD Zoning Statistics

- Uses Permitted
    - Retail and services, including grocery stores, drug stores, variety and soft goods stores, boutique shops, hobby stores, restaurants, video rental shops, beauty salons/barber shops, stores, branch banks, service stations, etc. are permitted in these areas.
  - Maximum Floor Area Ratio (FAR)
    - 0.25 based on gross site area
  - Maximum Building Height
    - 1 story of no more than 24 feet
- 

## E.2 Circulation

The circulation system for the **Kortsen/Heness Site Development Plan** includes design concepts for both vehicular and non-vehicular transportation systems. Streets and pathways are planned to minimize conflicts between vehicles and pedestrians while providing the most efficient and accessible circulation system throughout the development. The vehicular circulation concepts presented on Figure 2, Land Use and Circulation Plan, generally consist of standards established in the **Casa Grande Zoning Ordinance** and **Master Thoroughfare Plan and Transportation Study**.

The vehicular circulation system for the Site Development Plan includes the functional classification system developed in the City of Casa Grande's **Master Thoroughfare Plan and Transportation Study**. The street classification system for the Site Development Plan includes the following five classifications:

- Major Arterials
- Minor Arterials
- Major Collectors
- Secondary Collectors
- Local Streets

Major arterials include Kortsen and Henness Roads as six lane divided roadways in a 130-foot right-of-way. Minor arterials consist of Cottonwood Lane as a four lane divided roadway in a 110-foot right-of-way. The **Kortsen/Heness Development Guide** will require an additional ten (10) feet on each side of the right-of-way contiguous to the project site for an additional landscaping area.

The two only streets in the project area designated as major collectors include McMurray Boulevard and Arizola Road between Kortsen Road and McMurray Boulevard. The internal collector streets proposed within the Site Development Plan will be secondary collectors. Both major and secondary collectors consist of an 80-foot right-of-way. The internal collector streets will utilize a 47-foot pavement width except at arterial street intersections where a 67-foot pavement width will be used. The Development Guide will require additional landscape areas on these collectors. Local streets proposed within the Site Development Plan will be within a 44-foot right-of-way.

Vehicular access standards required within the Site Development Plan comply with **Casa Grande Zoning Ordinance**, the **Casa Grande Master Thoroughfare Plan and Transportation Study** and the guidelines in the Development Guide.

Parking standards shall be in conformance with the **City of Casa Grande Zoning Ordinance** and those standards set forth in the Development Guide.

Loading and service area requirements shall be in compliance with the City's Zoning Ordinance and the criteria presented in the Development Guide.

Signalized Intersections shall meet all City requirements and shall not be located closer than one quarter mile in spacing.

Street lights and typical improvements shall be installed to City standards.

The non-vehicular circulation system developed for the **Kortsen/Heness Site Development Plan** includes a pedestrian and a bicycle system throughout the site. The pedestrian system will include meandering walkways along all arterial and collector streets and a pedestrian/bicycle pathway along the linear open space corridor throughout the development. The bicycle circulation system includes the meandering pedestrian/bicycle pathway within the open space system and designated bike routes along the arterial and collector streets, as presented on Figure 2.

Kortsen Road and Arizola Road are proposed as a Class III: Bike Routes, according to the Recommended Bicycle System for Casa Grande. A Class III: Bike Route provides a designated route within the street rights-of-way, to be shared with general vehicular traffic.

### E.3. Public Utilities

Major water and wastewater facilities currently planned by the City of Casa Grande will provide service to the project site. Two, 12-inch water mains currently provide service to the southern 163 acres receiving PAD Zoning. An 18-inch line currently in Arizola Road along with an 18-inch main proposed to be installed in Henness Road and Cottonwood Lane will provide wastewater service to the project site.

All public and privately owned utility facilities, existing or proposed, shall comply with appropriate federal, state and local standards. Utilities will also be subject to the aesthetic design standards presented in the Development Guide. All public utilities planned within the Site Development Plan shall be located within street rights-of-way or a public utility easement ten (10) feet in width established along both sides of local streets.

### E.4. Landscape Concept

The landscape concept for the **Kortsen/Heness Site Development Plan** is illustrated on Figure 3, Conceptual Landscape Plan. Primary and secondary entry nodes will provide unique site entrances incorporating extensive landscaping and unified theme signage as presented on Sections A and B on Figure 3. All plant materials throughout the project will be Sonoran Desert in character. The Sonoran Desert concept consists of low water using and low maintenance desert plant materials, reflective of the semi-arid region. Internal collector streets and project perimeters will utilize extensive Sonoran Desert landscaping, but each area will include a unique theme providing a distinction between areas.



A comprehensive set of landscape guidelines in the Development Guide utilize a wide variety of lush desert plant materials that have low water and low maintenance requirements and will provide a strong association with the regional character. Included in these guidelines are restrictions which limit turf areas to no more than 20 percent of a site lot area.

In an effort to retain the natural desert character and establish water conserving landscapes, plant list were prepared for the Site Development Plan and are included in the Development Guide.

Landscaping concepts and guidelines are also included in the Development Guide for entry nodes, streetscapes, perimeter edges, residential and commercial areas, and open space/corridor systems. These guidelines are designed to establish continuity and consistent quality throughout the development.

#### E.5 Parks and Open Space

The park/open space system developed for the **Kortsen/Heness Site Development Plan** consists of 56.5 ~~42.5~~ acres or approximately twelve (12) ~~nine (9)~~ percent of the total site area. Seven (7) percent is the minimum open space requirement established by the City of Casa Grande in the Planned Area Development (P.A.D.) Zone. The open space system proposed for the development consists of a linear corridor which varies in width from 150 to 250-feet throughout the development. Two parks are also located within the development, as shown on Figure 3, Conceptual Landscape Plan. A ten (10) acre community park is planned to be located on the northern portion of the project site, while a five (5) acre neighborhood park will be located south of Cottonwood Lane. These park nodes will not be used for on-site detention/retention purposes.

The open space corridor includes a meandering pedestrian/bicycle pathway. The pathway provides a circulation system for pedestrians and bicycles throughout the development. The landscape treatment of these corridors will reflect the Sonoran Desert theme with strategically located areas of turf for community-wide use. The open space corridors will also accommodate the on-site drainage detention requirements in accordance with City standards.

#### E.6 Drainage

The drainage requirements of the **Kortsen/Heness Site Development Plan** will be in conformance with the City of Casa Grande Master Drainage Study. Within the Site Development Plan study area are two drainage channels proposed on the City's Master Drainage Plan. These two channels are both located on the northern and eastern perimeter of the southern 163 acre portion of the project site. The 40-foot drainage channel on the north side of Cottonwood Lane can be accommodated within the Site Development Plan. The 40-foot drainage channel on the east side of Henness Road falls outside the boundary of the site development plan. In addition to the proposed drainage channel along Cottonwood Lane, the Site Development Plan includes a linear park/open space system which will accommodate the development's on-site detention requirements, which are a minimum of 58.3 acre-feet. The two park nodes comprising fifteen acres, however will not be used for drainage detention purposes.

## E.7 Urban Design Elements

The urban design concepts developed for the **Kortsen/Henness Site Development Plan** includes a comprehensive system of lighting, street furniture, signage and wall and fence treatment contributing to a sense of identity and continuity throughout the development. The urban design standards established in the Development Guide assure a unique desirable character for the project.

## E.8 Building Development Concepts

The building development concepts for the **Kortsen/Henness Site Development Plan** reflect an overall image of quality. Consistency in design elements shall be exhibited through the appropriate use and scale of details, materials, colors and textures, including the use of "textured masonry" architectural treatments. The **Kortsen/Henness Development Guide** addresses such issues as building materials, orientation, setbacks, massing and screening of mechanical equipment. At a minimum, the requirements of the **Casa Grande Zoning Ordinance** will be met. The building development guidelines included in the Development Guide assure a quality development which functions and integrates with the proposed landscape treatment, site planning guidelines and proposed building materials guidelines.

## E.9 Phasing Concept

### E.9.1 General Overview

The development of the **Kortsen/Henness Site Development Plan** is envisioned to occur over a 10-20 year period. Based on the market analyses conducted at the outset of this project and on the proximity to infrastructure, it is anticipated that the southern 163 acres will be the first area within the project to develop. Of of this area, the portion of the site adjacent to Arizola Road will probably develop initially, with expansion into the residential areas adjacent to Henness Road occurring within the time frame consistent within the installation of that roadway. The later phases will include the development of commercial uses at the intersection of Cottonwood Lane and Henness Road, and ultimately the development of the northern 324 acres of the project site. This phasing sequence is presented on Figure 4, Conceptual Phasing Diagram.

### E.9.2 Public Improvements Phasing

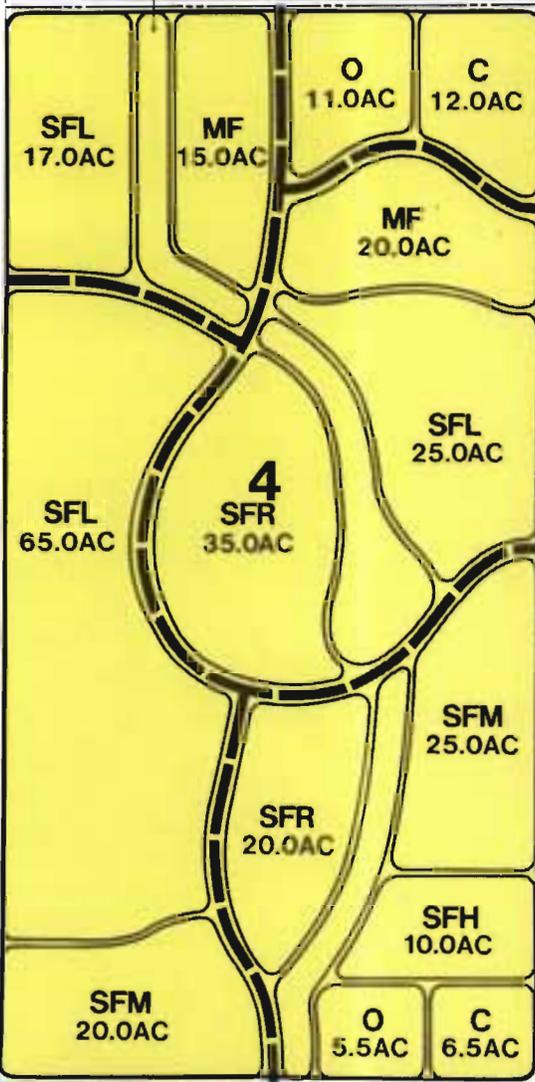
The phasing of public improvements will occur on a logical, cost efficient, phased basis consistent with project development. Table 3, Public Improvements Responsibility Schedule, is a preliminary outline of the public improvements that may be improved by the developer(s) of each respective tract, as identified on the Preliminary State Plat. While Table 3 includes the assignment of construction responsibility to specific tracts, it in no way precludes the ability of other parties to develop alternative plans addressing the issue of installation of public infrastructure.

Subsequent to the adoption of the Kortsen Henness Site Development Plan and prior to the construction of any improvements, a detailed improvements plan specifying the actual phasing and installation of public improvements will be prepared by a purchaser of the property. That purchaser will be required

PARK/OPEN SPACE 37.1AC

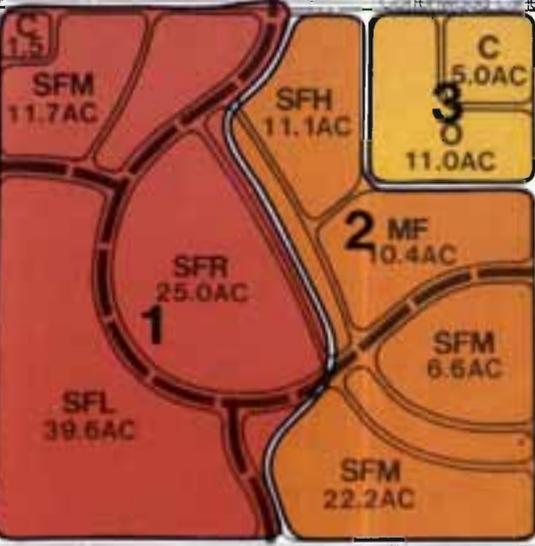
Kortsen Road

# Conceptual Phasing Diagram



- Phase 1
- Phase 2
- Phase 3
- Phase 4

Source: BRW Inc., August 1990



PARK/OPEN SPACE 19.3AC

McMurray Boulevard

## Kortsen/Henness Casa Grande Site Development Plan

Arizona State Land Department



to prepare designs of the following improvements and to establish a financing mechanism for the construction of these improvements:

- Arterial Streets and Landscaping
- Collector Streets and Landscaping
- Parks and Linear Open Space Corridors

Table 3

Public Improvements Responsibility Schedule

<u>Improvement</u>	<u>Tract Responsible For Construction</u>
Arterial Streets and Landscaping	Contiguous Tract Owner/Leasee -or- Improvement District of Some/All Tract Owners/Leasees
Collector Streets and Landscaping	Contiguous Tract Owner/Leasee -or- Improvement District of Some/All Tract Owners/Leasees
Neighborhood Park (5 acres)	Tract 2 -or- Improvement District of Some/All Tract Owners/Leasees
Open Space Corridor	Contiguous Tract Owners/Leasees -or- Improvement District of Some/All Tract Owners/Leasees

*F. Preliminary State Plat*

# STATE LAND PLAT NO. 21

## KORTSEN/HENNESS PRELIMINARY STATE PLAT

A TRACT MAP OF THE PROPOSED SUBDIVISION OF THE  
NE 1/4 OF SECTION 22, T. 6 S., R. 6 E., GILA AND SALT  
RIVERS MERIDIAN, PINAL COUNTY, ARIZONA

North 1/4 Cor Sec 22  
1/2" Rebar

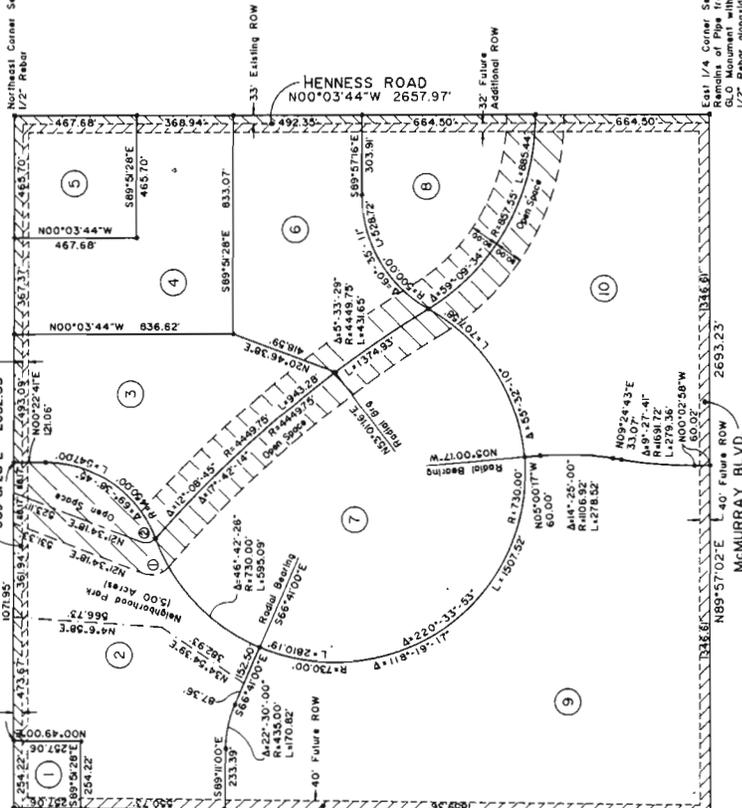
NO.	DEFLECTION	RADIUS	LENGTH
1	71°-30'-30"	86.78'	105.05'
2	70°-40'-55"	48.82'	80.23'

North 1/4 Cor Sec 22  
1/2" Iron Pipe with  
40# Nut Bolts



T-6-S R-6-E

SCALE 1" = 200'



**DECLARATION**  
KNOW ALL MEN BY THESE PRESENTS, THAT THE ARIZONA STATE LAND DEPARTMENT, acting through M.J. Hassell, STATE LAND COMMISSIONER, under the provision of Section 37-334 Arizona Revised Statutes, has caused to be surveyed and described under the name of STATE PLAT NO. 21, the NE 1/4 of Section 22, T. 6 S., R. 6 E., Gila and Salt Rivers Meridian, Pinal County, Arizona, as shown on the attached plat, and the same being INSTANTLY OPENED AND OFFERED FOR SALE TO THE PUBLIC, and the same being subject to the provisions of the Arizona State Land Code, and the provisions of the Arizona State Land Department's subdivision tracts that include the sections of proposed public rights of way and proposed drainage easements.

**DEDICATION**  
THE ARIZONA STATE LAND DEPARTMENT is pleased by law from dedication of public thoroughfares. It is the intent of the ARIZONA STATE LAND DEPARTMENT that those areas to be used for public ingress and egress be dedicated to the public. It is further intended that the purchaser of some will forthwith dedicate same for the purposes stated above with the provision that the purchaser of some will forthwith dedicate same for the purposes stated above.

**IN WITNESS WHEREOF**,  
THE ARIZONA STATE LAND DEPARTMENT acting through M.J. Hassell, STATE LAND COMMISSIONER,  
has hereunto affixed its signature this \_\_\_\_\_ day of \_\_\_\_\_, 1990.  
ARIZONA STATE LAND DEPARTMENT

**ACKNOWLEDGEMENT**  
STATE of Arizona  
County of Pinal  
ARIZONA STATE LAND COMMISSIONER

On this, the \_\_\_\_\_ day of \_\_\_\_\_, 1990, before me, personally appeared M.J. HASSELL,  
ARIZONA STATE LAND COMMISSIONER, known to me to be the person whose name is subscribed to the foregoing instrument,  
and acknowledged to me that he executed the same for the purposes herein expressed.

**IN WITNESS WHEREOF**,  
I hereunto set my hand and official seal. My commission expires on \_\_\_\_\_  
\_\_\_\_\_  
Notary Public

**CERTIFICATE**  
This is to certify that this plat and the survey upon which it is based were made in accordance with the State Land Department's rules and regulations, and that the same are correct and true to the actual conditions of the survey and the subdivision.  
The date of this certificate is the date of the recording of this plat in the office of the Registrar of Deeds for Pinal County, Arizona.

REFERENCE TO CITY OF CASA GRANDE PLANNING AND ZONING CASE FILE NUMBERS CGPZ-21-90,  
CGPZ-22-90, CGPZ-23-90 AND CGPZ-24-90.  
REFERENCE TO ARIZONA STATE LAND DEPARTMENT DEVELOPMENT PLAN FILE NUMBER 49-97248.  
NOTE: ALL CHANGES, AMENDMENTS OR ALTERATIONS OF THIS PLAT SHALL BE SUBJECT TO  
APPROVAL BY THE ARIZONA STATE LAND DEPARTMENT.

LEGEND	
(10)	TRACT NUMBER
→	TRACT BOUNDARY
*	TRACT CORNER
•	SUBDIVISION CORNER
---	FUTURE ADDITIONAL ROADWAY RIGHT-OF-WAY
---	EXISTING ROADWAY RIGHT-OF-WAY
---	PROPOSED OPEN SPACE BOUNDARY
---	PROPOSED PARK BOUNDARY
---	F.A.R. GROSS BLDG FLOOR AREA/SITE AREA IN S.F.
---	DWELLING UNITS/GROSS ACREAGE

TRACT NUMBER	TOTAL ACREAGE	AGREEMENT PERIMETER ROADWAY ACREAGE	PROPOSED PARK/ OPEN SPACE ACREAGE	LAND USE	F.A.R./MINIMUM LOT SIZE	GENERAL DEVELOPMENT MAGNITUDE
1	11.5001	0.5053		COMMERCIAL/RETAIL	0.25 F.A.R.	16,500 S.F.
2	19.9029	1.7329	8.2413	RESIDENTIAL	5000 SQ FT	102 DU
3	13.3052	0.6229	2.2622	RESIDENTIAL	IDU/3000 SQ FT	161 DU
4	11.0000	1.0144		COMMERCIAL/OFFICE	0.30 F.A.R.	144,000 S.F.
5	5.0000	1.0139		COMMERCIAL/RETAIL	0.25 F.A.R.	54,500 S.F.
6	11.5756	0.7348	1.1275	RESIDENTIAL	IDU/2000 SQ FT	227 DU
7	28.6373		3.5904	RESIDENTIAL	10,000 SQ FT	110 DU
8	8.3342		1.9659	RESIDENTIAL	5,000 SQ FT	57 DU
9	39.5771		2.9067	RESIDENTIAL	7,000 SQ FT	246 DU
10	24.3306	2.0111	2.1468	RESIDENTIAL	5,000 SQ FT	194 DU
TOTAL	163.3630	11.5328	19.3341			1097DU/215,000 S.F.



*Appendices*

# Casa Grande Elementary Schools

## GOVERNING BOARD

Suzanne Tomkinson, President  
Gary Butler, Clerk  
Jerril S. Benedict, Member  
Donna Plensman, Member  
Brendé Mason, Member

1480 North Pinal Avenue  
Casa Grande, Arizona 85222  
Telephone (602) 836-2111

July 2, 1990

W. Dean Skaggs, Ph.D.  
Superintendent

Hardy H. Childers  
Administrative Services Manager

Don Dermody  
Assistant Superintendent for Instruction

Mr. Rick Miller, Planning Director  
City of Casa Grande  
300 East Fourth Street  
Casa Grande, AZ 85222

Re: Kortsen/Henness Casa Grande Development Plan  
Arizona State Land Department

Dear Mr. Miller:

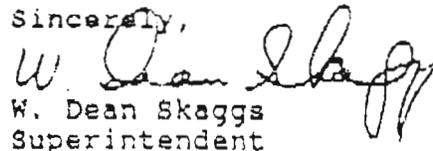
As a follow up to John McNamara's meeting with me on May 23, 1990, I have reviewed the proposed Kortsen/Henness Casa Grande Site Development Plan in terms of existing and proposed elementary school sites available to serve this development.

In reviewing the Casa Grande Elementary School District Master Plan with Mr. McNamara, I indicated that, as our Master Plan is implemented, three elementary schools will be located within close proximity to serve the primary educational needs of future project area residents. These include the new Ironwood Elementary School located approximately 0.8 mile west of the site at Cottonwood Lane and Colorado Street; and two new elementary schools to be located approximately 1.0 mile north of the site along Rodeo Road and approximately 1.5 miles south of the site along Early Road.

When the land becomes private and is presented to the City of Casa Grande for zoning approval, I would like to have the opportunity to reexamine the need for an elementary school in the area, especially if their projection is accurate with over 1,000 students in the approved area.

If you have any questions, or require additional information, please do not hesitate to contact me.

Sincerely,

  
W. Dean Skaggs  
Superintendent

cc: John McNamara  
✓ Melinda Lewis



## ARIZONA STATE PARKS

800 W. WASHINGTON  
SUITE 415  
PHOENIX, ARIZONA 85007  
TELEPHONE 602-542-4174

**ROSE MOFFORD**  
GOVERNOR

### STATE PARKS BOARD MEMBERS

**WILLIAM G. ROE**  
CHAIR  
TUCSON

**RONALD PIES**  
VICE CHAIR  
TEMPE

**DEAN M. FLAKE**  
SECRETARY  
SNOWFLAKE

**DUANE MILLER**  
SEDONA

**ELIZABETH TEA**  
DUNCAN

**JONI BOSH**  
PHOENIX

**M. JEAN HASSELL**  
STATE LAND COMMISSIONER

**KENNETH E. TRAVOUS**  
EXECUTIVE DIRECTOR

**COURTLAND NELSON**  
DEPUTY DIRECTOR

February 26, 1990

Robert Larkin, Manager  
Nonrenewable Resources and Minerals  
Arizona State Land Department  
1616 West Adams  
Phoenix, Arizona 85007

RE: Casa Grande, Land Use Planning, ASLD

Dear Bob:

Thank you for notifying us about the above project. I have reviewed the documentation you submitted and have the following comments pursuant to A.R.S. Section 41-864:

1. I note that an archaeological survey of the 480 acre project area did not identify any significant cultural resources.
2. Therefore, in my opinion this project should have no effect on any National Register or eligible properties.
3. One conditional comment is that should archaeological remains be encountered during project ground disturbing activities, work should cease in the area of the discovery and this office be notified immediately.

We appreciate your continued cooperation with this office in complying with the historic preservation requirements for state undertakings. If you have any questions, please contact me.

Sincerely,

Ann Valdo Howard  
Archaeologist

for Shereen Lerner, Ph.D.  
State Historic Preservation Officer

REPORT ON  
KORTSEN/HENNESS PROJECT  
SOIL SAMPLING AND ANALYSES  
PINAL COUNTY, ARIZONA

Submitted to:

BRW, Inc.  
2700 North Central Avenue, Suite 1000  
Phoenix, Arizona

Submitted by:

THOMAS-HARTIG & ASSOCIATES, INC.  
7031 West Oakland Street  
Chandler, Arizona  
(602) 961-1169

Project No. 89-0881

20 March 1990

By:

  
John C. Patton

Reviewed by:



Kenneth L. Kerick, P.E.

/sb

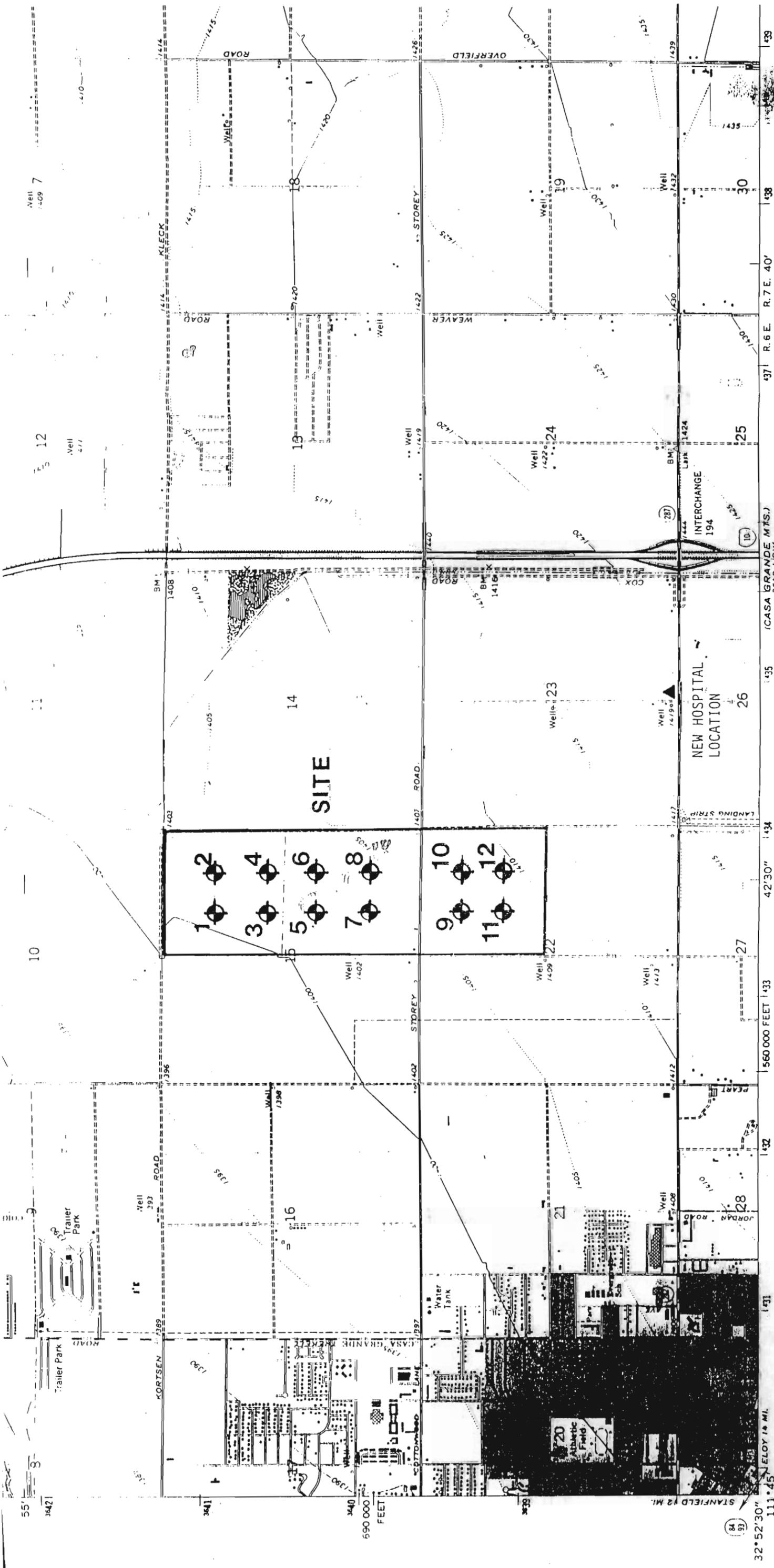
Copies to: Addressee (5)

## EXECUTIVE SUMMARY

This report presents data for the evaluation of an approximate 480 acre site located in Sections 15 and 22, Township 6 South, Range 6 East of the Gila and Salt River Base and Meridian. The site location is shown in Part II of Appendix A, Kortszen/Henness Project Sample Plan.

On 26 January 1990, Thomas-Hartig & Associates, Inc. obtained samples from 12 locations at depths of 0 - 1.5 feet and 2 - 3.5 feet. Samples from Locations 1 through 8 were composited by the laboratory and analyzed for the presence of organochlorine pesticides and PCB's (EPA Method 8080) and chlorinated herbicides (EPA Method 8150). Similarly samples from Locations 9 through 12 were composited and analyzed for the above compounds.

Metabolytes of DDT (4,4'-DDD, 4,4'-DDE, 4,4'-DDT) and toxaphene were detected in the shallow composite samples and 4,4'-DDE was detected in the deep composite sample for the northernmost area (1 through 8). None of the compound levels detected are above Arizona Department of Environmental Quality Action Levels (AL's) or Arizona Department of Health Services Recommended Health Based Guidance Levels (HBGL's) as of 2 March 1990.



Mapped, edited, and published by the Geological Survey  
 Control by USGS and NGS/NOAA  
 Topography by photogrammetric methods from aerial photographs taken 1963 and planimetric surveys 1965  
 Polyconic projection, 10,000-foot grid ticks based on Arizona coordinate system, central zone  
 1000-meter Universal Transverse Mercator grid ticks, zone 12, shown in blue, 1927 North American Datum  
 To place on the predicted North American Datum 1985 move the projection lines 3 meters south and 63 meters east as shown by dashed corner ticks  
 Red tint indicates area in which only landmark buildings are shown  
 Fine red dashed lines indicate selected fence lines  
 A portion of the southeast quarter of this map lies within a subsidence area  
 Vertical control based on latest available adjustment  
 There may be private inholdings within the boundaries of the National or State Reservations shown on this map

UTM GRID AND 1982 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET  
 0° 22' 7 MILS  
 12 1/4° 222 MILS  
 Revisions shown in purple and woodland compiled from aerial photographs taken 1978 and other sources. This information not field checked. Map edited 1982  
 FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092  
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Mapped, edited, and published by the Geological Survey  
 Control by USGS and NGS/NOAA  
 Topography by photogrammetric methods from aerial photographs taken 1963 and planimetric surveys 1965  
 Polyconic projection, 10,000-foot grid ticks based on Arizona coordinate system, central zone  
 1000-meter Universal Transverse Mercator grid ticks, zone 12, shown in blue, 1927 North American Datum  
 To place on the predicted North American Datum 1985 move the projection lines 3 meters south and 63 meters east as shown by dashed corner ticks  
 Red tint indicates area in which only landmark buildings are shown  
 Fine red dashed lines indicate selected fence lines  
 A portion of the southeast quarter of this map lies within a subsidence area  
 Vertical control based on latest available adjustment  
 There may be private inholdings within the boundaries of the National or State Reservations shown on this map

USGS Quadrangle:  
 Casa Grande, East  
 THOMAS-HARTIG & ASSOCIATES, INC.  
 Project No. 89-0881  
 QUADRANGLE LOCATION