LEGISLATIVE HISTORY

June 5, 1990          Ord 1990-53          Adoption of specific plan
June 19, 1990         Ordinance 1990-53 reconsidered and approved
September 24, 1990    Court invalidates June 19, 1990 reconsideration
July 21, 1992         Ord 1992-61          Adoption of First Amendment
July 18, 1995         Approval of Ord 1990-53 modifications
January 9, 1996       Ord 1996-8           Adoption of Second Amendment (and July 18, 1995 modifications)
MIKE BOYD, RECORDER
PIMA COUNTY, ARIZONA
CERTIFICATE OF RECORDING

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8989  1577
ORDINANCE #1990-53

AN ORDINANCE OF THE BOARD OF SUPERVISORS OF PIMA COUNTY; RELATING TO ZONING; ADOPTING THE SABINO SPRINGS SPECIFIC PLAN; AND AMENDING Co13-61-13, AGUA CALIENTE-SABINO CREEK ZONING PLAN AND PIMA COUNTY ZONING MAPS 50 AND 83 IN A PORTION OF SECTION 14 OF T13S, R15E, G&SR B&M.

BE IT ORDAINED BY THE BOARD OF SUPERVISORS OF PIMA COUNTY, ARIZONA:

SECTION 1. That the Sabino Springs Specific Plan, attached as Exhibit A and incorporated herein, is hereby adopted subject to the following conditions:

A. Amendment of the specific plan document, as may be necessitated by Board of Supervisors' action, within 30 days of specific plan ordinance adoption.

B. Amendment of Co13-61-13, Agua Caliente-Sabino Creek Zoning Plan, from SR (Suburban Ranch) to SP (Specific Plans, Ordinance #1990-53).

C. Within five years of adoption of this ordinance, the specific plan is subject to:
   1. Approval by the Director of Planning and Development Services, with the written concurrence of the directors of the Transportation and Flood Control District and Wastewater Management departments, of a master platting and improvements phasing schedule for the entire specific plan. This schedule shall reference the master studies necessary for preparation of the master plat and identify the necessary improvements and dedications (including roads, sewers, drainage and open space).
   2. If approval is not given within five years, then this specific plan shall be referred to the Planning and Zoning Commission for consideration of amendment or repeal.

D. Prior to approval of a subdivision plat or development plan or issuance of a building permit, this specific plan is subject to the following:
   1. No further subdividing or lot-splitting shall be allowed without the written approval of the Board of Supervisors.
   2. Approval and recording of the applicable master plat which will provide for development-related studies, assurances and dedications as established by the plat phasing and improvements schedule and any related conditions that may be approved by the Board of Supervisors. A title report providing evidence of ownership of the property shall be submitted to the Property Management Division of the Department of Transportation and Flood Control District prior to the preparation of covenants, conditions and restrictions, and any required dedications.
   3. Requirements of the Department of Transportation (DOT/FCD):
      a. A Transportation Improvement Financing and Implementation Plan (TIFIP) for the specific plan area shall be required. The TIFIP, provided by the owner/developer, shall address the provision of capacity and route...
continuity adjacent to and within the specific plan and the areas of responsibility of the County, the master developer and any subsequent developers.
b. A comprehensive transportation study for this specific plan shall be provided by the owner and shall be submitted for approval to DOT/FCD with the required TIFIP. The limits of study and scope of work shall be determined by DOT/FCD.
c. All internal transportation improvements and any external transportation improvements required to mitigate traffic impacts caused by development of the specific plan, as determined by the transportation study, shall be constructed at no cost to Pima County.
d. The final location, alignment, right-of-way widths and roadway cross-sections for the Houghton Road and Vista del Loma Segunda Road off-site accesses shall need approval from DOT/FCD prior to development of any portion of the specific plan.

4. Requirements of the Flood Control District (DOT/FCD):
A master drainage study shall be prepared and submitted by the master developer for review and approval by DOT/FCD. The limits of study and scope of work shall be developed by the master developer and subject to approval by the DOT/FCD. At a minimum, the scope of work shall include financing, phasing, restoration and mitigation for drainage modification.

5. Requirements of the Wastewater Management Department (WWMD):
A wastewater basin study shall be submitted to, and approved by WWMD prior to the submittal of a tentative plat or development plan. The basin study shall include an analysis of the impact this specific plan will have on the downstream sewer system and adequate sizing of all on-site and off-site public gravity sanitary sewers.

6. Requirements of the Pima County Archaeologist:
The management of archaeological resources shall be consistent with the provisions of the Archaeological Resource regulations as provided in Chapter VI of the specific plan.

7. Requirements of the Planning and Development Services Department (PDS):
A survey shall be conducted by a qualified biologist for the presence of special status species, as listed in the specific plan, to be reviewed by PDS and the Tucson unit of the Arizona Game & Fish Department.

8. Natural Open Space Preservation: In order to preserve the natural open space of this specific plan, the primary developer shall:
a. form a nonprofit corporation or similar entity to hold either a conservation easement or fee title to the natural open space area;
b. provide, within the covenants, conditions and restrictions, for building permit fees, title transfer fees, golf course fees, and homeowner assessments and dues. All of the fees and portion of the assessments shall be used to fund the efforts of the nonprofit corporation or similar entity;
c. establish for the corporation or similar entity the primary goals and objectives of providing environmental education to initial and subsequent homeowners and other individuals, including the responsibility of living in proximity to a public preserve;

Page 2 of 6
d. require that the corporation or similar entity manage the natural open space for conservation and recreation purposes, although other specific duties and responsibilities may be added at a later date.
e. require that the corporation or similar entity shall be primarily concerned with this specific plan, although it may choose to affiliate itself with another entity or institution to provide the same or expanded functions;
f. form the corporation or similar entity prior to, but in conjunction with, any subdivision plat for this specific plan. The details of holding and spending funds and the membership of the board of directors shall be submitted at the time of final subdivision plat approval and shall be subject to the approval of the Director of the Planning and Development Services Department and the District Ranger, Santa Catalina District of the Coronado National Forest.

E. A subdivision plat, development plan or building permit is subject to the following:
1. Provision of development-related assurances as required by the applicable agencies.
2. Dedication of necessary rights-of-way for roads and drainage by subdivision plat or by separate instrument if the property is not to be subdivided.
3. Requirements of the Department of Transportation (DOT/FCD):
   a. All public or private drainage structures, arterial, collector and local streets shall conform to Pima County Road and Street Standards. Design criteria, including right-of-way widths, typical cross-sections, design speeds, paving, utility locations, maximum design roadway slopes, access control, bicycle paths, pedestrian ways or sidewalks shall be subject to approval by DOT/FCD.
   b. Road crossings over washes that are identified in the specific plan as natural open space shall be designed to cross the floodplain with only minor encroachment. The reduction of floodplain widths may be acceptable to achieve required on-site detention or to facilitate wildlife movement. The design of the roadway shall be subject to approval by DOT/FCD.
4. Requirements of the Flood Control District (DOT/FCD):
   a. All internal drainage improvements and any external drainage improvements required to mitigate drainage impacts caused by development of this specific plan, as determined by the master drainage study, shall be constructed at no cost to the District.
   b. No modification to the existing 100-year floodplains of washes identified in the specific plan as natural open space shall be allowed except for roadway and utility crossings. An appropriate mitigation plan for these crossings shall be prepared by the master developer and subject to approval by DOT/FCD. Wildlife movement shall not be impeded by the crossings.
5. Requirements of the Wastewater Management Department (WWMD):
   a. The property owner shall connect to the public sewer system at the location and in the manner specified by WWMD at the time of review of a tentative plat or development plan.
   b. The property owner shall construct a public sewer extension to serve the specific plan. The public sewer improvements shall be designed and constructed in conformance with applicable Pima County standards and shall
be completed, inspected and released for service prior to the issuance of building permits.

6. Requirements of the Planning and Development Services Department (PDS):
   a. Design guidelines (Chapter VII) shall be used when not in conflict with adopted County regulations.
   b. Pima County reserves the right of final approval of wash treatments within a subdivision plat or development plan.
   c. Supplementary Site Analysis: A site analysis shall accompany all tentative plats and development plans for land located within the RA-1 (Estate) development designation or located on slopes of 15% or greater. The site analysis shall be used for evaluation of compliance with this specific plan and shall include the applicable site design elements of this specific plan and the performance standards of Chapter 18.67 (Buffer Overlay Zone). A copy of the site analysis shall be submitted to the Manager of the Coronado National Forest.
   d. Slopes of 20% or greater shall be designated as natural open space. Development envelopes shall not be permitted within this open space. Chapter 18.61 (Hillside Development Overlay Zone) shall be applied on a lot-by-lot basis.
   e. Fire Management: Subdivisions in the RA-1 (Estate) development category shall include designed fuel breaks by means of the use of roads, washes and open spaces. The covenants, conditions and restrictions shall make reference to the fire management policies of the Coronado National Forest which may impact home ownership within the subdivision.
   f. Golf Course Requirements: Review and approval of a golf course development plan for the applicable Golf Course development category shall be required prior to the approval of any adjacent subdivision plat or development plan and prior to the issuance of any grading permit for the golf course. The development plan shall be prepared in accordance with Chapter 18.59, Golf Course Overlay Zone (with the exception of the rezoning and ordinance adoption provisions) and the specific plan regulations for the golf course development category.
   g. Vegetation Mitigation Plan: Preliminary development plans or tentative plats shall be accompanied by a vegetation preservation plan prepared by a qualified horticulturist or landscape architect and approved by PDS. The preservation plan shall specify the methods of salvage, transplant, revegetation, irrigation, and protection from construction impacts. Minimum requirements for the preservation program are:

1) 100% of all saguaros and palo verdes located in the 100-year floodplain (except for roadway crossings) and in the natural and non-turfed areas of the golf course shall be preserved in place;
2) At least 50% of the saguaros located in each of the residential development blocks, and 75% of the saguaros located on the residential lots, shall be preserved or relocated on-site.
h. Xeriscape: The site-specific methods used to implement the principles of Xeriscape, as used for development within the specific plan, shall be described in detail for review with each applicable subdivision plat or development plan.

i. Visual Mitigation Study: Review and approval of a visual study shall be required prior to approval of any subdivision plat or development plan. The study shall:
   1) include simulations or photo-illustrations of the pre-development and post-development views of the development; and
   2) demonstrate conformance with the visual quality standards of Chapter 18.67 (Buffer Overlay Zone) of the Zoning Code.

j. Class I Wash Buffer: A 100-foot no-grade and building setback is required from the 100-year floodplain of the Class I wash. This setback area shall be fenced during construction and shall be set aside as natural open space. No access from backyards shall be permitted to this setback area. A 50-foot no-grade and building setback is required from the 100-year floodplains of all other washes.

k. This specific plan is restricted to no more than 496 dwelling units for the entire specific plan site.

l. A wall not to exceed six feet shall be permitted along the north and east perimeter of Sabino High School. All other perimeter delineation shall not exceed four feet in height and shall be subject to Chapter 18.67 (Buffer Overlay Zone).

m. Private streets shall be landscaped in accordance with Chapter 18.73 (Landscaping) of the Zoning Code.

n. Planning areas shall not be divided between subdivision plats and the maximum density of each plat shall be in conformance with the density limitations of Chapter VI, Development Regulations, of the specific plan.

7. Grading and Development Limitations: There shall be:
   a. no grading or other development within 200 feet of the three central springs and no grading within 100 feet of any other springs;
   b. no grading, clearing or other development of areas having 75% or more canopy cover as shown on Exhibit IV-D.3 of the specific plan;
   c. not more than 50% grading, clearing or other development of areas having 50 to 75% canopy cover as shown on Exhibit IV-D.3; and
   d. not more than 50% grading of the specific plan site.

SECTION 2. That Pima County Zoning Maps 50 and 83 in a portion of section 14 of T13S, R15E, G&SR B&M, are hereby amended to the SP (Specific Plan) zone as shown on the entitled "Amendments #41 and 10 by Ordinance #1990-53 to Pima County Zoning Maps 50 and 83, respectively", by reference made a part hereof.

SECTION 3.
A. That this ordinance shall become effective from and after the day that the Board of Supervisors, by majority vote, verifies that all of the following has occurred:
1. The Sabino Springs Specific Plan document, Exhibit A, has been revised to accurately reflect the amendments set forth in Section 1 of this ordinance;
2. A covenant holding Pima County harmless in the event of flooding has been recorded;
3. The applicant has submitted to Pima County a specific and accurate Surveyed Boundaries Map for the Sabino Springs Specific Plan.

B. Notwithstanding Subsection A of this section, this ordinance shall not become effective sooner than 30 days or later than 90 days from and after its adoption.

PASSED AND ADOPTED by the Board of Supervisors of Pima County, Arizona, this ______ day of ______ 1990.

[Signature]
Chairman, Board of Supervisors

Date: 10/14/90

ATTEST:

[Signature]
Clerk, Board of Supervisors

APPROVED AS TO FORM:

[Signature] 9/21/90
Civil Deputy County Attorney

[Signature]
Executive Secretary, Pima County Planning and Zoning Commission
Ordinance No. 1992-61, as recorded in Docket 9340, Pages 1650 through 1660 in the Office of the Pima County Recorder, contains certain errors and omissions. It is hereby replaced and superseded by revised Ordinance No. 1992-61, recorded in Docket 9377, Pages 518 through 1662.
ORDINANCE NO. 1992- _61_

AN ORDINANCE OF THE PIMA COUNTY BOARD OF SUPERVISORS; RELATING TO ZONING; AMENDING SECTION 1 OF ORDINANCE #1990-53 AND AMENDING THE SABINO SPRINGS SPECIFIC PLAN TO ADD, REVISE AND DELETE CERTAIN ZONING REQUIREMENTS.

BE IT ORDAINED BY THE BOARD OF SUPERVISORS OF PIMA COUNTY, ARIZONA:

SECTION 1: That Ordinance #1990-53 is hereby amended as follows:

SECTION 1. That the Sabino Springs Specific Plan, attached as Exhibit A and incorporated herein, is hereby adopted subject to the following conditions:

E. A subdivision plat, development plan or building permit is subject to the following:

6. Requirements of the Planning and Development Services Department:

  j. Class I Wash Buffer: A 100 foot no-grade and building setback is required from the 100 year floodplain of the Class I wash. This setback area shall be fenced during construction and shall be set aside as natural open space. No access from backyards shall be permitted to this setback area. A 50-foot no-grade and building setback is required from the 100 year floodplains of all other washes.

7. Grading and Development Limitations: There shall be:

a. no grading or other development within 200 feet of the three central springs and no grading within 100 feet of any other springs;

b. no grading, clearing or other development of areas having 75% or more canopy cover as shown on Exhibit IV-D,3 of the specific plan;

c. not more than 50% grading, clearing or other development of areas having 50 to 75% canopy cover as shown on Exhibit IV-D,3, and
d. not more than 50% grading of the specific plan site.
SECTION 2: That Chapter V, Section C, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended on page 61 by adding a new second paragraph, to read:

The Sabino Springs Land Use Plan shall implement the recommendations of a resource based riparian habitat study that was completed on the planning area in May, 1992 by SWCA, Environmental Consultants. A report from this study is included as Appendix J of this document. The Land Use Plan also incorporates a second access drive connecting the project with Snyder Road to serve as the primary access road to the development. The Land Use Plan is illustrated on Exhibit V-C. The acreages within the subareas reflect the resource-based riparian habitat boundaries in order to protect these riparian resource areas. The acreages for each subarea are provided in the following Land Use Plan Summary.

SECTION 3: That Chapter V, Section C, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended on page 62 by revising the Land Use Plan Summary, to read:

LAND USE PLAN SUMMARY

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>ACRES</th>
<th>DENSITY RANGE*</th>
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<tr>
<td>Planning Subareas</td>
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<tr>
<td>Realigned Wash</td>
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</table>
Total 208.3

Natural Open Space\(^1\) 260.2
\(^1\)Natural Open Space Includes:

- Class I Wash 9.2
- Washes and Resource Area 35.8
- Estate’’ (80% of N,O,P,Q,S) (58.5)
- Golf and Transitional Edge Area 156.7

* Maximum number of dwelling units for the Sabino Springs Specific Plan is 496.
** All estate lots shall not exceed a total of 45 dwelling units. An average of 80% of each lot will be designated as natural open space.
*** A minimum of 80% of the total Estate area will be natural open space. Estate natural open space acreage is included in the Natural Open Space total.

Note: All acres are approximate to the nearest 0.5 acres and are calculated from a hand held planimeter on a 1’’ = 200' scale map.

SECTION 4: That Chapter V, Section D, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended on page 64 by adding a new first paragraph, to read:

An additional primary access drive off of Snyder Road may be located approximately equidistant between the approved Vista de Loma Segunda entry and the Houghton Road alignment. This additional access point may serve as the main entry to the project and carry the largest relative number of trips generated by the fully developed site. This additional access may be gated to provide security to the residents. Construction of these off-site entry drives will be the responsibility of the Plan Area’s master developer.

SECTION 5: That Chapter V, Subsection F-1, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended on page 69, to read:

1. Response to Existing Conditions.
The Development Plan responds completely and thoroughly to the site’s existing hydrologic conditions: 1) the existing washes are being left, by and large, in their natural, undisturbed state (exceptions to this condition are discussed below), 2) the identified ecological resource areas have been used to define the boundaries of the planning areas, and 3) the entire golf course has been designed to result in the minimal encroachment of tees, greens, and fairways into these resource areas. Where encroachment occurs, it shall be mitigated in accordance with the mitigation measures stated herein.
SECTION 6: That Chapter V, Subsection F-1, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby further amended on page 69 by adding a new second paragraph, to read:

The approximate physical location of the boundary line between those areas to remain natural and ungraded, is shown on the attachment that identifies those areas mapped by SWCA (Appendix J). Once identified on the ground, and taking into account permitted encroachments for road, utility and golf course crossings and limited development areas as discussed below, these resource areas shall be fenced for protection during construction.

SECTION 7: That Chapter V, Subsection F-3, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended on page 70, to read:

3. Encroachments: Roads, Utilities and Golf Course Crossings.
   Roads, utilities and golf course crossings represent the primary features of the development which will encroach into the mapped floodplains (see Exhibit V-F.3). Crossings through the washes shall be avoided whenever reasonably possible to reduce their aggregate impact upon theses areas. The total number of proposed crossings was held to a minimum to reduce their aggregate impact upon the washes.

SECTION 8: That the first paragraph of Chapter V, Subsection G-1, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended on page 72, to read:

1. General Characteristics.
   The Grading Concept Plan, Exhibit V-G, depicts the primary grading characteristics of the developed site. The site will include a variety of grading treatments including roadways, residential lots, the golf course, and the recreational facilities.

SECTION 9: That Chapter V, Subsection G-1, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended on page 72 by adding a new second paragraph, to read:

A pre-grading survey shall be prepared to identify all vegetative volume that may be removed by any grading activity in the ecological resource areas. The vegetative volume identified by the pre-grading survey will be that vegetative type and canopy volume required to be mitigated in accordance with mitigation requirements stated herein.
SECTION 10: That the sixth and eighth paragraphs of Chapter V, Subsection G-1, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, are hereby amended on pages 72 and 73, to read:

The site’s existing washes and identified resource areas will be minimally disturbed by grading activities. The vast majority of these areas will be left in their natural condition; minimal disturbances will be in the form of road, utility and golf course crossings and limited development areas. Any disturbance of the ecological resources areas shall be mitigated in accordance with mitigation requirements stated herein.

Ungraded (i.e. Natural) Areas
- Undisturbed Riparian Resource Areas
- Undisturbed Class I Habitat
- Undisturbed Floodplains
- Undisturbed Areas On Each Lot Within Estate Areas
- Undisturbed Transition/Golf Course areas
- All Existing Springs and their immediate environs

SECTION 11: That the second paragraph of Chapter V, Subsection H-1, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended on page 75, to read:

The most significant environmental resources in terms of wildlife habitat values, as shown on Exhibit V-H, include the identified riparian resource areas, the Class I Tres Hombres Wash, the other drainage ways (particularly the central north-south wash), identified water sources, areas of medium to high density vegetative cover and the northern upland areas connecting to the adjacent Coronado National Forest. Protection of all these areas has been given a high priority in developing the Land Use Plan. The following discussion describes how the habitat values of the riparian resource areas have been protected, preserved or enhanced during the site planning process. (See Exhibit V-H). A report describing the methodology and criteria for delineating the resource based riparian boundaries is included in Appendix J.

SECTION 12: That Chapter V, Subsection H-1, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended by adding a new subsection "h" on page 77, to read:

h. Ecological Resource Areas.
The Plan Area was studied to identify those areas which contain significant riparian habitat resources (See Appendix J). These areas were determined based on the presence of species composition, densities and volume. These
areas are adjacent to the floodplain limits and include areas surrounding the springs. These primary riparian resource areas identified on Exhibit V-H shall be preserved in place with a minimum of disturbance. All disturbed areas shall be mitigated at 100% of the vegetative volume that is impacted.

SECTION 13: That the final paragraph of Chapter V, Subsection H-2, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended on page 79, to read:

The natural open space within the Sabino Springs Specific Plan totals 260.2 acres or 63% of the entire site.

SECTION 14: That Chapter VI, Section C, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended by adding a new subsection 10 on page 97, to read:

10. Setbacks for all permitted accessory structures shall be the same as those required by the Pima County Zoning Code under the most closely equivalent zoning classification.

SECTION 15: That Chapter VI, Section D, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended on pages 98 and 99 by revising the Land Use Plan Summary, to read:

D. Land Use Plan Summary.

Development categories have been assigned to each planning subarea identified in the Sabino Springs Specific Plan as shown on Exhibit VI-A. The categories include land use designation, area in acres, dwelling units and density per acre. These statistics are shown on the following page.

<table>
<thead>
<tr>
<th>Development Category</th>
<th>Planning Areas</th>
<th>Acres</th>
<th>Density Range (Homes/Acre)</th>
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<td>RA-5**</td>
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<td>3 - 7</td>
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<td>Clubhouse, Golf Course</td>
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<td>and Tennis/Swimming/Realigned Wash and Transitional Desert Edge</td>
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</tbody>
</table>
**PA**

Class I and Natural Washes, 103.5

Resource Area and Estate natural areas

Total 410.0

*Total acreage of RA-1 Category is 73.1 acres, of which 80% is to remain as natural open space.*

**Planning area E has been deleted and combined into Clubhouse Area.

### LAND USE PLAN SUMMARY

<table>
<thead>
<tr>
<th>Development Category</th>
<th>Planning Areas</th>
<th>Acres</th>
<th>Density Range* (Homes/Acre)</th>
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<tr>
<td>PA</td>
<td>Preservation Area(^1)</td>
<td>103.5</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Preservation Area Includes:

- Class I Washes 9.2
- Natural Washes 35.8
- Estate (80%) (38.5)

\(^*\) Maximum number of dwelling units for the Sabino Springs Specific Plan is 496.

Density transfers between planning areas are not permitted.

\(^**\) All estate lots shall not exceed a total of 45 dwelling units. An average of 80% of each lot will be designated as natural open space.
Note: All acres are approximate to the nearest 0.5 acres and are calculated from a hand held planimeter on a 1" = 200' scale map.

SECTION 16: That Chapter VI, Subsection G-1(a), of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended on page 104, to read:

a. Utility, sewer, road and golf course crossings.

SECTION 17: That Chapter VI, Subsection H-1(b)(4), of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended on page 106, to read:

4. Construction Monitoring: On-site monitoring of all aspects of site grading shall be provided at the expense of the master developer during project development in order to insure protection of preserved vegetation and water sources and to identify protected species of plants and wildlife. Monitoring shall be performed by an individual qualified in resource identification and protection, who shall be a third-party professional to be approved by Pima County in consultation with the Arizona Game and Fish Department.

a. All Grading: During clearing, grubbing and grading activities, the resource professional shall visit the site twice daily and shall be available on an on-call basis to respond to considerations found during these activities. Affected interest groups, including at least the Sabino Canyon Coalition and Saguaro Forest Associates, shall be invited to observe the grading activities through site inspection. The resource professional shall also review the siting of construction fencing and flagging prior to the start of site grading and shall make recommendations as needed. The adopted specific plan, County ordinances and supplementary site analysis to be prepared for the Estate development area shall guide the resource professional.

b. Golf Course Grading: The resource professional shall interact with the golf course architect and resource consultants employed by the developer to ensure the environmental integrity of golf course design and construction by modifying, if necessary, areas proposed for grading. The resource professional shall evaluate the field location of the major features of the golf course for compliance with this specific plan and to ensure the least amount of grading in areas that are adjacent to or within ecological resource areas.

SECTION 18: That Chapter VI, Section H, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, is hereby amended by adding a new subsection 3 on page 110, to read:
   a. The project pre-grading survey, which shall determine the vegetative
      volume removed by all grading operations within the ecological resource areas
      and shall be used as a basis to determine the minimum mitigation required
      for the project. Vegetative volume shall be measured for any tree or shrub
      to be removed which has a single trunk circumference of nine inches as
      measured six inches above the ground.
   b. The total volume of canopy vegetation impacted within the ecological
      resource areas shall be replaced in either the ecological resource areas or in
      the following project areas:
         1) areas within 100-year floodplains;
         2) upland areas adjacent to 100-year floodplains; and
         3) within the golf course transition area.
   c. Mitigation shall be by the transplanting of native indigenous plant
      species, predominantly mesquite.
   d. The number and size of species to be planted shall be equal to those
      necessary to replicate the disturbed canopy volume within five years.
   e. Drip irrigation systems shall be used to ensure survival of planted or
      transplanted vegetation.
   f. Where possible, existing vegetation to be removed shall be salvaged.
   g. All saguaro in the graded areas shall be avoided. Where avoidance
      is not possible, saguaros are to be salvaged and replanted in mitigation areas.
   h. In all areas of mitigation, appropriate upland or riparian under-story
      shall be established.

SECTION 19: That Chapter VI, Subsection J-1, of the Sabino Springs Specific Plan, set
forth in Exhibit A to Ordinance #1990-53, is hereby amended on page 111, to read:

1. Encroachments Into Mapped Floodplains.
Encroachments into mapped floodplains within the specific plan area will be
limited to:
   - all-weather roadway crossings
   - roadway dip crossings
   - the realignment of the site’s two westernmost existing channels
   - the regional detention basin at the southwest corner of the plan area.
   - utility, sewer and golf course crossings

SECTION 20: That an Appendix J, prepared by SWCA Environmental Consultants and
titled Sabino Springs Resource Based Riparian and Aquatic Habitat Boundary Delineation,
as shown in Attachment A to this ordinance, is added to the Sabino Springs Specific Plan
document.
SECTION 21: That the following exhibits to the Sabino Springs Specific Plan are hereby amended, as shown in Attachment B to this ordinance.

Exhibit V-C, Specific Plan Land Use Plan.
Exhibit V-D.1, Circulation Plan.
Exhibit V-F.3, Water Resources Plan.
Exhibit V-G, Conceptual Grading Plan.
Exhibit V-H, Environmental Resources.
Exhibit V-I, Landscape Plan.
Exhibit VI-A, Development Categories.

SECTION 22: That the following exhibit is added to the Sabino Springs Specific Plan, as shown in Attachment B to this ordinance.

Exhibit V-H.1, Ecological Resource Areas.

SECTION 23: That this ordinance shall become effective on the day the last of the following occurs:

A. The Planning and Development Services Director's certification that the Sabino Springs Specific Plan document has been revised to accurately reflect the amendments set forth in Sections 1 through 22 of this ordinance.

B. The Planning and Development Services Director's certification that the Surveyed Boundaries Map accepted by the Board of Supervisors on February 12, 1991, has been revised to accurately reflect the amendments set forth in Sections 1 through 22 of this ordinance.

C. Thirty-one days after the date the Chairman of the Board of Supervisors signs this ordinance.

SECTION 24: Not more than 60 days after the Chairman of the Board of Supervisors signs this ordinance, the Developer shall submit to the Planning and Development Services Director the revised Sabino Springs Specific Plan document and the revised Surveyed Boundaries Map referred to in the preceding Section.

SECTION 25: That all ordinances and parts of ordinances in conflict with this ordinance be and the same are hereby repealed to the extent of such conflict.

SECTION 26: That the provisions of this ordinance shall be severable and that if any part of this ordinance is held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions
of the ordinance. If, for any reason, this ordinance does not become effective or is ruled invalid in its entirety, Ordinance #1990-53 and the Sabino Springs Specific Plan shall be deemed in full force and effect as originally adopted.

PASSED AND ADOPTED by the Board of Supervisors of Pima County, Arizona, this Twenty-First day of July, 1992.

Chairman, Board of Supervisors

Date: Jul 21, 1992

ATTEST:

Clerk, Board of Supervisors

APPROVED AS TO FORM:

Civil Deputy County Attorney

Executive Secretary, Pima County Planning and Zoning Commission
NOTE

Pages 580 through 586 of Docket 9377 are Attachment A of Ordinance 1992-61 and are included in this document as Appendix J.

ORDINANCE NO. 1996-8

AN ORDINANCE OF THE PIMA COUNTY BOARD OF SUPERVISORS; RELATING TO ZONING; AMENDING ORDINANCE #1990-53, AS AMENDED BY ORDINANCE #1992-61, AND AMENDING THE SABINO SPRINGS SPECIFIC PLAN TO ADD, REVISE AND DELETE CERTAIN ZONING REQUIREMENTS.

THE PIMA COUNTY BOARD OF SUPERVISORS FINDS AND DECLARES THAT:

WHEREAS, on June 5, 1990, the Pima County Board of Supervisors adopted Ordinance 1990-53 rezoning from SR to SP that certain property referred to as the Sabino Springs Specific Plan (the "Specific Plan"); and

WHEREAS, on July 21, 1992, the Pima County Board of Supervisors adopted Ordinance 1992-61, known as the First Amendment of the Specific Plan, which amended Section 1 of Ordinance 1990-53 and amended the Specific Plan to add, revise and delete certain zoning requirements; and

WHEREAS, on March 15, 1995, the owners of approximately 19.3 acres (the "property") adjacent to the Specific Plan applied for a rezoning from SR to SP and amendment of the Specific Plan to include the property, which proposed changes are incorporated in attached Exhibit A (which has not been recorded but may be viewed at the office of the Pima County Development Services Department Planning Division); and

WHEREAS, on October 17, 1995, the Pima County Board of Supervisors approved the Second Amendment of the Specific Plan, which rezoned the property and amended the Specific Plan to add, revise and delete certain zoning requirements.

NOW, THEREFORE, BE IT ORDAINED BY THE PIMA COUNTY BOARD OF SUPERVISORS:

SECTION 1: That the 19.3 acres described as the Sabino Springs Specific Plan Second Amendment, which amends Pima County Zoning Map No. 50, are hereby rezoned from SR to SP, subject to the following conditions:
1. Recording of a covenant holding Pima County harmless in the event of flooding.
2. Recording of the necessary development related covenants as determined appropriate by the various County agencies.
3. Provision of development related assurances as required by the appropriate agencies.
4. There shall be no further subdividing or lot splitting without the written approval of the Board of Supervisors.
5. Prior to the preparation of the development related covenants and any required dedication, a title report (current to within 60 days) evidencing ownership of the property shall be submitted to the Department of Transportation, Real Property Division.
6. Adherence to all applicable requirements, standards and procedures as established within the Sabino Springs Specific Plan (Ordinance #1990-53 as amended by Ordinance #1992-61).
7. Transportation and Flood Control conditions:
   Dedication of 25 feet of right-of-way for Snyder Road adjacent to the subject property.
8. Prior to ground modification activities, an on-the-ground archaeological survey and appropriate mitigation measures shall be conducted on the subject property. A cultural resources mitigation plan for any identified archaeological sites on the subject property shall be submitted at the time of, or prior to the submittal of any tentative plat or development plan. The mitigation plan shall be prepared and reviewed as described in the Pima County Site Analysis Requirements.

SECTION 2: That Ordinance #1990-53, as amended by Ordinance #1992-61, is hereby amended to read:

SECTION 1. That the Sabino Springs Specific Plan, attached as Exhibit A and incorporated herein, is hereby adopted subject to the following conditions:

E. A subdivision plat, development plan or building permit is subject to the following:

6. Requirements of the Planning and Development Services Department:

   g. Vegetation Mitigation Plan: Preliminary development plans or tentative plats shall be accompanied by a vegetation preservation plan prepared by a qualified horticulturist or landscape architect and approved by PDS. The preservation plan shall specify the methods of salvage, transplant, revegetation, irrigation, and protection from construction impacts. Minimum requirements for the preservation program are:

1) 100% of all saguaros and palo verdes located in the 100-year floodplain (except for roadway crossings) and in the natural and nonturfed areas of the golf course shall be preserved in place,
EXCEPT THAT SAGUAROS AND PALO VERDE TREES LOCATED WITHIN THE "LINE OF SIGHT - LINE OF FLIGHT" AREAS OF THE APPROVED GOLF COURSE DEVELOPMENT PLAN MAY BE REMOVED IN ACCORDANCE WITH APPROVED TRANSPANT AND MITIGATION STANDARDS.

3) THE SAGUARO TRANSPANT AND MITIGATION STANDARDS SUBMITTED TO THE PLANNING DIVISION ON MAY 31, 1995, BY THE THIRD-PARTY MONITORING BIOLOGIST ARE INCORPORATED BY REFERENCE IN THE SABINO SPRINGS SPECIFIC PLAN DOCUMENT.

4) PALO VERDE TREES REMOVED FROM THE "LINE OF SIGHT - LINE OF FLIGHT" AREAS OF THE APPROVED GOLF COURSE DEVELOPMENT PLAN SHALL BE REPLACED ELSEWHERE ON SITE WITH COMPARABLE PLANT SIZE AT A 2:1 RATIO OR WITH 15-GALLON NURSERY STOCK AT A 3:1 RATIO. AFFECTED TREES SHALL BE EVALUATED IN A MANNER COMPARABLE TO THAT EVALUATION PERFORMED FOR AFFECTED SAGUAROS.

... k. This specific plan is restricted to no more than 496 dwelling units for the entire specific plan site.

SECTION 3: That the first paragraph of Chapter I of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 1, to read:

The Sabino Springs Specific Plan establishes comprehensive guidance and regulations for the development of approximately 449 acres located in Pima County, Arizona. The Specific Plan provides several distinct advantages to development activity. The Specific Plan permits the adoption of regulations to specific conditions. Such conditions usually cannot be adequately addressed through zoning, since zoning regulations must be broadly applied throughout the metropolitan area. A Specific Plan is designed for a particular site and the issues peculiar to that area. The Specific Plan also functions to coordinate public and private efforts of development.

SECTION 4: That the last paragraph of Chapter II, Section B, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 4, to read:
The site will include residential uses with an average gross density not to exceed 4.6 homes per acre and will include predominantly single-family detached homes. Carefully planned residential areas are interspersed with open space and an 18-hole private golf course, designed by Robert Trent Jones II to respect existing drainageways, vegetation and habitat features within the site. A private clubhouse, tennis and swim facility are also planned.

SECTION 5: That the last paragraph of Chapter IV, Subsection G.1, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 33, to read:

Looking north from Snyder Road, the property is not visible due the off-site terrain and it's [sic] IS THE ONLY VIEWPOINT WHERE THE PROPERTY IS VISIBLE. HOWEVER, MOST OF THE SITE IS NOT VISIBLE FROM THIS VIEWPOINT DUE TO THE existing vegetation in the foreground.

SECTION 6: That the second paragraph of Chapter IV, Subsection G.3, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 34, to read:

Foreground views are more dominant and have a greater impact on the viewer. The viewpoints along Bowes Road AND SNYDER ROAD, a public rights-of-way, is-one area ARE TWO AREAS in which the specific plan is visible within the foreground. THESE AREAS, ALONG WITH THE CLASS I HABITAT RIPARIAN AREA WITHIN THE SECOND PLAN AMENDMENT AREA, FALL WITHIN THE MEDIUM SENSITIVITY CATEGORY (SEE EXHIBIT IV-G.3). The other two viewpoints are one and two miles away from the site. The foreground views from these vantage points are of scattered single-family residences.

SECTION 7: That the last paragraph of Chapter IV, Section M, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 43, to read:

Structures:
The existing structures within the Plan Area are all privately held. SIX NINE private residences exist within the Plan Area. It is anticipated that some ALL of the existing structures will be REMOVED with the Plan's implementation.
SECTION 8: That the third and fourth paragraphs of Chapter IV, Section N, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, are hereby amended on page 44, to read:

There are no areas within the Sabino Springs Specific Plan area with more than three cumulative characteristics of the five six mentioned above. The steeper slopes, less than 25% of the Specific Plan area, are located in the northern portion of the site. These sloping areas are also identified as Class II habitat, Palo Verde-Saguaro Desert Scrub. Ribboned within this area, is a third characteristic, four minor washes. Centrally located is a composite of dense vegetation within and along two of the identified 100-year floodplains (see Exhibit IV-QP).

One of the eastern drainageways contains three characteristics. These are 1) hydrology, 2) vegetation, and 3) wildlife. This is a 100-year floodplain, a Class I Wildlife Habitat and contains 75% or more vegetation canopy coverage. (See Exhibit IV-QP.)

SECTION 9: That the first and third paragraphs of Chapter V, Section C, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, are hereby amended on page 61, to read:

The Sabino Springs Specific Plan encompasses approximately 440 acres and is divided into twenty-two land use planning areas (Exhibit V-C). The acreage of the planning areas does not include land devoted to primary collectors. The proposed primary land use allocation is summarized on pages 62 and 99. As much as possible, the design of the entire project presents the areas as a planned private recreational community. All land uses are integrated regarding circulation, infrastructure, open space, drainageways, environmental resources, the visual setting, development standards and guidelines.

There are nineteen residential categories, labeled A-S. Residential densities vary depending on their location, with the lowest densities at the north end of the site, with a clustering of more intense residential uses adjacent to the Sabino High School and the Sabino Springs Country Club.

SECTION 10: That Chapter V, Section C, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 62 by revising the Land Use Plan Summary, to read:
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<tr>
<td>Golf and Transitional Edge Area</td>
<td>156.7</td>
<td>158.9</td>
</tr>
</tbody>
</table>

¹ Natural Open Space includes:

Maximum number of dwelling units for the Sabino Springs Specific Plan is 516.

All estate lots in THE ESTATE PLANNING AREA shall not exceed a total of 45 dwelling units. An average of 80% of each lot will be designated as natural open space.

*** A minimum of 80% of the total Estate area will be natural open space. Estate natural open space acreage is included in the Natural Open Space total.
Note: All acres are approximate to the nearest 0.5 acres and are calculated from a hand held planimeter on a 1" = 200' scale map.

SECTION 11: That the third paragraph of Chapter V, Section D.1, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 64, to read:

An additional primary access drive off of Snyder Road, Sabino Springs Drive, may be located approximately equidistant between the approved Vista de Loma Segunda entry and the Houghton Road alignment. This additional access point may serve Sabino SPRINGS DRIVE as the main entry to the project and carry carries the largest relative number of trips generated by the fully developed site. This additional access may be gated to provide security to the residents. Construction of these off-site entry drives will be the responsibility of the Plan Area's master developer.

SECTION 12: That Chapter V, Section D.1, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 64 by adding a new fourth paragraph to be inserted immediately prior to the existing fourth paragraph of in Section D.1, to read:

RESIDENTIAL LOTS WITHIN PLANNING AREAS T AND U WILL BE ACCESSED VIA TWO MINOR ROADS OFF OF SABINO SPRINGS DRIVE, TERMINATING IN CUL-DE-SACS. ALONG THE NORTH SIDE OF SNYDER ROAD, 25 FEET OF ADDITIONAL RIGHT-OF-WAY WILL BE DEDICATED TO THE COUNTY. THE REQUIRED 30-FOOT MINIMUM BUILDING SETBACK WILL BE OBSERVED TO THE NORTH OF THE ADDITIONAL RIGHT-OF-WAY.

SECTION 13: That the first paragraph of Chapter V, Subsection D.3, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 65, to read:

3. Change in ADT.
The Project will generate approximately 6,550 6,750 additional ADT over the existing condition. Approximately 5,200 5,400 ADT can be assigned to the Plan Area's main entry drive SABINO SPRINGS DRIVE. All of this volume will empty onto Snyder Road.

SECTION 14: That Chapter V, Subsection E.5, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 68, to read:
5. Schools
Based upon the Tucson Unified School District criteria for estimating student populations, the worst case scenario of Sabino Springs developed at full build-out will produce 298,304 elementary, 84,87 middle and 400,104 high school students. It is not anticipated that this project will get close to generating these numbers of students due to the significant difference in demographics associated with exclusive private residential communities. Adequate provisions for school population impacts will be provided to the Tucson Unified School District as necessary.

SECTION 15: That the second paragraph of Chapter V, Subsection F.3, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 70, to read:

In total, the designated road crossings will disturb approximately 3.8% 4.0% (920,880 feet) of the 24,400,21,730 linear feet of major washes existing within the Specific Plan area. The total disturbed area for road crossings will be approximately 90,000 109,800 square feet or 0.5% of the entire Specific Plan area. These figures exclude the Second Plan Amendment area.

SECTION 16: That Chapter V, Subsection G.1, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 74 by adding a new paragraph after the last paragraph of Subsection G.1, to read:

THE SECOND PLAN AMENDMENT SITE WILL INCLUDE THE GRADING OF RESIDENTIAL LOTS AND RELATED ROADWAYS. ALL GRADING WILL BE SITE SPECIFIC. THE SITE'S EXISTING WASHES WILL BE MINIMALLY DISTURBED BY GRADING ACTIVITIES. THE VAST MAJORITY OF THESE AREAS WILL BE LEFT IN THEIR NATURAL STATE (SEE EXHIBIT V-G). GRADING WITHIN THIS AREA WILL NOT EXCEED 55% OF THE TOTAL SECOND PLAN AMENDMENT AREA.

SECTION 17: That Chapter V, Subsection G.2, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 74 by adding a new paragraph after the last paragraph of Subsection G.2, to read:

CUT AND FILL WITHIN THE SECOND PLAN AMENDMENT AREA WILL BE SITE SPECIFIC. NO AREAS WILL BE ALTERED BY MORE THAN 5 FEET OF CUT OR FILL IN THE POST-GRADED CONDITION.
SECTION 18: That Chapter V, Subsection H.1.a, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 76, to read:

a. **Tres Hombres Wash - Class I Habitat.** All areas within the 100-year floodplain (Class I habitat) will be preserved as natural open space with the exception of **THREE** road crossings. The northern road crossing will be an at-grade, dip section with minimal associated grading and site disturbance. The southern road crossing will be an all-weather crossing with all graded areas revegetated. **THE THIRD CROSSING, SABINO SPRINGS DRIVE WITHIN THE SECOND PLAN AMENDMENT AREA, WILL BE A TWO-LANE PAVED ALL-WEATHER ROADWAY WITH CURB AND WALK.**

SECTION 19: That the third paragraph of Chapter V, Subsection H.2, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 78, to read:

The Class I Habitat, Tres Hombres Wash, is directly adjacent to the largest disturbed area on-site. The habitat has been designated as natural open space. The habitat extends off-site to the northeast and southwest onto private subdivided and unsubdivided properties. There are **THREE** road crossings within the Class I habitat. In an effort to be sensitive to this habitat, the crossing to the north is a dip crossing. The Class I habitat is 21.1 acres in size. The **THREE** wash crossings will impact approximately 42,000 square feet of the Class I Habitat or **THREE PERCENT** of the Class I habitat.

SECTION 20: That the final paragraph of Chapter V, Subsection H.2, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 79, to read:

The natural open space within the Sabino Springs Specific Plan totals 260.2 acres or 63% of the entire site.

SECTION 21: That the sixth paragraph of Chapter V, Section I, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 81, to read:

A bufferyard with a wall; no higher than six feet will be located along portions of the lower west, south, and lower east **SOUTHWEST** section of the Specific Plan area. This landscaped bufferyard takes into consideration existing residential developments surrounding Sabino Springs Specific Plan, adjacent streets and the Sabino High School. Sabino High School students have routinely used the Sabino Springs site for a variety
of non-school sponsored activities. For this reason, a six-foot wall is imperative adjacent to the high school site. Consistent with the overall project, landscaping and revegetation will include drought tolerant and indigenous plant materials.

SECTION 22: That Chapter VI, Subsection C.1, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 96, to read:

C. General Provisions
1. If an issue, condition or situation arises or occurs that is not sufficiently addressed by this plan, those regulations of the Pima County Zoning Code that are applicable are as follows:

Residential Area 1 (RA-1)
(includes Planning Areas N,O,P,Q,S)  
Closest-equivalent is CR-1 (18.21) Single Residence

Residential Area 2 (RA-2)
(includes Planning Areas A,I,M,R,T,U)  
Closest-equivalent is CR-2 (18.23) Single Residence

Residential Area 3 (RA-3)
(includes Planning Areas G,H,J,K,L)  
Closest-equivalent is CR-4 (18.27) Mixed Dwelling

Residential Area 4 (RA-4)
(includes Planning Areas B,C,D)  
Closest-equivalent is TR (18.31) Transitional

Residential Area 5 (RA-5)
(includes Planning Areas E and F)  
Closest-equivalent is TR (18.31) Transitional

Recreational Facility 1 (RF-1)
(Includes Clubhouse, Golf Course, Tennis and Swimming)  
Closest-equivalent is MR (18.40) Major Resort and GC (18.59) Golf Course.

SECTION 23: That Chapter VI, Section D, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on pages 98 and 99 by revising the Land Use Plan Summary, to read:

D. Land Use Plan Summary.
Development categories have been assigned to each planning subarea identified in the Sabino Springs Specific Plan as shown on Exhibit VI-A. The categories include land use designation, area in acres, dwelling units and density per acre. These statistics are shown on the following page.
<table>
<thead>
<tr>
<th>Development Category</th>
<th>Planning Areas</th>
<th>Acres</th>
<th>Density Range (Homes/Acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA-1</td>
<td>N, O, P, Q, S (Estate)</td>
<td>14.6*</td>
<td>0.5 - 1</td>
</tr>
<tr>
<td>RA-2</td>
<td>A, I, M, R, T, U</td>
<td>33.6</td>
<td>1 - 2</td>
</tr>
<tr>
<td>RA-3</td>
<td>G, H, J, K, L</td>
<td>57.5</td>
<td>4 - 6</td>
</tr>
<tr>
<td>RA-4</td>
<td>B, C, D</td>
<td>23.6</td>
<td>4 - 8</td>
</tr>
<tr>
<td>RA-5**</td>
<td>F</td>
<td>9.3</td>
<td>3 - 7</td>
</tr>
<tr>
<td>RF-1</td>
<td>Clubhouse, Golf Course and Tennis/Swimming/Realigned Wash and Transitional Desert Edge Class I and Natural Washes, Resource Area and Estate natural areas</td>
<td>167.9</td>
<td>170.1</td>
</tr>
<tr>
<td>PA</td>
<td></td>
<td>403.5</td>
<td>1113</td>
</tr>
</tbody>
</table>

* Total acreage of RA-1 Category is 73.1 acres, of which 80% is to remain as natural open space.
** Planning area E has been deleted and combined into Clubhouse Area.

**LAND USE PLAN SUMMARY**

<table>
<thead>
<tr>
<th>Development Category</th>
<th>Planning Areas</th>
<th>Acres</th>
<th>Density Range* (Homes/Acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA-2</td>
<td>A</td>
<td>6.1</td>
<td>1 - 2</td>
</tr>
<tr>
<td>RA-4</td>
<td>B</td>
<td>4.6</td>
<td>4 - 8</td>
</tr>
<tr>
<td>RA-4</td>
<td>C</td>
<td>0.8</td>
<td>4 - 8</td>
</tr>
<tr>
<td>RA-4</td>
<td>D</td>
<td>18.2</td>
<td>4 - 8</td>
</tr>
<tr>
<td>RA-5</td>
<td>F</td>
<td>9.3</td>
<td>3 - 7</td>
</tr>
<tr>
<td>RA-3</td>
<td>G</td>
<td>8.3</td>
<td>4 - 6</td>
</tr>
<tr>
<td>RA-3</td>
<td>H</td>
<td>12.0</td>
<td>4 - 6</td>
</tr>
<tr>
<td>RA-3</td>
<td>I</td>
<td>6.1</td>
<td>1 - 2</td>
</tr>
<tr>
<td>RA-3</td>
<td>J</td>
<td>14.0</td>
<td>4 - 6</td>
</tr>
<tr>
<td>RA-3</td>
<td>K</td>
<td>5.7</td>
<td>4 - 6</td>
</tr>
<tr>
<td>RA-3</td>
<td>L</td>
<td>17.5</td>
<td>4 - 6</td>
</tr>
<tr>
<td>RA-2</td>
<td>M</td>
<td>13.9</td>
<td>1 - 2</td>
</tr>
<tr>
<td>RA-1</td>
<td>N-Estate**</td>
<td>23.4</td>
<td>0.5 - 1</td>
</tr>
<tr>
<td>RA-1</td>
<td>O-Estate</td>
<td>11.7</td>
<td>0.5 - 1</td>
</tr>
<tr>
<td>RA-1</td>
<td>P-Estate</td>
<td>10.6</td>
<td>0.5 - 1</td>
</tr>
<tr>
<td>RA-1</td>
<td>Q-Estate</td>
<td>17.0</td>
<td>0.5 - 1</td>
</tr>
<tr>
<td>RA-2</td>
<td>R</td>
<td>7.5</td>
<td>1 - 2</td>
</tr>
<tr>
<td>RA-1</td>
<td>S-Estate</td>
<td>10.4</td>
<td>0.5 - 1</td>
</tr>
<tr>
<td>RA-2</td>
<td>T</td>
<td>4.7</td>
<td>1 - 2</td>
</tr>
</tbody>
</table>
RA-2   U   7.5  1 - 2
RF-1   T   2.2
RF-1   CH-Clubhouse/Tennis/Swim  6.4
RF-1   Realigned Wash  4.8
RF-1   Golf Course and Transitional  156.7  158.9
PA   Preservation Area  111.3

Preservation Area Includes:
Class I Washes  9.2  15.3
Natural Washes  35.8  37.5
Estate (80%)  (58.5)

* Maximum number of dwelling units for the Sabino Springs Specific Plan is 516.
Density transfers between planning areas are not permitted.

** All estate lots THE ESTATE PLANNING AREA shall not exceed a total of 45
dwelling units. An average of 80% of each lot will be designated as natural open space.

Note: All acres are approximate to the nearest 0.5 acres and are calculated from a hand
held planimeter on a 1" = 200’ scale map.

SECTION 24: That Chapter VI, Subsection E.2.b, of the Sabino Springs Specific Plan, set
forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 101, to
read:

2. RA-2 Residential Areas A, I, M, R., T., U

b. General Development Standards:
1. Minimum Lot Area: 12,000 square feet.
2. Maximum Lot Coverage: 60%
3. Maximum Building Height: Not to exceed 18 feet.
4. Parking Requirements: Shall be in accordance with Chapter
   18.75 of the Pima County Zoning Code.
5. Maximum Density: Two RAC and shall not exceed the overall
   Specific Plan dwelling unit cap of 496 516 homes.
6. Minimum Yard Requirements: Front = 20 feet
   Side = None
   Rear = 10 feet.

SECTION 25: That Chapter VI, Subsection E.3.b, of the Sabino Springs Specific Plan, set
forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 102, to
read:
3. RA-3 Residential Areas G, H, J, K, L

b. General Development Standards:
1. Minimum Lot Area: 5,000 square feet.
2. Maximum Lot Coverage: 60%
3. Maximum Building Height: Not to exceed 24 feet.
4. Parking Requirements: Shall be in accordance with Chapter 18.75 of the Pima County Zoning Code.
5. Maximum Density: Six RAC and shall not exceed the overall Specific Plan dwelling unit cap of 496 homes.
6. Minimum Yard Requirements: Front = 20 feet
   Side = None
   Rear = 8 feet.

SECTION 26: That Chapter VI, Subsection E.4.b, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 102, to read:

3. RA-4 Residential Areas B, C, D

b. General Development Standards:
1. Minimum Lot Area: 4,000 square feet.
2. Maximum Lot Coverage: 50%
3. Maximum Building Height: Not to exceed 24 feet.
4. Parking Requirements: Shall be in accordance with Chapter 18.75 of the Pima County Zoning Code.
5. Maximum Density: Eight RAC and shall not exceed the overall Specific Plan dwelling unit cap of 496 homes.
6. Minimum Yard Requirements: Front = 20 feet
   Side = None
   Rear = 5 feet.

SECTION 27: That Chapter VI, Subsection E.5.b, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 103, to read:

3. RA-5 Residential Area E, F

b. General Development Standards:
1. Minimum Lot Area: 3,000 square feet.
2. Maximum Lot Coverage: 65%
3. Maximum Building Height: Not to exceed 24 feet.
4. Parking Requirements: Shall be in accordance with Chapter 18.75 of the Pima County Zoning Code and any nonresidential parking lots shall be screened by vegetation to reduce visibility (per Chapter 18.67 of the Pima County Zoning Code).

5. Maximum Density: Seven RAC and shall not exceed the overall Specific Plan dwelling unit cap of 496,516 homes.

6. Minimum Yard Requirements:
   Front = 20 feet
   Side = None
   Rear = 5 feet

SECTION 28: That Chapter VIII, Section D, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 131 by revising Phase 1, and, on page 132, by amending Phase 4 and adding a new paragraph for Phase 5 immediately after Phase 4, to read:

PHASE 1
Phase 1 will include six residential planning areas (three internal to the project and three within the estate area), the 18-hole golf course, the clubhouse and recreational facilities.

<table>
<thead>
<tr>
<th>PLANNING AREA</th>
<th>ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>17.0</td>
</tr>
<tr>
<td>G</td>
<td>12.4</td>
</tr>
<tr>
<td>P</td>
<td>9.0</td>
</tr>
<tr>
<td>Q</td>
<td>13.6</td>
</tr>
<tr>
<td>R</td>
<td>8.5</td>
</tr>
<tr>
<td>S</td>
<td>9.0</td>
</tr>
<tr>
<td>Golf course/Revegetated</td>
<td>164.4</td>
</tr>
<tr>
<td>Clubhouse</td>
<td>3.5</td>
</tr>
</tbody>
</table>

PHASE 4
Phase 4, the final phase, will include five planning areas; all five are internal to the project.

<table>
<thead>
<tr>
<th>PLANNING AREA</th>
<th>ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>4.3</td>
</tr>
<tr>
<td>C</td>
<td>0.8</td>
</tr>
<tr>
<td>E</td>
<td>1.8</td>
</tr>
<tr>
<td>F</td>
<td>9.3</td>
</tr>
<tr>
<td>L</td>
<td>14.0</td>
</tr>
</tbody>
</table>

PHASE 5
Phase 5, the final phase, will include two planning areas.
SECTION 29: That Chapter VIII, Section D, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 133 by amending the last paragraph, to read:

Minor modifications to the boundaries and acreages of planning areas, adjustments because of final road alignments, drainage (including retention/detention) and golf course design will occur during technical refinements in the tentative plat map process and shall not require an amendment to the Specific Plan. Maximum dwelling units per cumulative planning area will not be affected by these modifications. The Sabino Springs Specific Plan residential dwelling unit maximum shall be 496. 

SECTION 30: That Chapter VIII, Subsection G.1, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended on page 135 by amending the last paragraph, to read:

1. The overall assigned dwelling unit yield of 496 residential dwelling units shall not be exceeded.

SECTION 31: That Appendix B, Legal Description, of the Sabino Springs Specific Plan, set forth in Exhibit A to Ordinance #1990-53, as amended, is hereby amended by adding the legal description of the Second Plan Amendment area, as shown in Attachment B to this ordinance and incorporated herein by this reference.

SECTION 32: That the Arizona Game and Fish Department response letter dated March 9, 1995, attached herein and incorporated herein by reference as Attachment C, is hereby added to Appendix G, Arizona Game and Fish Department Response, of the Sabino Springs Specific Plan document.

SECTION 33: That the Pima County Wastewater Management Department response letter dated February 6, 1995, attached herein and incorporated herein by reference as Attachment D, is hereby added to Appendix H, Pima County Wastewater Management Department Response, of the Sabino Springs Specific Plan document.
SECTION 34: That the Arizona State Museum response letter dated January 26, 1995, attached herein and incorporated herein by reference as Attachment E, is hereby added to Appendix I, Archaeologist’s Response, of the Sabino Springs Specific Plan document.

SECTION 35: That the following exhibits to the Sabino Springs Specific Plan are hereby amended, as shown in Attachment F and incorporated herein by this reference.

  Exhibit II-B, Regional/Vicinity Map
  Exhibit IV-A, Existing Zoning
  Exhibit IV-B.1, Topography
  Exhibit IV-B.3, Slopes
  Exhibit IV-C.2, Watershed
  Exhibit IV-C.4, Hydrology
  Exhibit IV-D.2, Plant Communities
  Exhibit IV-D.3, Plant Densities
  Exhibit IV-F, Soils
  Exhibit IV-G.1, Visibility
  Exhibit IV-G.2, Scenic Quality
  Exhibit IV-G.3, Visual Sensitivity
  Exhibit IV-H, Traffic, Schools, Recreation
  Exhibit IV-I, Sewers
  Exhibit IV-P, Composite
  Exhibit V-C, Specific Plan/Land Use Plan
  Exhibit V-D.1, Circulation Plan
  Exhibit V-E.2, Public Facilities (Water)
  Exhibit V-E.3, Public Facilities (Sewer)
  Exhibit V-F.3, Water Resources Plan
  Exhibit V-G, Conceptual Grading Plan
  Exhibit V-H, Environmental Resources Plan
  Exhibit V-H.1, Ecological Resource Areas
  Exhibit V-I, Landscape Plan
  Exhibit V-J, Recreation/Pedestrian Path System
  Exhibit VI-A, Development Categories
  Exhibit VIII-D, Land Use Phasing Plan
  Exhibit VIII-E, Circulation Phasing Plan
  Exhibit VIII-F.1, Public Facilities Phasing (Sewer)
  Exhibit VIII-F.2, Public Facilities Phasing (Water)
SECTION 36: That this ordinance shall become effective on the day the last of all of the following occurs:

A. The Planning Official’s certification that the Sabino Springs Specific Plan document has been revised to accurately reflect the amendments set forth in sections 3 through 35 of this ordinance.

B. The Planning Official’s certification that the Surveyed Boundaries Map accepted by the Board of Supervisors on February 12, 1991, has been revised to accurately reflect the amendments set forth in sections 3 through 35 of this ordinance.

C. Thirty-one days after the date the Chairman of the Board of Supervisors signs this ordinance.

SECTION 37: Not more than 60 days after the Chairman of the Board of Supervisors signs this ordinance, the Developer shall submit to the Planning Official the revised Sabino Springs Specific Plan document, accurately incorporating all the amendments set forth in this ordinance, and the revised Surveyed Boundaries Map referred to in the preceding Section.

SECTION 38: That all ordinances and parts of ordinances in conflict with this ordinance be and the same are hereby repealed to the extent of such conflict.

SECTION 39: That the provisions of this ordinance shall be severable and that if any part of this ordinance is held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of the ordinance. If, for any reason, this ordinance does not become effective or is ruled invalid in its entirety, Ordinance #1990-53, as amended, and the Sabino Springs Specific Plan shall be deemed in full force and effect as originally adopted and amended by Ordinance #1992-61.

[continued]
PASSED AND ADOPTED by the Board of Supervisors of Pima County, Arizona, this


[Signature]
Chairman, Board of Supervisors

Date: JAN 09 1996

ATTEST:

[Signature]
Clerk, Board of Supervisors

APPROVED AS TO FORM:

[Signature]
Civil Deputy County Attorney

[Signature]
Executive Secretary, Pima County Planning and Zoning Commission
SABINO SPRINGS
SPECIFIC PLAN
FINAL
Co23-89-2

June 5, 1990
First Amendment: July 21, 1992
Second Amendment: October 17, 1995

Prepared For:

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For Clarification of Material
Contained in This Specific
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Randal W. Jackson, Principal
Charles B. Deans, Project Manager
Michael Grassinger, Regional Manager

The Planning Center
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Suite 202
Tucson, AZ 85701
(602) 623-6146
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1. SUMMARY

The Sabino Springs Specific Plan establishes comprehensive guidance and regulations for the development of 430 acres located in Pima County, Arizona. The Specific Plan provides several distinct advantages to development activity. The Specific Plan permits the adoption of regulations to specific conditions. Such conditions usually cannot be adequately addressed through zoning, since zoning regulations must be broadly applied throughout the metropolitan area. A Specific Plan is designed for a particular site and the issues peculiar to that area. The Specific Plan also functions to coordinate public and private efforts of development.

The Sabino Springs Specific Plan is located in the northeast portion of metropolitan Tucson. Recently, it has seen new shopping centers and improvements of existing roads and new bridge construction. The site itself is directly adjacent to the Coronado National Forest and the intensive use of Sabino High School. The entire site is within the Buffer Overlay Zone.

The Specific Plan will establish the development regulations and programs for the implementation of a high-quality private, recreation based residential plan. It will also provide the parameters to implement the Land Use Plan by establishing policies and regulations which will replace the current property zoning. The Specific Plan is regulatory, adopted by ordinance.

The Plan has been prepared in accordance with Pima County Zoning Code, Chapter 18.90: Specific Plans. The Site Analysis and Inventory, Development Plan, and Specific Plan Implementation Chapters review the required written and graphic information as specified in Zoning Code Chapter 18.90, subsection .030 and the Pima County Planning and Development Services Specific Plan Document Preparation, dated January 4, 1988.

Project area maps are at a scale of 1"=600'. An acetate preliminary development plan overlay is provided in the pocket at the end of the document.

Exhibit numbering corresponds to the written Section and Subsection of the text, i.e., Section V-C's exhibit is labeled Exhibit V-C.

Information for the Site Analysis was compiled from site visitations, agency responses, topographic, hydrologic, environmental, archaeological and landscape architectural analysis.
The authority for preparation of Specific Plans is found in the Arizona Revised Statutes, Section 11-825. The law allows preparation of Specific Plans based on the Comprehensive Land Use Plan, as may be required for the systematic execution of the Comprehensive Land Use Plan and further, allows for their review and adoption.
II. INTRODUCTION

A. Purpose and Intent

The Sabino Springs Specific Plan represents a thorough and complete planning effort applicable to this specific site. It reflects a logical sequence of development for a residential and recreational community. The Plan includes a site analysis and inventory, description of proposed development, regulations, infrastructure provisions and phasing plans. Development standards reflect a response to issues and characteristics specific to the Sabino Springs Specific Plan area and its environs.

The Sabino Springs Specific Plan focuses on respecting and enhancing special site features, careful master planning and coordination of residential and recreational land uses, preservation and protection of open space, creation of top quality recreational amenities and provision of an effective internal circulation system which respects the land as well as the needs of fire and life safety. Responsible land uses as proposed within the Sabino Springs Specific Plan can be insured through the adoption of an effective development control mechanism that reflects thorough and comprehensive land use planning.

The Specific Plan is a device used to implement the Comprehensive Land Use Plan, area and community plans. It is a detailed plan for a focused area. The Specific Plan articulates planning considerations and imposes regulations or controls on the proposed uses. The Sabino Springs Specific Plan is the combination of concepts, procedures, and regulations of numerous planning documents combined into one document.

B. Project Location and Description

The property is located in the northeast Metropolitan Tucson area, in Pima County, Arizona. It is approximately twelve miles northeast of Tucson’s Central Business District and fifteen miles north of Interstate Highway 10. Catalina Highway is one-half mile to the southeast of the site. Bowes Road, an extension of Harrison Road, is the west boundary and the Houghton Road right-of-way is the east boundary. Snyder Road is to the south. Sabino Canyon High School is immediately adjacent to the property on the southwest corner. The Coronado National Forest’s Pusch Ridge Wilderness borders the northern boundary of the Specific Plan area. See Exhibit II-B.
The Sabino Springs Specific Plan area is surrounded by single-family homes on three sides, to the west, south, and east. McDonald Park, a 38 acre lighted park, is located approximately one mile south of the site. The Sabino Canyon Recreation Area boundary is .25 linear miles to the west. The Sabino Canyon Visitor Center is 10 surface road miles northwest of the property.

The site is within the recently adopted Buffer Overlay Zone Ordinance which stipulates specific development parameters for areas within one mile of a designated public preserve.

The Sabino Springs Specific Plan calls for the creation of a private residential community. Key elements of the plan include: environmental sensitivity in planning and construction, residential land uses, an emphasis on quality recreational amenities designed to meet the needs of the residents, including an 18-hole golf course and development which is in general harmony with the adjacent neighborhoods.

Development standards are planned to be in conformance with the Buffer Overlay Zone Ordinance, 18.67 Pima County Development Codes including:

- Building color
- Fences and walls
- Lighting
- Parking lots
- Setbacks of structures and driveways from public preserves
- Utilities
- Approved and prohibited plant materials
- Trail access (Not applicable)
- Identification and protection of washes
- Establishment of functional open space
- Habitat restoration or enhancement
- Preservation of natural open space
- Sensitivity to visual quality

The site will include residential uses with an average gross density not to exceed 1.2 homes per acre and will include predominantly single-family detached homes. Carefully planned residential areas are interspersed with open space and an 18-hole private golf course, designed by Robert Trent Jones II to respect existing drainageways, vegetation and habitat features within the site. A private clubhouse, tennis and swim facility is also planned.
C. Authority and Scope

The Sabino Springs Specific Plan has been prepared pursuant to the provisions of the Arizona Government code, Title 11, Chapter 6, Article 2, Section 11-825. The Arizona Revised Statues authorizes jurisdictions to adopt specific plans by ordinance or as regulation. Hearings are required by both the County Planning and Zoning Commission and the Board of Supervisors.

The Sabino Springs Specific Plan is a regulatory plan which will serve as the zoning for the subject property. Proposed development plans, or agreements, tentative plats and any other development approval must be consistent with the Specific Plan. Projects which are found consistent with the Specific Plan will be deemed consistent with the County's Comprehensive Land Use Plan.

The intent of this Specific Plan is to provide a concise development plan for the subject property. This Specific Plan will serve to implement the development of the approved land uses within the bounds of the regulations provided herein and will be adopted by ordinance as a regulatory document.

D. Legal Description

See Appendix B.

E. Ownership and Tax Code

See Ownership Map, Appendix C.

The property is owned by the following:

<table>
<thead>
<tr>
<th>Parcel #</th>
<th>Tax Code #</th>
<th>Owner/Address</th>
</tr>
</thead>
</table>
| 1        | 11407061A  | Nickerson H. William  
P.O. Box 60066  Tucson, AZ |
| 2        | 114070600 | Perini Land and Development Company  
940 N. Finance Center Dr. #207  Tucson, AZ |
| 3        | 11407059A | Manning Neal C.  
6179 E. Broadway Blvd.  Tucson, AZ |
| 4        | 11407059B | Perini Land and Development Company  
940 N. Finance Center Dr. #207  Tucson, AZ |
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 5 | 11407058A | Perini Land and Development Company  
940 N. Finance Center Dr. #207  
Tucson, AZ |
| 6 | 11407058B | The Northwest Properties, An Arizona General Partnership  
c/o David L. Northcraft, Managing Partner,  
9402 E. Ocotillo Dr. Tucson, AZ |
| 7 | 114070540 | Podbielski Peter J. & Christine Mifsud JT/RS  
P.O. Box X-94 APO NY |
| 8 | 114070550 | Perini Land and Development Company  
940 N. Finance Center Dr. #207  
Tucson, AZ |
| 9 | 114070560 | Perini Land and Development Company  
940 N. Finance Center Dr. #207  
Tucson, AZ |
| 10 | 114070530 | Perini Land and Development Company  
940 N. Finance Center Dr. #207  
Tucson, AZ |
| 11 | 114070510 | Jacob Daniel James Sr. & Rae Ann JT/RS  
4107 N. Avenida De Montezuma  
Tucson, AZ |
| 12 | 11407074A | Title Guaranty Agency of AZ. TR T-1204  
101 N. Wilmot Rd. #210  
Tucson, AZ |
| 13 | 114070730 | Perini Land and Development Company  
940 N. Finance Center Dr. #207  
Tucson, AZ |
| 14 | 114070700 | Kwolek Marsha J.  
290 Ansley Drive  
Athens, GA |
| 15 | 114070720 | Kildebeck John & Duggan Martha Patricia  
13434 Bayliss Rd.  
Los Angeles CA |
| 16 | 11407071A | Nickerson H. William  
P.O. Box 60066  
Tucson, AZ |
| 17 | 11407057A | Title Guaranty Agency of AZ. TR T-1208  
101 N. Wilmot Rd. #210  
Tucson, AZ |
| 18 | 11407100C | Title Guaranty Agency of AZ. TR T-1212  
101 N. Wilmot Rd. #210  
Tucson, AZ |
| 19 | 114070830 | Urdiales Gonzalo & Ocelia JT/RS  
2841 N. Rosemont Ave.  
Tucson, AZ |
| 20 | 114070840 | Title Guaranty Agency of AZ. TR T-1207  
101 N. Wilmot Rd. #210  
Tucson, AZ |
| 21 | 11407085A | Title Guaranty Agency of AZ. TR T-1212  
101 N. Wilmot Rd. #210  
Tucson, AZ |
III. STATEMENT OF FINDINGS

A. Introduction

The proposed Sabino Springs Specific Plan consists of a private residential community, including a golf course with clubhouse and recreational facilities. Exhibit V-C. The site is within the Agua Caliente Zoning Plan and is currently designated as Suburban Ranch (1 residence per 3.3 acres). The proposed Sabino Springs Specific Plan is surrounded by existing residential areas on three sides. Sabino High School is directly adjacent to Sabino Springs Specific Plan area to the southwest and includes six major buildings with heights up to 60 feet and lighted sports fields. The Coronado National Forest Pusch Ridge Wilderness is adjacent to the northern boundary of the property.

The Sabino Springs Specific Plan is a long-range plan allowing for the creation of a self-contained, high quality private residential community. The plan sensitively integrates residential and recreational land uses, concentrating the more intense uses adjacent to the existing Sabino High School.

This area of the Santa Catalina foothills has a mixture of desert characteristics including mesquite woodland and palo verde-saguaro desert scrub. The site has a sloping terrain with the steep Santa Catalina Mountains immediately north of the property and metropolitan Tucson to the southwest.

Development has been occurring to the north and east in the Metropolitan Tucson area. The Wrightstown/Tanque Verde interchange, approximately 3 miles south of the site, was completed two years ago. Three shopping centers, businesses and office developments have been completed within two to three miles of the site at the Tanque Verde/Catalina Highway intersection. Tanque Verde has recently been widened and the new Houghton Road bridge is under construction.

A logical step in the planning of this area is a master planned community based on concepts defining the growth, quality and direction of Pima County's built environment. Development is planned to be in accordance with the Buffer Overlay Zone Ordinance requirements. This Specific Plan establishes a variety of quality residential home types, as well as amenity features which provide a balanced lifestyle within the community and the surrounding area.
The adoption of Sabino Springs Specific Plan will establish the type, location, development character and required infrastructure for development to occur. The Specific Plan shapes the development to respond to the physical constraints of the site, its proximity to the Sabino High School and the Coronado National Forest, coordinates the mix of residential homes and provides effective circulation, well designed recreation and public facilities.

This Specific Plan will be a device used to implement the General Plan in a more detailed way for this focused area. The Specific Plan articulates the planning considerations for each parcel and imposes regulations or controls on the use of the parcels. The Sabino Springs Specific Plan is the combination of concepts, procedures, and regulations of numerous planning documents combined into one document.

B. Plan Goals

The plan goals recognize major development issues, the landowners’ goals and County requirements. The following set of Sabino Springs Specific Plan objectives are:

1. To implement the goals and policies of the Pima County Comprehensive Land Use Plan;

2. To meet the requirements of the Buffer Overlay Zone Ordinance;

3. To provide quality land uses, based on current, anticipated, and future market demands with a range of opportunities;

4. To ensure coordinated, responsible land use planning through the adoption of cohesive procedures, regulations, standards and guidelines;

5. To provide uniform regulations for land use, circulation and landscaping;

6. To identify and clarify development standards for direct implementation;

7. To provide an infrastructure system and public facilities to support development in an efficient and timely manner;

8. To provide a development phasing plan which addresses responsible and appropriate construction of infrastructure, while also maintaining
flexibility;

9. To provide design guidelines to establish a framework for a comprehensive and aesthetic community plan which will retain lasting values and quality of life over the years.

10. To meet overall Pima County objectives for specific plans by:

a. Allowing non-conventional methods of preserving open space in compliance with the Buffer Overlay Zone Ordinance.

b. Creatively combining the elements of various County regulations such as Buffer Overlay ZOne Ordinance (B.O.Z.O.), Hillside Development Zone (HDZ), Parks and Open Space Plan into one document that ensures sensitivity to unique environmental characteristics.

c. Providing for a mix of residential types within a master planned area and guaranteeing design standards necessary to meet the unique needs of the site.

d. Creating a complete package of regulations for land use, signs, roads, landscaping, trails and recreational features which will provide an identifiable community within the overall context of the larger area.

C. Alternative Planning Tools

The use of the Specific Plan for this property is clearly justified. The Specific Plan provides the bridge between Pima County's Comprehensive Land Use Plan, 1960, the Buffer Overlay Zone Ordinance, and the needs of this specific site. It establishes an orderly, cost effective and environmentally sound framework for development of this property.

This property is being planned as a private residential community with one 18-hole golf course, a clubhouse and tennis facilities. Its location, based on present and future growth trends, transportation and infrastructure planning, is highly suited to such a designation. The use of the Specific Plan will allow a long term commitment to this residential concept and provide a good standard for responsible development in Eastern Pima County.

Development regulations will be more detailed and appropriate for the site and region than those found under conventional zoning categories which
apply to the entire County, and will meet or exceed the requirements of the Buffer Overlay Zone Ordinance. The Specific Plan will provide a means of responding to existing plan policies that piecemeal rezoning requests will not permit.

D. Plan Consistency

The Sabino Springs Specific Plan is in substantial conformance with the Conceptual Land Use Element of the Pima County Comprehensive Land Use Plan (September, 1989) and the Buffer Overlay Zone Ordinance (1988). The southern portion of the project lies within an Urban Planning Sector. The rest of the site is located within Mountain Foothills Segment (D) which is described as including open space, sensitive land uses adjacent to public preserves, appropriate architectural siting and materials and indigenous landscaping.

This plan is not in substantial conformance with the Agua Caliente-Sabino Creek Zoning Plan approved twenty-six years ago, in 1963. Many major public improvements have been or are being completed, such as the Tanque Verde Bridge and the Houghton Road Bridge. Present zoning within the Specific Plan area is Conditional CR-1 and Suburban Ranch. Adjacent uses include, CR-1 (1.2 RAC) to the west, CR-1 (1.2 RAC) and SR (0.3 RAC) and Sabino High School, with a 60-foot high building, to the south, and the Coronado National Forest Pusch Ridge Wilderness to the north. The surrounding residential and public facility uses provide the rationale for a specific land use plan which amends the existing Zoning Plan.

The Sabino High School is an extremely intense adjacent land use. It houses 1,326 students, 114 faculty and staff, extensive outdoor athletic events which include night lighting and outdoor public address systems, a building height of 60 feet and over 600 registered student vehicles and 15 buses.

The Specific Plan is consistent with Pima County's Major Streets and Routes Plan. Two designated streets are located to the east and south of the plan area, Houghton Road and Snyder Road. The Specific Plan is consistent with Pima County's Master Parks and Recreation Plan.

Natural and functional open space are defined per the Buffer Overlay Zone Ordinance definitions.

E. Zoning Code Consistency

The Sabino Springs Specific Plan is consistent with the Pima County Zoning
Code regarding relative importance of surrounding private and public interests. These interests include homeowners to the east, south and west, as well as Sabino High School to the west.

Coronado National Forest is adjacent to the site on the north property line. Extensive development has occurred to the west, south and east of the parcel. The proposed uses within this Specific Plan will provide needed long-range residential and recreational opportunities for its residents.

The Specific Plan will enhance the broad-based planning efforts in the region and should increase surrounding property values by providing homes priced at or above comparable values in the general area. This, combined with cleaning up the area around Sabino High School, providing a quality golf-oriented, recreational facility and improving the overall street and utility infrastructure will enhance property values on and off-site. It will also address long-range community goals regarding transportation, air quality, concentration of recreational activities, and preservation and enhancement of the environment.

F. Community Benefits

As the population in eastern Pima County increases, the demand for housing and services increase. A portion of the community's needs will be met with this residential community. Its designation will provide for some of the long-term needs of the increasing population as well as assure that the community will be built-out as planned.

The plan's long-term commitment to quality development, Buffer Overlay Zone Ordinance conformance, land use designations, development standards, design guidelines and implementation should provide both direct and indirect benefits to the neighborhood, community and region. The property owners within and adjacent to the plan area, as well as the region, should benefit similarly from the increased certainty regarding future land uses, additional private recreational opportunities and increased economic development as a result of the construction related jobs necessary to build this project, as well as permanent jobs created in conjunction with operating and maintaining the golf course and related activities.

G. Context Compatibility

The Sabino Springs Specific Plan is a project which addresses present and future growth in eastern Pima County and provides the framework for appropriate land uses and the provision of needed services. The plan
provides for a sensitivity to the region, the neighborhood and the site by allowing only residential and related recreational uses consistent with existing surrounding development. Design standards are included to ensure that construction will be compatible with homes and institutions in the existing neighborhood.

The land use policies recommended in the Agua Caliente-Sabino Creek Zoning Plan and the Buffer Overlay Zone Ordinance recognize the need for sensitive treatment of this area and specify guidelines to realize an acceptable approach.

H. Environmental Suitability

The Specific Plan area is appropriate for a well conceived development. The area is characterized as typical Arizona Upland-Sonoran Desert which contains two plant communities, the mesquite woodland and palo verde-saguaro desert scrub. There are six washes which traverse the site, one which is designated as a Class I habitat. These areas have been preserved with minor modifications and, compatible land uses located adjacent to them. A Plant Preservation Plan is proposed to insure the salvage of appropriate materials. A Cultural Resources Plan has been included to provide appropriate treatment for archaeological sites.

The site is environmentally suitable for a development which preserves and/or addresses the site features. This plan does provide the regulations for such a site.

I. Public Services Suitability

Existing public services in the vicinity of the Plan Area provide an adequate foundation for its development as intended.

Roads: Snyder Road, Bowes Road, and Houghton Road represent the major existing streets in the immediate Plan vicinity. All of these streets are presently operating well below their existing respective capacities.

The Plan Area will take its point of ingress/egress off of Snyder Road. Current projections show that this roadway will be operating at only 65% of its capacity even after the additional traffic generated by the Plan Area is added to existing volumes.

No mass transit bus routes are presently available to the site. Handi-Car transportation services are available, on an on-demand basis, for the elderly
and handicapped. The nearest Sun Tran Park'n'Ride lot is located at the intersection of Tanque Verde Road and Catalina Highway, approximately 3.5 miles south of the project site. No designated bike routes exist in the immediate vicinity of the project.

Utilities: Existing sewer and water facilities exist in the immediate vicinity of the project sufficient to provide an adequate foundation for the development of the Plan Area. Localized off-site extensions of sewer and water lines, as necessary, will be completed by the owner at the specific time of development.

A reclaimed water facility has been planned to be an integral part of the project.

Other basic utilities, i.e. electric, natural gas, and telephone, also have facilities in the immediate vicinity of the Plan Area such that any extensions required to serve the subject Site will be non-substantial.

Emergency Service: Fire and emergency service will be available to individual home owners, on an annual subscription basis, through Rural Metro Corporation.
IV. SITE ANALYSIS AND INVENTORY

A. Existing Land Use

The proposed Sabino Springs Specific Plan area includes an assemblage of homes and ranches and is zoned conditional CR-1 and SR, Suburban Ranch. There are six single-family residences, numerous jeep trails which traverse the site, a large, highly visible City of Tucson Water reservoir, and several abandoned ranch sites within the plan area.

Under the current Pima County Land Use Plans, the Agua Caliente-Sabino Creek Zoning Plan, adopted 1963, the Specific Plan area is designated as SR, Suburban Ranch zoning (see Exhibit III-D). Four cases in the past three years have been amended from SR to CR-1. The Agua Caliente-Sabino Creek Zoning Plan has not been updated since its 1963 adoption, over twenty-six years ago.

Existing land uses within ¼ mile of the site include CR-1 single-family residences to the west, Sabino High School, the Church of Latter Day Saints, SR and CR-1 single-family residences all to the south and SR single-family residences to the east. To the north is the Coronado National Forest Push Ridge Wilderness (see Exhibit IV-A). A USGS Geodetic site is located 1 mile north within the Forest Service land (see Exhibit IV-H).

There are no pending rezoning cases within ¼ mile of the Specific Plan area. 34.0 acres of the western portion of this site was conditionally rezoned to CR-1 in 1988 by Perini Land and Development Company. There is one well-site registered with the Arizona Water Resources Department of Tucson Active Management Area. It is located in the NW ¼ of the NW ¼ of Section 14, Township 13 South, Range 15 East. The well site is within 100 feet of the Specific Plan area and registered to Arthur J. Warriner.

B. Topography

1. General Characteristics.

The Plan Area generally slopes in a northeast to southwest manner as it falls away from the Santa Catalina Mountains lying immediately north of the site. The northern third of the property contains the majority of the site's topographic relief and significant features. The site planning process for the Sabino Springs Specific Plan has responded to this condition by devoting almost the entire northern third of the project to low-density estate lots. This will allow the customized placement of individual homesites, provide the opportunity to sensitively respond to each lot's specific topographic constraints, and in the overall, require the least extensive amount of topographic alteration and grading throughout the northern one-third of the project.
South of this area, the site possesses a more gradual slope and uniform character, and slopes gently to the southeast in a series of wide, flat-topped parallel ridges. (See Exhibit IV-B.1)

2. Protected Peaks and Ridges.

No protected peaks and/or ridges, as shown in Section 18.61 of the Pima County Zoning Code, are located within the Plan Area.

3. Slopes in Excess of Fifteen Percent.

The Plan Area contains some areas with slopes in excess of 15%. These areas are shown on Exhibit IV-B.3, Slopes.

As is consistent with the above description of the site’s general topographic characteristics, the majority of the steeper slopes shown on this map are located within the northern third of the property.

4. Rock Outcroppings.

There are no true rock outcroppings of any topographic significance on the site, i.e., no substantial surface exposures of monolithic, vertical bedrock material. The northern third of the property is, however, characterized by a comparatively shallower depth to bedrock than the remainder of the site (the approximate southern boundary of this condition is shown on Exhibit IV-B.3, Slopes). In some instances, weathered and cobbled bedrock material is apparent on the desert.

5. Average Cross Slope.

The average cross-slope of the Plan Area is 10.92 %. The specific calculations used in deriving this figure are shown in Appendix D.

Given this measured cross-slope, the site is not subject to any of the density limitations as set forth in Section 18.61.070 of the Pima County Zoning Code.
Equation:

\[
(10) \times (194,400) \times (0.0023)
\]

\[
= \frac{10.92\% \text{ Average Cross Slope}}{409.65 \text{ Acres}}
\]

C. Hydrology

1. General Characteristics

The Plan Area drains in a southwesterly manner via six (6) established natural drainages. Each of these drainages originates in the Coronado National Forest immediately north of the site; and each is a standard desert wash: flows are intermittent, channelways are sand-bottomed, and each supports varying degrees of vegetative cover including mesquite trees and native desert shrubs.

The site lies within a "Critical Basin" as determined by the Pima County Department of Transportation and Flood Control District. Under this designation, post-development discharges must be reduced by approximately 10% over the existing condition.

The entire Plan Area lies within Zone "C" per the Federal Emergency Management Agency’s (FEMA’s) current Flood Insurance Rate Map. This designation denotes areas of minimal flooding potential which, accordingly, do not require flood insurance. There are no federally mapped floodplains within the Plan boundary.

2. Watersheds

All of the watersheds affecting the Plan area extend far into the Coronado National Forest (see Exhibit IV-C.2, Off-site Watersheds). The drainage area of these watersheds is also provided on this Exhibit. Given the location of the watersheds within the National Forest, their boundaries are exclusively defined by natural ridgetops and canyons.


The most significant off-site feature pertaining to hydrology and drainage has already been mentioned above, i.e. that the watersheds affecting the Plan
Area lie wholly within the undeveloped Coronado National Forest, therefore, the upstream run-off situation will essentially remain in an undeveloped condition. Upstream flows may increase on a temporary basis if significant portions of the Forest within these watersheds were burned from wildfire.

4. On-Site Hydrologic Conditions.

The Plan Area is bisected by six (6) primary drainages, each of which is oriented in an essentially north-south manner (see Exhibit IV-C.4, Hydrology). All of these washes are intermittent streams, and their respective discharge flows range from 500 cubic feet per second (cfs) to 2520 cfs during the 100-year storm event.

In general, these 100-year peak flows occur for relatively short periods of time and result in typically shallow depths. For example, the Plan Area’s largest wash ($Q_{100} = 2520$ cfs) flows at a volume 50% or greater than its peak for approximately 30 minutes during the 100-year event. It’s depth during this interval is approximately 2 feet.

All of the primary washes generally possess the same cross-sectional character, i.e. each can be described as a wide, shallow-bottomed channel with poorly defined or non-existent banks (although the channels are more clearly defined in the northern third of the Plan Area due to the increased steepness of the terrain). Under this condition, the 100-year floodplain limits (see Exhibit IV-C.4) become the primary determinant in defining developable areas and locating applicable erosion hazard setbacks.

Nine (9) natural springs exist within the Plan Area (see Exhibit V-H). In addition, numerous seep areas are present, several of which are associated with the aforementioned springs. Such features result from the shallowness of the groundwater table in the vicinity of the Catalina Fault Line. In almost all cases, these features lie within the erosion hazard setbacks of the primary washes, and thereby, shall not be disturbed by the development within the Specific Plan area. In all but one case, these features lie within the erosion hazard setbacks or within the proposed golf course. Two exceptions to this pertains to the springs located within Estate Lot Area "S" and Planning Area "D". In these instances, the springs will be left undisturbed and will lie within an on-lot conservation easement or within a protected common area.

The site’s drainage system is very well-defined due to the prevailing terrain. The Plan Area contains no areas which are regularly subject to sheet flooding.
5. Downstream Drainage Conditions.

Under the existing condition, two significant off-site drainage problems occur in the vicinity of the Plan Area. The first of these flooding problems affects the Sabino High School site. The second impacts the Bowes Road/Snyder Road intersection. Both of these problems are long-standing, and have been the subject of numerous formal complaints (dating back to 1981) which have been filed with the Pima County Department of Transportation and Flood Control District.

Even during the frequent storm events (i.e. those lesser in magnitude than the 100-year event), the two westernmost washes in the Plan Area outlet significant flows directly onto the school grounds. Surface drainage facilities constructed at the school have proven inadequate to capture and convey this flow. A relatively minor storm event often results in extensive flooding to the school’s facilities, particularly the gymnasium.

The problem affecting the Snyder Road/Bowes Road intersection is a subsequent result of the Sabino High School problem. The nuisance flow which floods the school site eventually finds its way to this intersection and, given the lack of any drainage improvements, spreads out to the extent that vehicular travel is difficult. The magnitude of this problem is further increased by the additional stormwater flow which crosses Snyder Road east of the intersection. This flow is conveyed by two primary washes within the Plan Area that eventually converge in a dip section approximately 400’ east of Bowes Road.

D. Vegetation

1. Introduction:

Shreve and Wiggins (1964) have subdivided the Sonoran Desert into seven vegetation community types. The project site falls under the Arizona Upland subdivision of this classificatory scheme. The Arizona Upland vegetation community type is characterized by a number of distinct associations of species that dominate areas depending on local geographical and topographical features. The cacti of these associations are numerous and diversified and perennial grasses can be locally abundant in specific areas.

Vegetation is particularly important for scenic value along drainages, as well as on the upper elevation slopes which are indicated as having
medium visibility levels from both on-site and off-site viewpoints. Vegetation is important for screening and buffering along the west, south and east perimeters of the project and between land uses of differing intensities (i.e., clubhouse vs. residential areas). The role of vegetation in soil stabilization is most critical along the banks of washes.

2. Site Description:

Although the Critical and Sensitive Wildlife Communities Map indicates that this entire side contains only one vegetative type, a more detailed on-site survey of vegetation indicated two major subtypes which occur on the subject property: Mesquite Woodland and Palo Verde-Saguaro Desert Scrub. (See Exhibit IV-D.2 and Appendix E). Mesquite woodland covers the majority of the property, especially along the washes and lower portions of the bajada. Palo Verde-Saguaro desert scrub dominates the upper slopes on ridges between washes above the geological fault crossing the property from east to west. Both of these community types and their dominant species are briefly described below. A complete list of plant species observed is provided in Appendix E. Plant species nomenclature follows Shreve and Wiggins (1964) and Benson (1981).

a. Mesquite Woodland. This community type occurs on the lower flats and washes of the project site (Exhibit IV-D.2). The dominant species is the velvet mesquite tree (Prosopis juliflora var. velutina) which forms both open and dense phases of woodland habitat on the property. The open phase (20-50% cover density) of the woodland community occurs primarily on the flat areas between washes where conditions are drier and soils shallower. The moderately dense phase (over 50% cover density) of the woodland community occurs along the washes on the property where moisture is more abundant and soils are generally deeper. Areas around the springs have continuous cover of mesquite.

The saguaro cactus (Carnegia giganteas) occurs throughout the property dispersed among the trees and shrubs. Young saguaros are commonly observed on the site beneath the larger trees and shrubs indicating the good quality of the habitat. Saguaro cacti provide food and shelter for many desert wildlife species including bats and birds.
Other prominent species occurring within the mesquite woodland fall into two groups: a shrub, subshrub, and herbaceous species group and a cacti group. The first group has species on the site that include the foothill palo verde (Cercidium microphyllum), catclaw (Acacia greggii), graythorn bush (Condaliopsis lycioides), hackberry (Celtis pallida), desert thorn bush (Lycium andersonii), and coursetia (Coursetia glandulosa). These species are distributed throughout the mesquite woodland but tend to be denser and larger near the washes and springs. Species of the understory and open areas between the trees and shrubs consist of a variety of small subshrubs and annual species. The most common subshrubs are the triangle-leaf bursage (Ambrosia deltoidea), burroweed (Haploppappus tenuisectus), burrobush (Hymenoclea salsola), Cooper's paper flower (Psilostrophe cooperi), desert zinnea (Zinnea acerosa), odora (Porophyllum gracile), trixis (Trixis californica), and spiny haplopappus (Haploppappus spinulosus). Annual species observed included desert senna (Cassia covesii), devil's claw (Proboscidea areanaria), chia (Salvia columbariae), pincushion (Chaenactis macrantha), desert marigold (Baileya multiradiata), triple-awn grass (Aristida adscensionis), Arabian grass (Schismus arabicus), and red brome (Bromus rubens).

The various cacti species are distributed throughout the site except in the bottoms of the major washes. Several species reach large sizes and many outstanding individuals can be found on site. Establishment of young cacti is apparent over the entire area. Other than the saguaro, the most common cacti species on the property include several species and varieties of cholla (Opuntia fulgida; O. acanthocarpa; O. spinosior; O. versicolor; and O. leptocaulis). Prickly pear cacti are represented by varieties of Opuntia phaeacantha. Other cacti present on site include fishhook cactus (Mammillaria microcarpa), barrel cactus (Ferocactus wislizenii), and hedgehog cactus (Echinocereus engelmannii).

The areas near the springs and seeps of the washes on the property support some plant species not found on the flats and hillsides. A few trees of black willow (Salix gooddingii) and a single cottonwood (Populus fremontii) occur around the major spring and pond area in the northeast portion of the property in Tres Hombres Wash. The moist areas around springs and seeps in the tributary washes support species such as Goodding
verbena (Verbena gooddingii), jackass clover (Wislizenia refracta), rush (Juncus sp.), monkey-flower (Mimulus glabradus), common cocklebur (Xanthium strumarium), thistle (Cirsium neomexicanum), and western ragweed (Ambrosia psilostachya). Carpets of rabbitfoot grass (Polygonon monspelensis) occur in wet sandy areas of the major washes. One localized wet area near the spring in the central portion of the property supports a small pocket of cattails (Typha domingensis) and duckweed (Lemna sp.).

b. **Palo Verde-Saguaro Desert Scrub.** This community type is most evident on the ridges and slopes between washes on the upper slopes of the northern portion of the project site (Exhibit IV.D.2). The distinct change from woodland to desert scrub coincides well with the contact area between the Catalina Fault, that traverses the property from east to west, and the abrupt rise in elevation marking the slopes north of the fault. Conditions on these upper slopes are much drier than the woodland areas lower on the bajada. This changes the distribution of the dominant species. Mesquite still occurs on the upper slopes, however, here it is confined primarily to the washes. The ridges and slopes are dominated by foothill palo verde and saguaro cacti. Other species common on these dry ridges include ocotillo (Fouquieria spendens), fairyduster (Calliandra eriophylla), fishhook cactus, hedgehog cactus, burroweed, triangle-leaf bursage, and brittlebush.

c. **Disturbed Areas.** The property has had a number of uses over the years and therefore there are many quite severe disturbances around established homes and ranches including jeep trails, driveways, roads, grazed areas, wildcat dumps, and shooting ranges. The largest grazed area is located to the south of the pond near Tres Hombres Wash. The vegetation in this area is devoid of trees and consist mainly of the smaller subshrubs. The areas around the springs have suffered moderate disturbance from inappropriate human use of the areas. Trash and debris have accumulated near the springs and exotic species such as bermuda grass (Cynodon dactylon) have been introduced. The spring and pond area in Tres Hombres Wash is currently surrounded by a residence which utilizes the pond as a water source for horses and other livestock.

d. **Protected or endangered species.** In accordance with Chapter
7; Article 1, Section 3-901 of the Arizona Native Plan Law (Arizona Commission of Agriculture and Horticulture [ACAH] 1981) protected plant species occurring on-site include all cacti, ocotillo, and live or dead specimens of mesquite and palo verde.

A directed search for Tumamoc globeberry and Night-blooming cereus was conducted and neither species was found on site. Tumamoc globeberry (Tumamoca mcdougali) is a federally listed endangered species and has been identified as a Special Status Species documented in the project vicinity by the Arizona Game and Fish Department (See attached letter). The Night-blooming cereus (Cereus greggii) is a Category 2 listed species on the Federal Register.

3. Vegetation Transplant Potential:

The native plant species that were inventoried are those identified in the Arizona Native Plant Law (Arizona Commission of Agriculture and Horticulture [ACAH] 1981) as protected plants. These include *Carnegiea gigantea* (Saguaro), *Cercidium microphyllum* and *Cercidium floridum* (Foothill and Blue palo verde), *Ferocactus species* (Barrel cactus), *Fouquieria splendens* (Ocotillo) and *Prosopis species* (Velvet mesquite).

Based on the vegetative communities map, aerial photographs and site reconnaissance, representative one-acre transects were selected and inventoried. The data generated from the transects was used to establish the approximate number of plants for the entire site. In addition, the general size, health, form, and transplant potential of the plants were evaluated.
Table 1 below summarizes the transplant potential of on-site plants. Detailed rating criteria are provided in Chapter VII: Design Guidelines, Section C: Landscape. The following is a general description of the potential for tree transplant and salvage:

**TABLE 1 - Summary of Plant Transplant Potential**

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>PERCENTAGE OF TOTAL WITH HIGH TRANSPLANT POTENTIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Carnegiea gigantea</em></td>
<td>50%</td>
</tr>
<tr>
<td>(Saguaro)</td>
<td></td>
</tr>
<tr>
<td><em>Cercidium microphyllum</em></td>
<td>10%</td>
</tr>
<tr>
<td>(Foothill Palo Verde)</td>
<td></td>
</tr>
<tr>
<td><em>Ferocactus species</em></td>
<td>75%</td>
</tr>
<tr>
<td>(Barrel Cactus)</td>
<td></td>
</tr>
<tr>
<td><em>Fouquieria splendens</em></td>
<td>80%</td>
</tr>
<tr>
<td>(Ocotillo)</td>
<td></td>
</tr>
<tr>
<td><em>Prospis species</em></td>
<td>5%</td>
</tr>
<tr>
<td>(Mesquite)</td>
<td></td>
</tr>
</tbody>
</table>

**a. Trees:** Shallow, rocky soils on the upper bajada generally limit the potential for tree salvage because of the low chance of obtaining a rootball sufficient for plant survival. A high percentage of mesquites have poor form and character resulting from dieback and uneven growth and development (most likely from periods of drought and frost); heavy infestations of mistletoe throughout vital portions of the trees; or sawn bases of trees near human developments. Trees in wash channels (generally mesquites) are growing in sandy soils and have a low chance of obtaining a cohesive rootball. Trees along wash banks, are typically in rocky soils, have exposed roots have a low chance of obtaining a rootball. The trees with the best form and character were observed in areas associated with higher concentrations of water such as springs, seeps, and ponds, or areas receiving extra runoff from graded
developments. Wherever possible, attempts will be made to avoid disturbance of these trees during development.

b. **Saguars:** Large saguaros with many arms are considered to have a low transplant potential primarily because of the extreme difficulty in moving without damaging the cactus. Small saguaros (18"-6") generally have high transplant potential because of the ease of handling and transplanting and their usual good health. Poor access, dry conditions, and shallow soils reduced transplant potential on the upper bajada.

c. **Barrel Cacti:** Barrel cacti in good health and form have a high transplant potential since they are manageable in size and have food storage capabilities to withstand transplanting.

d. **Ocotillos:** Ocotillos in good health and form have a high transplant potential since the nature of the root system allows relatively easy removal from most soil conditions and the species can usually withstand transplanting with minimal care.

E. **Wildlife**

1. **Wildlife Species**

A variety of wildlife species are found within the vegetation communities and physical features occurring on the property. The results of the wildlife survey indicate the site is a good area for wildlife resources. Species observed utilizing the habitats on the proposed project site are listed in Appendix F. The survey indicated habitat utilization on the site by 6 reptile species, 13 mammal species (plus many unidentified small mammal burrows of various sizes), and 32 species of birds.

Undisturbed communities typically have species from each trophic level: grazers, primary predators, and secondary predators. The project site contains a wide variety of species within each trophic level including, but not limited to, grazing animals such as mule deer, small mammals, and doves to higher level predators such as coyotes, bobcats, and redtail hawks. The turkey vulture, a wide-ranging scavenger, was also observed on the project site.

Wildlife species diversity corresponds with the diversity of plant species and microhabitats found within the vegetation communities on the site.
The diversity of birds was observed to be highest within the washes and dense mesquite vegetation along the wash and arroyo margins. Mammal diversity remained the same between the wash habitats and the open mesquite forests although the specific species changed from one habitat to another. For example, coyote pups and a small group of adults were observed with the Tres Hombres Wash but few small mammal burrows were observed. In contrast, the open mesquite forested areas had many small mammal burrows including signs of kangaroo rat activity. A higher diversity of reptiles was also observed in the flatter, more open habitats on the property.

The diversity of observed species is substantially lower on the steep-sided, rocky slopes on the northern portion of the property where the Palo verde-saguaro community occurred.

Species diversity in the project area is expected to expand during particular seasons due to the presence of water sources on the project site. The dense, tall vegetation surrounding the pond, springs, seeps, and major washes may provide needed habitat for migrating birds as they utilize this type of setting as a staging area to replenish body reserves as they move to wintering and breeding grounds. Concentrations of migrating passerines would be high during the appropriate seasons in these woodland habitats. Migrating birds observed during the survey include the MacGillivreys warbler and American goldfinch.

Migrating raptors may also utilize the woodland habitats for roosts and perches while foraging over the more open, drier habitats of the site.

Additional species may be found on the project site that are dependant on permanent sources of water such as amphibians. These permanent sources of water may also be utilized by far-ranging species attracted to these water supplies, such as javelina, mule deer, and bats. Other species observed which are attracted to the water sources as foraging areas include the white-throated swift, purple martin, and violet green swallow. The desert tortoise has been identified as a special status species documented in the project vicinity by the Arizona Game and Fish Department. (See Appendix G).

2. Wildlife Habitat
The Critical and Sensitive Wildlife Habitats Map for Eastern Pima County indicates the Tres Hombres Wash as a Class I Habitat. It is a well defined desert wash characterized by a dense canopy of mesquite trees connecting to the public land of the Coronado National Forest to the north, and with the urbanized areas to the south of the project. It flows in a southwesterly direction across the eastern portion of the property, and joins the Sabino Creek approximately one and one-half miles downstream. In addition to containing significant vegetation resources, it serves as an important route for wildlife movement.

Other habitat areas include the mesquite woodlands occurring in association with water sources or along secondary connecting drainages. These are present along the south flowing wash on the center of the property and on the narrow washes connecting the water sources with the hills to the north. These narrow drainages are biologically significant in that they link the permanent water sources occurring on the property with the expansive natural habitat areas to the north of the project.

F. Soils

Regional Geology and Overview: Sabino Springs Specific Plan area lies in the Tucson Basin; a broad northwest trending sediment-filled structure depression which is part of the desert subprovince of the southern Basin and Range physiographic province. The Tucson Basin is generally considered to be the region surrounded by the Tucson, Black, Sierrita, Santa Rita, Empire, Tanque Verde, Santa Catalina and Tortolita Mountains. The floor of the Tucson Basin is generally a flat alluvial plain bordered by these rugged mountains. The plain is approximately 50 miles long and 15 to 20 miles wide near the center of the valley floor and has an outlet which is only about four miles wide at the northwest end of the basin. The basin surface drops gently in elevation from about 2,900 feet at the south end to about 2,000 feet at the northwest outlet. Basin drainage is directed to the northwest by the Santa Cruz River and its three main tributaries; Rillito River, Pantano Wash, and Canada Del Oro. The project site is located near the north-northeast margin of the basin near the Santa Catalina Mountains.

The Sabino Springs Specific Plan area is comprised of two main geomorphic features consisting of an alluvial slope along the mountain front. The majority of the parcel lies geomorphically at the head of an alluvial slope of relatively low topographic relief at the northern margin of the Tucson Basin, adjacent to the Santa Catalina Mountains. The elevation gain across the
alluvial slope within the site boundaries is about 380 feet. The elevation rises from about 2700 feet at the southwest site corner to about 3,080 feet near the northeast site boundary. The slope is transected by several washes which cross the site generally from north to south, becoming broader as they progress southward. The northeast corner and north central areas of the site are characterized geomorphically by rock outcrops which form topographically dominant hills with steeper gradients. The washes which are located adjacent to these areas are typically steep sided and narrow.

The surface and near surface soil and rock conditions across the site can be generalized with respect to two main topographic features; 1) the alluvial slope which makes up most of the site and is transected by numerous washes and 2) shallow depth to bedrock outcrops which occur primarily in the northern portion of the plan area.

The alluvial slope consists of soil deposits of undifferentiated Tinaja beds covered by dissected basin fill and unconsolidated alluvial strata. These deposits form the relatively flat surface of the slope over most of the site. Based on information obtained from 1) reconnaissance observations, 2) review of pertinent geologic literature, and 3) test pits performed for this investigation, the unconsolidated alluvial slope soils consist generally of sand with varying amounts of silt, gravel and cobbles. These soils typically exhibit relatively low densities at and near the ground surface and increase in density with depth. The depth of the unconsolidated alluvial soils encountered in our test pits ranged from approximately two to five feet over a majority of the alluvial slope. The depth of relatively low density soils encountered in the test pit locations exceeded the depth of exploration and appeared to be limited to the west end of the project between Bowes Road and the western most wash. The underlying dissected basin fill soils generally include discontinuous cobble and boulder layers which contain varying amounts of sand. The size of cobble materials encountered in the test pits were typically 6 to 8 inches in size. Boulders were typically 24 to 36 inches in size. However, larger boulders are probably present due to the depositional environment of the basin fill.

The washes which dissect the alluvial slope contain channel flow soils which consist generally of sands with varying amounts of silt, gravel and cobbles. The channel flow soils are typically loose at the surface and increase in density with depth.

The near-surface rocks along the northern project boundaries consist of severely to moderately weathered mylonitic Catalina Gneiss which decreases
in weathering with depth. The Catalina Gneiss forms part of the metamorphic core complex of the Catalina Mountains with bedding planes and layers having general east-west strike and dipping approximately 20 to 30 degrees to the south. Based on potassium-argon dating the Catalina Gneiss has an apparent age of between 24.8 and 29.5 million years.

The Catalina Fault trace is based on 1) literature review, 2) an interpretation of geomorphic features from aerial photographs, and 3) the absence of bedrock at shallow depths south of the fault trace. The fault trace is known to generally follow the topographic base of the Santa Catalina Mountains and exhibit surface seeps and springs. The Catalina Fault typically defines the edge of the Tucson Basin with bedrock exposed north of the fault trace and alluvial and basin fills south of the fault trace. The dip of the fault plane usually determines the depth at which bedrock is encountered south of the fault trace. It should be noted that the fault trace represents a fault zone of varying width rather than a well defined fault plane. Seeps and springs associated with the Catalina Fault are usually seasonal in nature and occur as a result of surface water infiltrating the rock through joints and fissures and forming ground water within the rock mass. When the altitude of the water table intersects the surface trace of the fault, the water usually flows in an unconfined state. Typically the water table south of the fault is confined within an aquifer beneath the relatively impermeable Tinaja beds and flows under artisanal conditions when the Tinaja beds are penetrated by wells.

The presence of seeps and springs on the project site is suggested by the stocktank located on the eastern edge of the site.

Proposed development is feasible from a geotechnical standpoint. Residential or other similarly loaded structures can be properly supported on shallow spread footing foundation which bear on properly compacted fill or firm ground.

Soil properties of importance in planning and engineering design include permeability, sheer strength, compaction, expansion, drainage, and shrink/swell. All of the onsite soils are usable for development with proper engineering design.

The site is composed of 5 soil series as depicted on the Soil Conservation Service Maps. The soils map (Exhibit IV-F) identifies the major soils groups. The majority of the area is covered by the Pinaleno Very Cobbly Sandy Loam, Cellar-Rock Outcrop Complex, and Hayhook-Sonoita Complex. Water erosion is characterized as slight for these groups. Runoff is slow to
moderate in the Pinaleno Very Cobbly Sandy Loam and Hayhook-Sonoita Complex and rapid in the Cellar-Rock Outcrop Complex. The permeability of all three soil groups are moderately rapid.

**Arizo-Riverwash Complex, 0-3% slopes**

Arizo-Riverwash Complex are on level flood plains and channel bottoms. The components of this complex is 50% Arizo fine sandy loam and 20% Riverwash. The Arizo soil is formed in sandy and gravely alluvium derived from granite, limestone, sandstone, and older valley fill. The Riverwash soil is unstabilized and stratified layers of sand, silt, and gravel. Urban development on this soil complex is limited by frequent flooding and sandy soil.

**Anklam-Pantano Complex, 5-25% slopes**

Anklam-Pantano Complex is on rolling to hilly pediments at the base of mountains. The components of this unit are 40% Anklam very gravelly sandy loam and 35% Pantano extremely gravelly loam with 50% rock outcrop. The Anklam soil is formed in gravelly alluvium derived from rhyolite, andesite, tuff agglomerate, schist and shale. The Pantano soil is formed in gravelly alluvium derived from metamorphic, sedimentary and volcanic rock. The limitations of this soil type is depth to bedrock and slope.

**Cellar-Rock Outcrop Complex, 30-65% slopes**

Cellar-Rock Outcrop Complex is on steep hillslopes at the base of very steep mountains. The component of this soil series are 70% Cellar very gravelly sandy loam and 20% rock outcrop that are intricately intermingles. The Cellar soil is formed in gravelly alluvium derived from granite and gneiss. Rock outcropping occurs in a strictly geotechnical sense and is defined as the mere surface exposure of bedrock material. The general character of this exposed material is that of weathered gneiss and granite cobble rather than of monolithic material. Slope and depth-to-bedrock limit the use of this soil type for intensive urban development.

In response to this soil type's limitations, only low density, custom estate lots and golf course uses have been located upon it. Neither of these uses will necessitate a substantial lowering nor mass alteration of the site's existing grade and will, thereby, not create a situation where the substantial removal of bedrock material, as would likely be required with more intensive urban uses, is necessary.
moderate in the Pinaleno Very Cobbly Sandy Loam and Hayhook-Sonoita Complex and rapid in the Cellar-Rock Outcrop Complex. The permeability of all three soil groups are moderately rapid.

**Arizo-Riverwash Complex, 0-3% slopes**

Arizo-Riverwash Complex are on level flood plains and channel bottoms. The components of this complex is 50% Arizo fine sandy loam and 20% Riverwash. The Arizo soil is formed in sandy and gravely alluvium derived from granite, limestone, sandstone, and older valley fill. The Riverwash soil is unstabilized and stratified layers of sand, silt, and gravel. Urban development on this soil complex is limited by frequent flooding and sandy soil.

**Anklam-Pantano Complex, 5-25% slopes**

Anklam-Pantano Complex is on rolling to hilly pediments at the base of mountains. The components of this unit are 40% Anklam very gravelly sandy loam and 35% Pantano extremely gravelly loam with 50% rock outcrop. The Anklam soil is formed in gravelly alluvium derived from rhyolite, andesite, tuff agglomerate, schist and shale. The Pantano soil is formed in gravelly alluvium derived from metamorphic, sedimentary and volcanic rock. The limitations of this soil type is depth to bedrock and slope.

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In response to this soil type's limitations, only low density, custom estate lots and golf course uses have been located upon it. Neither of these uses will necessitate a substantial lowering nor mass alteration of the site's existing grade and will, thereby, not create a situation where the substantial removal of bedrock material, as would likely be required with more intensive urban uses, is necessary.
Hayhook-Sonoita Complex, 1-5% slopes

The Hayhook-Sonoita Complex is found on gently sloping intermediate and low fan terraces incised by narrow drainageways. This complex is composed of 45% Hayhook sandy loam and 30% Sonoita gravelly sandy loam. Both Hayhook and Sonoita soils are formed in coarse textured alluvium derived dominantly from granite. The Hayhook-Sonoita Complex is suitable for urban development.

Pinaleno Very Cobbly Sandy Loam, 1-8% slopes

Pinaleno Very Cobbly Sandy Loam is on gently sloping fan terraces and is a deep, well drained soil. This soil is formed in gravelly alluvium derived dominantly from shale, schist, conglomerate and granite. Included in this series are small areas of Altar, Artesia, Continental, Mohave, Nickel, Palos Verdes, Arizo and Riverwash soils. This soil series has few limitation and is well suited for urban development.

G. Viewsheds

The viewshed analysis was conducted by onsite and offsite reconnaissance, along with a USGS topographic map and aerial photographs. The visual sensitivity map is a composite of the Visibility Map and the Scenic Quality map, per B.O.Z.O.

1. Visibility

Visibility is an analysis of the terrain that can be seen from a certain viewpoint. Viewpoints were selected from "officially recognized hiking and equestrian trails and public roadways in a two-mile radius from the site within the buffer overlay zone," (Buffer Overlay Zone, Resolution No. 1988-151). The viewpoints were from two locations on the Sabino Canyon Lower Bear Canyon Trail, Houghton Road just north of the Catalina Highway, Snyder Road, Bowes Road, and Harrison Road.

The Buffer Overlay Zone requirements differentiate between foreground (within ¼ mile) and middleground (¼ to 2 miles) of any viewpoint. The criteria determining low, medium and high visibility is based on the following number of viewpoints from which the site is visible:
NUMBER OF TIMES SITE IS VISIBLE

<table>
<thead>
<tr>
<th>Visibility from Viewpoints</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreground</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Middleground</td>
<td>0-2</td>
<td>3-4</td>
<td>4</td>
</tr>
</tbody>
</table>

The site is divided into medium and low visibility ranges (see Exhibit IV-G.1). Less than 37% of the site is visible from three viewpoints at distances between ¼ -2 miles, the middle-ground range.

Two of the three viewpoints are directly related to the Coronado National Forest vista. The first of the two viewpoints is from the Lower Bear Canyon Trail southwest toward more developed areas. The panoramic vista, both foreground and middleground, from this viewpoint include single-family subdivisions, including Canyon Ridge, Sabino Town and Country Estates, Sabino Canyon Clusters, Sabino Foothills, Hidden Valley, and an abandoned landing strip within a ¼ mile of the boundary.

The second vista is along Houghton Road, just north of the Catalina Highway. At this higher elevation of Houghton Road, the entire site, more than a mile away, is visible. Within this middleground vista, the site is not perceived as an individual entity, but is seen in relation to its surrounding. Kevin Lynch in Site Planning points out that visibility is affected by angle of vision, rapidity of scanning, and movement of the observer.

The third viewpoint from which the site is visible is within the middleground view, from Bowes Road looking east. The western portion of the property, directly abutting Bowes Road, is within the foreground visibility range (see Exhibit IV-G.1).

Looking north from Snyder Road is the only viewpoint where the property is visible. However, most of the site is not visible from this viewpoint due to the existing vegetation in the foreground.

2. Scenic Quality

Measuring Scenic Quality is not as easily quantified as the visibility of the site. There are no measurable criteria defined within the requirements of the Buffer Overlay Zone Ordinance, Resolution No. 1988-151. The requirements define high, medium, and low scenic quality as follows:
<table>
<thead>
<tr>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>• no/little slope</td>
<td>• low/moderate slopes</td>
<td>• unique landforms</td>
</tr>
<tr>
<td>• little/moderate vegetation</td>
<td>• few rock outcrops</td>
<td>• steep slopes, ridgetops, promontories, and rock outcrops</td>
</tr>
<tr>
<td>• few saguaros and/or riparian vegetation</td>
<td>• high degree of vegetative variety, dense stands of saguaros, or riparian vegetation</td>
<td>• high degree of vegetative variety, dense stands of saguaros or undisturbed riparian habitat</td>
</tr>
<tr>
<td>• little color &amp; texture variety</td>
<td>• moderate/wide range of colors &amp; textures</td>
<td>• wide range of colors and textures</td>
</tr>
</tbody>
</table>

Based on the above criteria, there are no areas onsite which have high scenic qualities. The majority of the site has low scenic quality. The northern portion of the site contains hillier terrain with moderate stands of saguaros. The combination of terrain, vegetation density and variety, along with disturbed areas provides moderate scenic quality onsite (see Exhibit IV-G.2). Views and vistas from adjoining properties will be minimally impacted by development of the site.

3. Visual Sensitivity

Visual Sensitivity is a composite of the Visibility and Scenic Quality Viewshed analyses. There are no areas onsite which have high visual sensitivity values. 50% of the site, the southern portion, has low visual sensitivity while the northern half of the site has moderate visual sensitivity (see Exhibit IV-G.3).

Foreground views are more dominant and have a greater impact on the viewer. The viewpoint along Bowes Road and Snyder Road, public rights-of-way, are two areas in which the specific plan area is visible within the foreground. These areas, along with the class I habitat riparian area within the second plan amendment area, fall within the medium sensitivity category (See Exhibit IV-G.3). The other two viewpoints are one and two miles away from the site. The foreground views from these vantage points are of scattered single-family residences.
H. Traffic

1. General Characteristics

The site is located in the far northeast portion of the Tucson Metropolitan area. The major roads in the area have a paved, two-lane cross-section (i.e. Houghton Road, Snyder Road, and Bear Canyon Road). Although their present cross-sections are not overly large, each of these roads has a capacity far in excess of present traffic demand.

This project is in conformance with the Board of Supervisor’s actions dated November 30, 1987 relating to Sunrise Drive extension removal.

The major traffic generator in the Plan Area vicinity is Sabino High School. Of the 3,020 daily trips which occur on Bowes Road north of Snyder Road (see Traffic Table 1), approximately 1,200-1,400 trips are attributable to the aforementioned high school facility.

Bus service is available at Tanque Verde and Catalina Highway (approximately three and one-half miles away). No mass transit (Sun Tran) bus routes presently serve the Plan Area itself. Handi-Car will provide on-demand ride services for the elderly and handicapped.

2. Existing Off-Site Streets.

Three major public roadways exist in the vicinity of the Plan Area (see Exhibit IV-H, Traffic). Bowes Road, an extension of Harrison Road, bounds the site to the west, Snyder Road lies further to the south, and the Houghton Road right-of-way bounds it to the east. Both Bowes and Snyder Roads are two-lane paved, uncured roadways. The Houghton Road right-of-way contains an improved (chip and seal) access road, the primary purpose of which is to provide access to the adjacent residential subdivisions east of the Plan Area.

In addition to the above major roads there are several minor streets lying outside of the Plan Area boundary. All of these streets tie into Snyder Road and serve existing residential subdivisions outside of the Plan Area. Vista del Loma Segunda (public) serves the Tres Lomas North 4 Subdivision (Bk. 32, Pg. 24) south of the site; while Auburn Lane, Cadillac Lane, and Cord Lane (all three private) serve the Woodland Estates Subdivision (Book 30, Pg. 9) south of the site.

Within the boundaries of the Plan Area, there is an appreciable network of
dirt roads. Many of these lie over existing ingress/egress easements to serve established residences, while a great many are informal jeep trails. The condition of these dirt roads varies widely, as does the extent to which each is currently used.

3. Proposed Off-Site Streets.

The Plan Area will incorporate two access points off of Snyder Road. The first access drive will begin at the existing Vista del Loma Segunda/Snyder Road intersection. This drive will follow the Vista del Loma Segunda right-of-way northward, then transition into the Plan Area and enter it approximately 500' east of the Sabino High School property.

The second access drive will utilize the existing Houghton Road alignment north of Snyder Road. This drive will run along the eastern boundary of the Plan Area to a location just north of the existing Tucson Water storage tank. This storage tank is the northern terminus of the Houghton Road right-of-way.

The conceptual location of both of these proposed off-site streets has been shown on Exhibit IV-H, Traffic.


The portion of Houghton Road lying south of Snyder Road is designated as a scenic route with an ultimate right-of-way width of 200'.

Table 2 presents additional pertinent traffic information pertaining to the Plan Area.
## TRAFFIC TABLE 2

**Pertinent Traffic Data Pertaining to the Plan Area**

<table>
<thead>
<tr>
<th>Perimeter Roadways</th>
<th>Bowes/Harrison</th>
<th>Snyder</th>
<th>Houghton *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Right-of-Way</td>
<td>60'-80'</td>
<td>100'-150'</td>
<td>30'</td>
</tr>
<tr>
<td>Ultimate Right-of-Way</td>
<td>90'</td>
<td>150'</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Existing Travel Lanes</td>
<td>2</td>
<td>2</td>
<td>2 (Chip and Seal)</td>
</tr>
<tr>
<td>Posted Speed</td>
<td>40 MPH</td>
<td>45 MPH</td>
<td>None</td>
</tr>
<tr>
<td>Capacity (Vehicles Per Day)</td>
<td>5,000</td>
<td>12,000</td>
<td>NA</td>
</tr>
<tr>
<td>Present ADT</td>
<td>3,020 **</td>
<td>1,130</td>
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* Data pertains only to portion of Houghton Road lying north of Snyder Road, unless otherwise noted.

** Traffic counts are from November and December, 1989 and have been provided by the Pima County Department of Transportation and Flood Control District.

*** No improvements are shown in the Pima Association of Governments' Transportation Improvement Program for 1989-1993.
I. Sewers

1. General Characteristics and Existing Sewer Facilities.

Several public sewer lines exist in the immediate downstream vicinity of the Plan Area (see Exhibit IV-I, Sewers), although none of these are located within the actual Plan boundary. To the west, four separate 8-inch lines exist within the Canyon Heights Subdivision (Bk 24, Pg. 49) adjacent to Bowes Road. These lines (PCWWM # S-500) are located in Ravine Trail, Ocotillo Trail, Vallarta Trail, and Vallarta Drive, respectively, and each terminates approximately 75’ west of Bowes Road. Ravine Trail and Vallarta Trail terminate with cleanouts while Ocotillo Trail and Vallarta Drive terminate with manholes.

In addition, another 8-inch line (SDG-109) is located beneath Bowes Road. This line’s northern terminus is a manhole lying approximately 600’ north of Snyder Road. Line SDG-109 is tributary to the 21 inch Sabino Creek Trunk Augmentation sewer to the south.

Two other 8-inch sewer lines (S-497), lie within the Woodland Ranch Estates Subdivision (Bk. 25, Pg. 7) located southeast of the Snyder Road/Bowes Road intersection. These lines terminate at cleanouts located within Snyder Circle and Bamboo Circle, respectively. Both of these streets intersect with Snyder Road, and both manholes are located approximately 250’ south of these respective intersections.

2. Capacity Response Letter.

A capacity response letter from the Pima County Department of Wastewater Management has been provided as Appendix H. This letter states that downstream sewer capacity does exist under present conditions and sewer flows may need to be distributed/split among adjacent sewer lines.

J. Schools

The Sabino Springs Specific Plan area is within the Tucson Unified School District 1. Collier Elementary School, 3900 N. Bear Canyon Road, is 1½ miles southwest of the Specific Plan area and serves grades K-6. Collier Elementary School has a capacity of 404 students. Official enrollment as of October, 1989, was 470 students. Within the next couple of years, the District will consider moving the 6th grade to Magee Middle School.
Magee Middle School, 8380 E. Speedway Boulevard, is 4½ miles south of the Specific Plan area and serves grades 7 and 8. Magee Middle School has an operating capacity of 594. The official enrollment as of October 1989 was 448. With the possible future addition of the 6th grade, Magee Middle School will still be operating under capacity.

Sabino High School, 5000 N. Bowes Road, is adjacent to the southwest boundary of the Specific Plan and includes grades 9-12 (see Exhibit IV-I). The operating capacity is 2214. Enrollment as of October, 1989, was 1392. There currently are no future plans to expand the existing school facilities or to build any new schools.

K. Recreation and Trails

The Coronado National Forest is adjacent to the north boundary of the Specific Plan. Within the Coronado National Forest, north and west of the site, is the Sabino Canyon Recreation Area which is over ten miles by car to the Visitor Center and less than one-half linear miles to the eastern boundary. This is a popular passive recreation area that contains shuttle service, hiking trails and picnic areas. Exhibit IV-H includes two existing trails, Bear Canyon Trail and Phone Line Trail, within that area.

The *Eastern Pima County Trails Master Plan* identifies a proposed trail within the plan area and a Boundary Access Point (BAP) adjacent to the plan boundary. Trail #195, the proposed Harrison-Houghton Link, is identified as a one-mile third priority local cross-country trail intended for horse and foot travel. Boundary Access Point #54, located at the northern terminus of Houghton Road, would serve proposed third priority trail #221, located adjacent to Houghton Road. The Forest Service does not desire an access point to be constructed at this location.

McDonald Park, 4100 N. Harrison Road, one mile south of the site. It is a 38 acre Pima County maintained park. Park facilities include restrooms, multi-use ballfields, night-lighting, parking, and a concession stand.

There are no adopted trails within a 2 mile radius of the Specific Plan area. Sabino Canyon Road does provide a trailhead into the Sabino Canyon Recreation Area, which is over one and one-half miles from the site and, due to the lack of direct access from the west, is over ten miles by car. Bear Canyon Road trailhead is less than one linear mile and over two road miles west of the property.
Sabino and Bear Canyon Creek, intermittent streams, are approximately 1 mile west of the site. Soldier Canyon Creek is two miles east of Sabino Springs Specific Plan area. Both of these washes have been identified on Pima County's *Interim Official Map: Regional Trail & River Park System* as potential "Primary Trail/Natural Wash".

There are no designated bike routes, (with or without bike lanes), within a 2 mile radius of the site. Pima Association of Governments has identified several paved streets in the area as "bikeable". These streets are: Snyder Road, Bear Canyon Road, Bidahochi Drive, Summer Trail, Kayenta Drive, Prospect Place, Wolford Road, Tierra Alta, and Rio Vista (see Exhibit IV-I).

L. Cultural/Archaeologic/Historic Resources

Over the past three years archaeologists from P.A.S.T. conducted several studies. A 20 person-day, intensive archaeological survey of the Sabino Springs Specific Plan Area was completed. The presence of natural springs on the property may account for the dispersal of artifacts and range of cultural resources discovered. A total of six (6) archaeological and historic sites were documented for the property (AZ BB:9:50, BB:9:239, BB:9:240, BB:9:241, BB:9:242, and BB:9:243). The archives at the Arizona State Museum indicated one site (AZ BB:9:50 ASM) had been previously recorded in 1978. This site was visited and shows signs of extensive vandalism. The site card for BB:9:60 was also updated. Subsequently, the portion of the property containing BB:9:50 was mapped using high resolution aerial orthophotography (1"=40') and an archaeological base map was developed by the Pima Community College Archaeology Center. Data on the other sites were also updated and brief descriptions are found in Appendix I. Additional information is available for staff review from the Pima Community College Archaeology Centre.

An additional 100-acres in the northern portion of the site will be surveyed prior to any development within the specific plan area. Proposed low densities in this area minimize the potential for disturbance of any possible resources.

M. Existing Infrastructure, Public Services and Structures

Roads:

Three major public roadways exist in the vicinity of the Plan Area (see Exhibit IV-H). Bowes Road bounds it to the west, Snyder Road lies further
to the south, and the Houghton Road right-of-way (30’ width) bounds it to the east. Both Bowes and Snyder Roads are two-lane paved, uncurbed roadways. The Houghton Road right-of-way contains only a dirt access road, the primary purpose of which is to provide access to the City of Tucson reservoir site located approximately 3/4 of a mile north of Snyder Road.

Complementing the above major roads are several minor public streets. All of these tie into Snyder Road and serve existing residential subdivisions outside of the Plan Area. Vista del Loma Segunda serves the Tres Lomas North 4 Subdivision (Bk. 32, Pg. 24), while Auburn Lane, Cadillac Lane, and Cord Lane serve the Woodland Estates Subdivision (Book 30, Pg. 9).

Within the boundaries of the Plan Area, there is an appreciable network of dirt roads. Many of these lie over existing ingress/egress easements to serve established residences, while a great many are informal jeep trails. The condition of these dirt roads varies widely, as does the extent to which each is currently used.

Utilities:

Public Wastewater Facilities (Sewers)

Several public sewer lines exist in the vicinity of the Plan Area (see Exhibit IV-1) although none of these are located within the actual Plan boundary. To the west, four separate 8-inch lines exist within the Canyon Heights Subdivision (Bk. 24, Pg. 49) adjacent to Bowes Road. These lines (PCWWM # S-500) are located in Ravine Trail, Ocotillo Trail, Vallarta Trail, and Vallarta Drive, respectively, and each terminates approximately 75’ west of Bowes Road.

In addition, another 8-inch line (SDG-109) is located beneath Bowes Road. This line’s northern terminus is a manhole lying approximately 600’ north of Snyder Road. The line continues southward, still within the Bowes Road right-of-way, to a point well beyond the Snyder Road intersection.

Two other 8-inch sewer lines (S-497), lie within the Woodland Ranch Estates Subdivision (Bk. 25, Pg. 7) located southeast of the Snyder Road/Bowes Road intersection. These lines terminate at cleanouts located within Snyder Circle and Bamboo Circle, respectively. Both of these streets intersect with Snyder Road, and both manholes are located approximately 250’ south of these respective intersections.
Public Water Facilities

A Tucson Water tank is located on a roughly one-acre site lying adjacent to the Houghton Road right-of-way and approximately 3/4 of a mile north of Snyder Road. This tank provides forebay storage for the booster facility at the site.

Another 6-inch water line extends northward from Snyder Road under the Vista del Loma Segunda pavement. This line is located beneath the entire length of the street, and also offers a stub-out line which extends another 600' due northward (to approximately the southern boundary of the Plan Area) from the point at which Vista del Loma Segunda assumes a northeasterly orientation.

Public Services and Facilities:

As the Plan Area lies within unincorporated Pima County, fire and emergency service is available to the site only through individual residential contracts with Rural Metro Corporation.

Other basic utilities, i.e., electric, natural gas, and telephone, also have facilities in the immediate vicinity of the Plan Area such that any extensions required to serve the subject site will not be major. Electric service will be provided by Tucson Electric Power, natural gas service will be by Southwest Gas Corporation, and telephone service by Mountain Bell/U.S. West Communications. No cable television service presently exists within the immediate vicinity of the Project, but Jones Intercable will eventually expand its service area to include the subject site.

No Sun Tran bus service is presently provided to the Plan Area, it is available at Tanque Verde and Catalina Highway. Handi-Car private-reservation transport services are available to the area for the elderly and handicapped.

The most significant public facility in the vicinity is the Coronado National Forest Pusch Ridge Wilderness, which borders the Plan Area at its northernmost boundary. The Forest proper offers numerous developed and primitive camping sites, hiking trails, and miscellaneous recreational opportunities but not within two miles of the Sabino Springs Specific Plan area.

The most significant municipal facility in the vicinity is Sabino High School. This approximately 54-acre campus includes six buildings, building heights of
over 60 feet, night-lighted athletic fields and parking facilities. It serves a specified sub-district within the Tucson Unified School District, also serves a large portion of the nearby Tanque Verde School District due to the latter’s current lack of a high school facility.

Structures:

The existing structures within the Plan Area are all privately held.

Nine private residences exist within the Plan Area. It is anticipated that all of the existing structures will be removed with the Plan’s implementation.

N. Composite Map

The purpose of the composite map is to identify areas onsite with multiple site characteristics which may require special evaluation in regards to proposed development.

The site characteristics identified on the composite map are those specified in the "Specific Plan Document Preparation, Draft," dated January 4, 1988, prepared by the Pima County Planning and Development Services. The following six characteristics were identified:

1. Topography:
   • Protected peaks and ridges
   • Rock outcrops
   • Slopes equal to or greater than 15 percent but less than 25 percent
   • Slopes greater than 25 percent

2. Hydrology:
   • 100-year floodplains with a discharge greater than or equal to 100 cfs
   • Sheet flooding areas with flood depths greater than or equal to one foot
   • Federally mapped floodways and floodplains.

3. Vegetation:
   • Areas of high vegetative densities
   • Areas where vegetation is needed for soil stabilization

4. Wildlife:
   • Wildlife habitats as shown on the Significant Habitats Map
5. Viewsheds:
   • Onsite areas that are highly visible from offsite locations

6. Soils:
   • Arizo-Riverwash Complex
   • Cellar-Rock Outcrop Complex

There are no areas within the Sabino Springs Specific Plan area with more than three cumulative characteristics of the six mentioned above. The steeper slopes, less than 25% of the Specific Plan area, are located in the northern portion of the site. These sloping areas are also identified as Class II Habitat, Palo Verde-Saguaro Desert Scrub. Ribboned within this area, is a third characteristic, four minor washes. Centrally located is a composite of dense vegetation within and along two of the identified 100-year flood-plains (see Exhibit IV-P).

One of the eastern drainageways contains three characteristics. These are 1) hydrology, 2) vegetation, and 3) wildlife. This is a 100-year floodplain, a Class I Wildlife Habitat and contains 75% or more vegetation canopy coverage. (See Exhibit IV-P).

The majority of the southern half of the Specific Plan area, with the exception of the floodplains, contains no special site characteristic which require special evaluation for development.
Sabino Springs
Specific Plan

NOTE: There are no areas of High Visual Quality.
Sabino Springs
Specific Plan

A PLANNED COMMUNITY BY:
PERINI LAND & DEVELOPMENT CO.

THE PLANNING CENTER
950 N. FINANCE CENTER DRIVE, SUITE 270
TUCSON, AZ 85710 (602) 622-8146

NOTE: There are no areas of High Visual Sensitivity.
Sabino Springs
Specific Plan

A PLANNED COMMUNITY BY:
PERINI LAND & DEVELOPMENT CO.

THE PLANNING CENTER
900 N. FINANCE CENTER DRIVE, SUITE 210
TUCSON, AZ 85710 (602) 823-8148

0 2000 4000 6000 FT.
V. DEVELOPMENT PLAN

A. Purpose and Intent

The Sabino Springs Specific Plan is a planned residential and recreational community. This section contains a description of the plan goals, combined with various specific plan components. These components provide the rationale for the development regulations found in Section VI.

The project development plan is the result of thorough site analysis and research. As a result, the plan resolves, as much as possible, development related issues in the form of proposed physical plans, improvements, guidelines for future development, technical information and regulations.

B. Goals

In recognizing the major development issues, the landowners' objectives and County requirements, a set of development plan goals have been established:

- Implementation and clarification of the goals and policies of the Pima County Comprehensive Land Use Plan;
- Ensure coordinated, responsible planning through the use of cohesive procedures, regulations, standards and guidelines;
- Provide a development phasing plan which is a general and logical estimate of how development will occur;
- Process and adopt a Specific Plan which will provide a precise understanding of development and future growth for the region and the specific plan area;
- Provide land uses, based on current, anticipated, and future demands with a range of opportunities;
- Provide uniform regulations for land use, circulation drainage, environment and landscaping;
- Provide a backbone infrastructure system and public facilities to support development in an efficient and timely manner including a reclaimed water system for irrigation of the golf course;
• Utilize the drainageways as a community amenity for recreation, open space, habitat preservation and habitat linkage;

• Enhance the community via CC & R’s and a Master Homeowner’s Association;

• Provide a land use plan that not only respects the adjacent land uses, but will contribute to the overall quality of the community;

• To achieve the best possible land use pattern for the Specific Plan area with emphasis on preservation of significant environmental features, open space and Class I Habitat;

• Provide, within the Specific Plan, a community image that enhances the existing surrounding neighborhood;

• To provide an infrastructure system, including sewer and water systems that will adequately serve full build-out of the Specific Plan development;

• Underground all new or existing infrastructure and utilities as is feasible;

• To incorporate and implement standards that are economical for the developer and are consistent with County standards and can reasonably be accommodated in the project;

• Provide development standards for required open space within the plan;

• Provide a project phasing plan that times development with the provision of needed infrastructure and services;

• Establish Design Guidelines covering five topical areas including site planning, architecture, signage, lighting and landscaping to ensure a quality appearance and identity for Sabino Springs;

• Establish a strong identifiable landscaping treatment with recurring elements to unify the development and reinforce the circulation and open space components of the project.
C. Land Use Plan

The Sabino Springs Specific Plan encompasses 430 acres and is divided into twenty-two land use planning areas (Exhibit V-C). The acreage of the planning areas does not include land devoted to primary collectors. The proposed primary land use allocation is summarized on pages 62 and 99. As much as possible, the design of the entire project presents the areas as a planned private recreational community. All land uses are integrated regarding circulation, infrastructure, open space, drainageways, environmental resources, the visual setting, development standards and guidelines.

The Sabino Springs Land Use Plan shall implement the recommendations of a resource based riparian habitat study that was completed on the planning area in May, 1992 by SWCA, Environmental Consultants. A report from this study is included as Appendix J of this document. The Land Use Plan also incorporates a second access drive connecting the project with Snyder Road to serve as the primary access road to the development. The Land Use Plan is illustrated on Exhibit V-C. The acreages within the subareas reflect the resource-based riparian habitat boundaries in order to protect these riparian resource areas. The acreages for each subarea are provided in the following Land Use Plan summary.

There are 20 residential categories, labeled A - U. Residential densities vary depending on their location, with the lowest densities at the north end of the site, with a clustering of more intense residential uses adjacent to the Sabino High School and the Sabino Springs Country Club.

A clubhouse, tennis and swim club sites are planned to provide the community’s core recreational focus and may include activities such as dining, meeting space, pool/health spa, tennis, golf and social activities.

The 18-hole championship golf course was designed by Robert Trent Jones II, International and is planned as the focus of the Sabino Springs community. The course provides the major site amenity fulfilling recreational needs as well as providing open space and habitat and will be watered only by 100% reclaimed water.

Many of the fairways have been placed adjacent to on-site watercourses in an effort to buffer the washes from residential uses. The golf holes will provide a more compatible adjacent use with opportunities to "expand" the natural open space and wildlife habitat of the washes. The six washes on-site provide direct connections to the Coronado National Forest.

In an effort to provide a private residential community, a buffer/screen and wall feature is located adjacent to existing roads and adjacent homes. This screening will terminate at the on-site washes to provide for the free movement of any wildlife.
LAND USE PLAN SUMMARY

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Natural Open Space

1Natural Open Space Includes:
   - Class I Wash
   - Washes and Resource Area
   - Estate*** (80% of N,O,P,Q,S) (58.5)
   - Golf and Transitional Edge Area 158.9

Maximum number of dwelling units for the Sabino Springs Specific Plan is 516.
The Estate planning area shall not exceed a total of 45 dwelling units. An average of 80% of each lot will be designated as natural open space.
*** A minimum of 80% of the total Estate area will be natural open space. Estate natural open space acreage is included in the Natural Open Space total.

Note: All acres are approximate to the nearest 0.5 acres and are calculated from a hand held planimeter on a 1" = 200' scale map.

Development Plan Revised July 21, 1992
Revised October 17, 1995
D. Circulation Concept Plan

1. General Description

Exhibit V-D.1, Circulation Plan, delineates the primary street network for the Plan Area. The main entry drive of the site will intersect with Snyder Road approximately 1,200' south of the Plan boundary. The alignment of this off-site extension will utilize, to the greatest extent possible, the existing Vista del Loma Segunda right-of-way (located within the Tres Lomas North #4 subdivision). The construction of this off-site entry drive shall be the responsibility of the Plan Area's master developer. The specifics of the establishment of this off-site entry drive area as follows:

a. The existing Tres Lomas lots through which the entry drive will extend (beyond the existing Vista del Loma Segunda right-of-way) are under the ownership of the Specific Plan’s master developer, thereby providing the proprietary foundation for the extension of the existing street. The street extension shall be private beginning at that point where it leaves the existing public right-of-way and a gated access point will be established at this location.

b. Traffic intrusion was considered as it relates to the overall project and to the existing Tres Lomas Subdivision. However, establishing the entry drive as proposed represents the most prudent and least deleterious alternative to providing access to the project site. The only other reasonable alternative, i.e., the main entry onto Bowes Road, would not only result in a volume of traffic beyond Bowe’s capacity, but also necessitate the routing of the vast majority of the Project’s daily trips past Sabino High School. It is our position that doing so would create a definite traffic hazard as well as a worsened pedestrian situation in the school vicinity. Due to this fact, it would appear that Section 18.69.040.B.6.e.3. would apply and, thereby, allow the proposed access through Tres Lomas to Snyder Road.

A second linkage of the project to Snyder Road will be accomplished utilizing the existing roadway lying within the Houghton Road right-of-way north of Snyder Road. This roadway, presently constructed of chip-and-seal material,
extends approximately 1/2 mile north of Snyder Road, and currently provides access to the Estrella Vista Estates and Ranchitos de los Sagueros subdivisions located east of the Specific Plan area. The roadway will be improved to 24' of asphaltic concrete pavement (per Cross-Section E-E, Exhibit V-D.2) and extended an additional 1/4 mile north of its present terminus so as to provide a secondary access route, from Snyder, to the Specific Plan’s estate lots and to its southeastern-most development block (Area "M").

An additional primary access drive off of Snyder Road, Sabino Springs Drive, is located approximately equidistant between the approved Vista de Loma Segunda entry and the Houghton Road alignment. Sabino Springs Drive serves as the main entry to the project and carries the largest relative number of trips generated by the fully developed site. This access may be gated to provide security to the residents. Construction of these entry drives will be the responsibility of the Plan Area’s master developer.

Residential lots within planning areas T and U will be accessed via two minor roads off of Sabino Springs Drive, terminating in cul-de-sacs. Along the north side of Snyder Road, 25 feet of additional right-of-way will be dedicated to the county. The required 30-foot minimum building setback will be observed to the north of the additional right-of-way.

All of the Project’s on-site streets will be privately held and will be local in both their scale and character. This use of local-scale streets is justified in light of, 1) the relatively low volumes of traffic the streets will accommodate, and 2) the foothills topography and setting of the site, both of which require a more rural and sensitive approach to roadway design.

The proposed street cross-sections (to be described more fully in the next section) vary depending upon their functional requirements and specific settings. For example, the estate lots, located in the northern third of the Project, will be served by a relatively narrow street having a minimum right-of-way width so as to minimize grading impacts upon the surrounding steep topography.

2. Proposed Street Cross-Sections.

The project will utilize five (5) different street cross-sections (these sections are keyed on the Circulation Plan (Exhibit V-D.1) and illustrated on Exhibit V-D.2, Street Sections). Street cross-sections meet or exceed Pima County Department of Transportation standards.
Street Section A-A': The main entry drive of the Plan Area. This street will be the widest utilized in the Project and be comprised of two 18' travel lanes divided by an 8' landscaped median. This street section is consistent with the Pima County cross-section C-1 except for its wider lane widths and provision for a landscaped median.

Street Section B-B': The primary local collector providing direct access to many of the planning areas. This street will also use an 8' landscaped median but be comprised of two 14' (slightly smaller) travel lanes. This street section is consistent with the Pima County cross-section C-3 except for its wider lane widths and provision for a landscaped median.

Street Section C-C': The standard street section to be utilized within the
majority of the planning areas. This street will be the predominant subdivision street and provide direct access to individual residential lots. This street section is consistent with the Pima County cross-section S-3 except for its wider lane widths.

Street Section D-D': This street cross-section will serve the estate-lot planning areas in the northern third of the Specific Plan area. Its narrow right-of-way width and pavement will best respond to the low traffic demand and steep topography of the estate areas. This street section is consistent with Pima County cross-section R-2 except for its introduction of wedge curb and its reduction (to 4') of the shoulder width in order to minimize grading impacts.

Street Section E-E': This street will border the eastern boundary of the Plan Area (i.e. the Houghton Road right-of-way) and provide secondary access (i.e. not all-weather) to the estate lots and southeastern-most development block. This Houghton Road extension will be constructed by the developer, but maintained on a public basis due to its location within already-established public rights-of-way. Ingress/egress rights to adjacent property owners (in existing subdivisions) will not be affected. Controlled (i.e. gated) access points will be established, on the Project's private streets, where they intersect with Houghton Road. This street section is consistent with Pima County cross-section R-2.

In order to preserve the washes to the greatest extent possible, access to planning areas D, G, H, and J will be through the use of cul-de-sac streets from the proposed on-site local collector. Provision for secondary, e.g., emergency, access to the residential areas could be provided by easements and widened cart paths through the golf course. Final design of the access system will be subject to review and approval by Pima County Department of Transportation and Flood Control.

3. Change in ADT.

The Project will generate approximately 6,750 additional ADT over the existing condition. Approximately 5,400 ADT can be assigned to Sabino Springs Drive. All of this volume will empty onto Snyder Road.

The remaining 1,350 ADT can be assigned to the proposed secondary access road (along the Plan's eastern boundary). This latter volume will be split, in some fashion, between Snyder Road and Houghton Road south of Snyder.

Even if it is assumed, as a worst-case, that Snyder Road carries all of the
additional ADT to be generated by the development, the existing roadway (with a capacity of 12,000 vehicles per day) will still be carrying a total of only 8,330 ADT, and thus be operating at 69.5% of its capacity.

The proposed egress-only access at the Plan Area’s western boundary (See Circulation Plan) will result in approximately 375 additional daily trips onto Bowes Road. These additional trips will bring Bowes Road’s total volume to 3,395 daily trips and leave it functioning at approximately 67.9% of its current capacity.

Houghton Road (south of Snyder Road) exhibits a similar capacity to absorb the projected additional ADT. It is reasonable to assume that one-half of the 1,350 ADT projected for the proposed secondary access road (along the Plan’s eastern boundary) will proceed southward on Houghton Road from the Snyder Road intersection. In this case, Houghton Road’s ADT would rise to 1,729, still comfortably below capacity for this type of roadway.


The Project will utilize an almost entirely self-contained street network employing only two ingress/egress routes to existing Snyder Road (a major public route). Both of the proposed ingress/egress routes represent off-site extensions primarily utilizing existing public rights-of-way and shall be constructed and maintained solely by the developer. The limited access onto Bowes Road will be gated so that only limited traffic movement will be assured.

5. Transit Routes.

No mass transit bus routes nor attendant facilities are proposed.


Pedestrian paths or refuge areas shall be provided (see Exhibit V-D.2, Street Sections) adjacent to most of the project’s streets. No such pedestrian facilities are planned, due to negligible anticipated pedestrian traffic, along the secondary access street along the Plan’s eastern boundary.

A cart path will be associated with the golf course. The final alignment of this path through the course shall be determined at the final golf course phase design. The Circulation Plan shows the key locations at which the path system shall cross the proposed street system.
7. Emergency Access:

Emergency access will be provided to all planning areas. In addition, the Forest Service will be provided access through the development for firefighting purposes.

E. Public Facilities

1. Water Service Provision and Availability.

Water service for the Plan Area shall be provided by Tucson Water, which has an assured 100-year water supply. An existing Tucson Water tank presently exists in the northeastern vicinity of the site, and an existing water line loop partially encircles the property. Furthermore, the Project will incorporate new Tucson Water facilities (to be described below) designed to provide service to not only the subject property, but the northeastern metropolitan region as well.

2. Proposed Potable and Reclaimed Water Facilities.

Exhibit V-E.2, Public Facilities Plan, shows the location of three proposed Tucson Water facilities to be constructed on site: 1) a 5-million gallon potable water storage tank, 2) a .5-million gallon reclaimed water storage tank, and 3) a booster station for the potable water system.

The 5-million gallon potable water tank will serve a regional function as well as provide water service to the Plan Area. The Project’s proposed potable water system, also shown on the Public Facilities Plan, will tie into existing perimeter water lines to complete its loop.

Both the 5-million gallon potable water tank and the .5-million gallon reclaimed tank are proposed to be completely buried and revegetated to eliminate their intrusion into the viewsed. The proposed booster station will be constructed above grade but will be terraced into the hillside completely enclosed with a screen wall, and the surrounding area densely revegetated as not to be visible.

The proposed .5-million gallon reclaimed water tank will provide non-potable water for miscellaneous irrigation uses. These include the irrigation of the project’s golf course with 100% reclaimed water. No potable water will be
used at any time to irrigate the golf course.

This improvement will necessitate the extension of the existing reclaimed water distribution system from its nearest present location at Sunrise Drive and Kolb Road. The specific route to be employed will be determined by Tucson Water. This extension, along with the .5-million gallon storage tank, is a system-wide improvement and is not solely required to provide effluent service to this particular project.

3. Sewer Service.

The Project will be served exclusively by public, gravity sewers. The proposed sewer system (see Exhibit V-E.3, Public Facilities Plan) will tie into two existing public manholes (one at the Vallarta Trail/Bowes Road intersection; the other at the Snyder/Bowes Road intersection).

Every effort was made to minimize site disturbance due to sewer and utility facilities. As such, the great majority of the Project's on-site sewers will lie beneath paved rights-of-way. However, in a few select locations, sewers have necessarily been located in unpaved areas due to slope and gravity flow constraints. For example, the two southernmost development blocks will require a sewer line along the southern boundary (see Public Facilities Plan) in order to be sewered by gravity flow. Routing the sewer in this fashion will necessitate two wash crossings, the disturbance associated with these crossings will not be significant. These crossing areas will be revegetated.

The proposed off-site sewers required by the project to cross Bowes Road and those along the main entry drive, westward, beneath Snyder Road (to Bowes Road) will lie almost exclusively beneath paved and/or public rights-of-way and will not require any special easements.

4. Other Utilities.

Gas, electric, and telephone service lines presently exist within, and in the vicinity of, the Plan Area. Final design of new service facilities shall take place at the time of actual construction, subdividing, and site development, service facility design will be coordinated with the individual utility companies.

5. Schools.

Based upon the Tucson Unified School District criteria for estimating student populations, the worse case scenario of Sabino Springs developed at full
build-out will produce 304 elementary, 87 middle and 104 high school students. It is not anticipated that this project will get close to generating these numbers of students due to the significant difference in demographics associated with exclusive private residential communities. Adequate provisions for school population impacts will be provided to the Tucson Unified School District as necessary.

F. Water Resources Concept Plan

1. Response to Existing Conditions.

The Development Plan responds completely and thoroughly to the site's existing hydrologic conditions: 1) the existing washes are being left, by and large, in their natural, undisturbed state (exceptions to this condition are discussed below), 2) the identified ecological resource areas have been used to define the boundaries of the planning areas, and 3) the entire golf course has been designed to result in the minimal encroachment of tees, greens, and fairways into these resource areas. Where encroachment occurs, it shall be mitigated in accordance with the mitigation measures stated herein.

The approximate physical location of the boundary line between those areas to remain natural and ungraded, is shown on the attachment that identifies those areas mapped by SWCA (Appendix J). Once identified on the ground, and taking into account permitted encroachments for road, utility and golf course crossings and limited development areas as discussed below, these resource areas shall be fenced for protection during construction.

2. Effect Upon Site Drainage Patterns.

The Development Plan has left the overall drainage patterns of the site intact due to its predominant preservation of existing floodplains. There is however, one exception to this condition; and it is proposed in order to alleviate the substantial and long-standing flooding problems of the area.

Exhibit V-F.2, Water Resources Concept Plan, shows the realignment of the two western-most existing washes and the routing of their combined flow into a large detention facility. This proposed design eliminates the major flooding problems (described in Inventory Section IV.C) being experienced by Sabino High School and the Snyder Road/Bowes Road intersection.

The rerouting of these washes into the proposed detention facility (which actually accepts flows from the three westernmost washes) allows the capture and metering of this combined storm run-off at an outlet rate which is below
that of the existing wash which presently outlets near the detention basin’s proposed outlet point.

The proposed wash realignment can be accomplished using revegetated, shallow-bottomed earthen channels similar in section to their original shape. The use of structural stabilization (e.g. rip rap) will be minimized.

3. Encroachments: Roads, Utilities and Golf Course Crossings.
Roads, utilities and golf course crossings represent the primary features of the development which will encroach into the mapped floodplains (see Exhibit V-F.3). Crossings through the washes shall be avoided whenever reasonably possible to reduce their aggregate impact upon these areas. The total number of proposed crossings was held to a minimum to reduce their aggregate impact upon the washes.

In total, the designated road crossings will disturb approximately 4.0% (880 feet) of the 21,730 linear feet of major washes existing within the Specific Plan area. The total disturbed area for road crossings will be approximately 109,800 square feet or 0.5% of the entire Specific Plan area.

4. Encroachments: Others

The re-alignment of the two western-most channels, as described above, will solve the severe and existing problem of flooding at the High School and will improve the Snyder/Bowes intersection.

As mentioned above, the re-aligned channel will be primarily earthen in composition, revegetated, and contoured to resemble the characteristic channel cross-section of the Specific Plan Site.

5. Post-Development Discharges.

Existing and post-development discharges (for the 100-year event) at all existing outlet points have been shown on the Water Resources Concept Plan. The post-development quantities shown reflect the need to reduce the existing peak flows, through detention, per Critical Basin requirements as determined by the Pima County Department of Transportation and Flood Control District.

6. Potential Off-Site Impacts.

The off-impacts associated with the proposed drainage scheme are extremely positive. The Sabino High School site, the Mormon Church facility (at the
northeast corner of Bowes Road and Snyder Road), and the Bowes/Snyder intersection will be improved and will not experience the frequency of flooding to which they've been accustomed. This accomplishment will represent a significant flood management achievement.

7. Engineering and Design Features.

The most significant design feature of the proposed drainage scheme is the preservation of the vast majority of the site's existing major washes in their natural, undisturbed state.

The most prominent engineering design feature being proposed is the detention facility at the southwest corner of the Specific Plan area. The need for and benefit of this facility has already been discussed above. In the interest of multiple use, this detention basin will double as the on-site nursery and driving range for the proposed golf course.

Several other locations have also been designated on the Water Resources Concept Plan as potential detention sites. The specific need for size and configuration of these basins will be determined at the time of platting and engineering of each individual planning area.

Aside from detention facilities, a cross-section of a typical all-weather road crossing has been shown on the Hydrology Sections. This cross-section shows numerous design elements for these crossings, including culverts, rip-rap, and shallow transitional slopes to meet the existing grade.

8. Erosion Maintenance

Any flooding or erosion damage to the golf course will be addressed through standard golf course maintenance. No attempt will be made to address any such potential problem through requests for bank protection or channelization.


The Site's designation as part of a Critical Basin requires that post-development run-off values be less than those in the existing condition. The drainage solution being proposed and the methods employed in determining detention requirements are consistent with the goals and objectives of the Pima County Department of Transportation and Flood Control District with respect to this Specific Plan site.
G. Grading Concept

1. General Characteristics.

Grading Concept Plan, Exhibit V-G, depicts the primary grading characteristics of the developed site. The site will include a variety of grading treatments including roadways, residential, lots, the golf course, and the recreational facilities.

A pre-grading survey shall be prepared to identify all vegetative volume that may be removed by any grading activity in the ecological resource areas. The vegetative volume identified by the pre-grading survey will be that vegetative type and canopy volume required to be mitigated in accordance with mitigation requirements stated herein.

The estate lots, located in the northern third of the project, will remain largely undisturbed even in their fully-developed condition as individual custom homesites. Each lot will not exceed the square foot building envelope, as permitted under the Hillside Development Zone ordinance (Section 18.61.080), with the remaining portion of the lot preserved in a natural state by way of a conservation easement. In addition, a reduced street cross-section, of only 28' total width from back-of-curb to back-of-curb, will be utilized within the estate area to further minimize the total amount of grading. The conservation easements will be recorded at the time subdivision plats for the individual development areas are approved. The easements will be granted in favor of the Sabino Springs Homeowners Association or other appropriate entity.

Beyond the aforementioned backs-of-curb, a reduced shoulder width (of 4’) will be employed to minimize the extent of transitioning necessary to meet the existing adjacent grades. This practice will result in the least possible amount of visible cut and fill slopes. All such slopes will be suitably revegetated to mitigate their visual impacts.

Yet the most compelling reason to minimize the extent of cutting and filling necessary for the roadway is economic, not aesthetic. The relatively shallow depth to bedrock within the estate area makes any substantial grade alterations (particularly cuts) extremely expensive due to the costs of removing bedrock material. Prudent engineering design will thereby assure that the roadway "fits" the existing topography to the greatest extent possible.

All on-lot grading within the estates will meet the requirements of Section 18.61.080 (Development Standards) of the Hillside Development Zone ordinance regarding maximum percent grading per lot, maximum height of exposed cut
and fill slopes, and site restoration measures.

The site’s existing washes and identified resource areas will be minimally disturbed by grading activities. The vast majority of these areas will be left in their natural condition; minimal disturbances will be in the form of road, utility and golf course crossings and limited development areas. Any disturbance of the ecological resources areas shall be mitigated in accordance with mitigation requirements stated herein.

A special area of grading concern is that portion of the site devoted to the northernmost golf course holes. These occur within the sloping topography characteristic of the northern portion of the site. To insure a sensitive treatment to this edge, these holes will be used as the control mechanism for the golf course grading plan, i.e., their grades will be set and held, during engineering design, in such a way as to preserve a minimal difference in elevation between their proposed finished grades and the adjacent existing topography.

The overall disposition of the post-graded Site includes:

**Graded Areas**

- Planning Areas (not estate lots)
- Building Sites (clubhouse, etc.)
- Local Collector and Spine Roads
- Re-aligned Drainage Channel
- Detention Basin Facility
- Eventual Developed Homesites Within the Estate Area
- Portions of Transition Areas (i.e., areas between Development Blocks, Golf Course and Washes)
- Golf Course (minimized as necessary for turfed or bermed areas).

**Ungraded (i.e. Natural) Areas**

- Undisturbed Riparian Resource Areas
- Undisturbed Class I Habitat
- Undisturbed Floodplains
- Undisturbed Areas On Each Lot Within Estate Areas
- Undisturbed Transition/Golf Course areas
- All Existing Springs and their immediate environs

The specific disposition of the total ungraded area within the estate-lot portions of the project will not be determined until the custom development of each individual estate lot. Once the home site for each lot has been selected by its
individual buyer, the specific boundary of that lot's conservation easement will be determined. The aggregate open space within the estate-lot will then be a function of the specific manner in which the ultimate lot purchasers design and site their custom homes.

The second plan amendment site will include the grading of residential lots and related roadways. All grading will be site specific. The site's existing washes will be minimally disturbed by grading activities. The vast majority of these areas will be left in their natural state (see Exhibit V-G). Grading within this area will not exceed 55% of the total second plan amendment area.

2. Cut and Fill.

The Grading Concept Plan delineates those areas of the site which will be altered by more than 5' of cut or fill in the post-graded condition. This situation occurs primarily at the northern ends of the development blocks located in the center of the Project. The need to exceed the 5' cut/fill value is a result of the increasing steepness of the natural topography in these locations combined with the need for transition to existing perimeter grades at the boundary of each planning area.

To mitigate this situation, as well as the edge condition around the central planning areas in general, a revegetation treatment (transitional desert edge) will be employed at each block perimeter (see the Landscape Concept Plan, Exhibit V-I) to help in smoothly transitioning to natural wash and/or golf course, as the specific case may be. The transitional desert edge is a natural area enhanced by transplanted material to provide a stronger area of definition between these areas.

Another area where the grading alteration will be in excess of 5' is in the southernmost portion of the re-aligned channel being proposed within the far western portion of the site. With this treatment, a consistent slope will likely be applied to the re-aligned channels from their northern points of initial disturbance to their shared outlet point at the detention facility. The application of this consistent slope is prudent from a hydrologic standpoint but does necessitate new channel-bottom grades which, at some locations, are slightly different from those in the existing condition.

Cut and fill within the second plan amendment area will be site specific. No areas will be altered by more than 5 feet of cut or fill in the post-graded condition.

3. Engineering and Design Features.

Given the change from natural to fully-graded settings on this project, the most
critical grading issue centers around sensitively transitioning from one setting to the other.

The use of revegetated earthen slopes and curvilinear contouring will be employed as primary design elements when transitioning from a fully-graded condition to a natural and/or golf course setting. Optimally, a 3:1 slope (1' of rise for every 3' horizontal) would be the maximum steepness used in these applications, thereby allowing substantial revegetation.
H. Environmental Resources Concept Plan

The Sabino Springs Specific Plan lies wholly within the Buffer Overlay Zone. The Overlay Zone was established to:

- Permit the economically reasonable use of lands while at the same time preserving and protecting the open space characteristics of those lands in the vicinity of the public preserves;

- Protect and enhance existing public preserves in Pima County as a limited and valuable resources;

- Establish mechanisms that will protect the public preserves and result in an ecologically sound transition between the preserves and more urbanized development;

- Assure the continued existence of adequate wildlife habitat and foster the unimpeded movement of wildlife in the vicinity of public preserves;

- Provide for an aesthetic visual appearance from and to public preserves;

- Promote a continued economic benefit to the region by protecting the public preserves for the enjoyment of residents and visitors alike; and

- Neither promote nor discourage changes in underlying zoning, but rather provide continuing performance standards for the unique lands within the buffer overlay zone (Ord. 1988-116 §1, (part), 1988).

1. Habitat Resources.

A letter from the Arizona Game and Fish Department is included in Appendix G evaluating this proposal in respect to mitigation measures for wildlife.

The most significant environmental resources in terms of wildlife habitat values as shown on Exhibit V-H, include the identified riparian resource areas, the Class I Tres Hombres Wash, the other drainage ways (particularly the central north-south wash) identified water sources, areas of medium to high density vegetative cover and the northern upland areas connecting to the adjacent Coronado National Forest. Protection of all of these areas has been given a high priority in developing the Land Use Plan. The following discussion describes how the habitat values of the riparian resource areas have been protected, preserved or
enhanced during the site planning process. (See Exhibit V-H). A report
describing the methodology and criteria for delineating the resource
based riparian boundaries is included in Appendix J.

a. **Tres Hombres Wash - Class I Habitat.** All areas within the
100-year flood plain (Class I Habitat) will be preserved as
natural open space with the exception of three road crossings.
The northern road crossing will be an at-grade, dip section with
minimal associated grading and site disturbance. The southern
road crossing will be an all-weather crossing with all graded
areas revegetated. The third crossing, Sabino Springs Drive
within the second plan amendment area, will be a two-lane
paved all-weather roadway with curb and walk.

b. **Central north-south wash and other drainageways.** All areas
within the 100 year flood plain of the central wash and other
drainageways will be preserved as natural open space with the
exception of the reconstructed drainageways in the western most
portion of the site. Additional habitat width is provided by
siting a compatible land use - the golf course/open space-
adjacent and parallel to these preserved washes. The enhanced
habitat associated with the open space between the open space
and the residential lots provides a buffer between homes and the
golf course while maintaining views and providing increased
habitat conditions for wildlife.

c. **Water sources.** These areas will be preserved in the natural
open space system as site amenities and will be protected during
construction. In all cases but two, these water sources are
naturally occurring within the 100 year floodplain of the
drainageways, which will be preserved. The stock tank in the
eastern portion of the site will be incorporated into the golf
course area as a water feature. Additionally, other areas may be
incorporated into the golf course for reclaimed water storage.

d. **Areas of medium to high density vegetation.** A portion of
these areas will be preserved, in place, in association with either
drainageways or other natural open space areas. Where impacted
by development, salvageable vegetation will be transplanted into
the enhanced vegetation areas adjacent to the golf course as well
as utilized for on-site landscaping and revegetation. In areas
where medium to high densities of saguaro occur in the northern portion of the site, natural open space will preserve the vast majority of this habitat.
e. The northern Palo Verde-Saguaro Upland area. The northern portion of the site will be developed as large residential lots with all site grading limited to small building envelopes. The major portion of the lot area will be designated as natural open space. The building pads will be sited to provide a large area of continuous interconnected open space linking the on-site drainageway open spaces to the adjacent public lands to the north. The minimal grading associated with low residential density on these upland habitats will minimize impacts.

f. Special Status Species. A detailed conservation program and mitigation plan will be developed for Special Status Species, (as documented by the Arizona Game and Fish Department) if these species are found on-site. The mitigation plan will be prepared by a qualified environmental biologist. The plan will include an on-the-ground survey and a program for the protection and maintenance of the species and reasonable maintenance of the habitat of the species prior to, during and after construction activities. The mitigation plan will be reviewed by the Arizona Game and Fish Department, and other appropriate agencies, prior to implementation. This plan will be completed prior to any ground disturbing activities.

g. Realigned Washes. The two western-most washes will be reconstructed as described under section V-F.2 to alleviate flooding and impacts to the Sabino High School. The result will be a revegetated wash with earthen bottom and sides. Limited rip-rap, consisting of non-grouted 4"-8" diameter cobble, will be used as deemed necessary and where warranted by flow volumes and velocities. It is anticipated that the use of such rip-rap will be limited to the outer banks of reaches where an appreciable change in flow direction is necessary (i.e., where the channel alignment experiences a substantial "turn"). In addition, portions of the channel bottom subject to scour or other degradation will be protected as necessary. This would include areas adjacent to up and down-stream culvert openings, drops in vertical channel alignment, etc.

Native plant species, including specimens removed from other portions of the site, will be utilized to revegetate and renaturalize these washes. See Section VII, Design Guidelines.
2. Open Space Resources.

The Sabino Springs Specific Plan is designed as a private recreational based recreational community. Open space is an important site opportunity from an environmental perspective as well an amenity in terms of quality of life. This plan has identified and preserved areas of open space and has attempted to utilize a "multiple use" of that open space. Four washes (including one Class I habitat) have been designated in the plan as natural areas of open space, not to be disturbed.

In an attempt to maintain wildlife connections and to enlarge their width, golf course fairways and enhanced desert areas have been located adjacent to the natural undisturbed washes. Three of the washes connect on the northern boundary of the property to the Coronado National Forest and to the south, they become part of subdivided and unsubdivided properties and the Sabino High School. This recreation/open space land use in conjunction with the natural undisturbed washes will provide a larger area for animal forage and cover. In addition, this treatment helps preserve existing floodplain areas by providing increased setback areas from structural developments.

The Class I Habitat, Tres Hombres Wash, is directly adjacent to the largest disturbed area on-site. The habitat has been designated as natural open space. The habitat extends off-site to the northeast and southwest onto private subdivided and unsubdivided properties. There are three road crossings within the Class I habitat. In an effort to be sensitive to this habitat, the crossing to the north is a dip crossing. The Class I habitat is 21.1 acres in size. The three wash crossings will impact approximately 31,200 square feet of the Class I Habitat or three percent of the Class I habitat.

Within the estate residential area to the north, the densities are low and specific building envelopes will be designated for house pads and
driveway locations with a maximum building envelope not to exceed that permitted by the Hillside Development Zone ordinance with an average of 80% of each lot being left in natural open space.

The overall open space within this plan provides an expansive network of linkages to the public preserve, the Coronado National Forest.

According to the B.O.Z.O. definition, if functional open space is "a part of an interconnected open space system and creates wildlife habitat opportunities" it "shall be credited as natural open space at 100%". (Pima County Code 18.67.050.L). The open space within the Sabino Springs Specific Plan falls within this definition.

The natural open space within the Sabino Springs Specific Plan totals 268.0 acres or 62% of the entire site.

3. Buffer Overlay Zone.

Per the Pima County Ordinance 18.67, Buffer Overlay Zone, the following items are called out as requiring special treatment, the Specific Plan's response follows:

a. Class I Habitats: In conformance with B.O.Z.O.. All of the Class I Habitat is preserved with the exception of two road crossings.


c. Fences and Walls: Exception necessary; see Section V-I, Landscape Concept, VI-M.1, Fences and Walls, VI-L, Landscape/Vegetation Regulation and Section VII-C.4, Landscape Guidelines.


e. Parking Lots: In conformance with B.O.Z.O. See Section VI-E, 1-5.b.4, Residential Area/Clubhouse/Recreational Facilities, VI-F. 2.e and VI-G, 2.b, Golf Course; Parking Standards.

6 & 7, Estate Residential.

g. Utilities: In conformance with B.O.Z.O. See Section VI-I,
Public Facilities Regulations.


i. Trails Access: Not Applicable. See Section IV-K, Trails and Recreation.


4. Archaeological Resources

See Archaeological Regulations, Section VI-K and Monitoring Program, Section VIII-H.

I. Landscape Concept

The landscape concept is depicted on Exhibit V-I. The landscape plan provides a community landscape framework which serves to enhance the overall image and character of the site. The recommended plants for each area are to be selected from the list of plants identified onsite and the Buffer Overlay Zone Approved Plant List (see Appendix).

Sabino Springs is planned as a high desert community with a landscape concept that maintains the Sonoran Desert ambiance. The plants utilized will include trees salvaged from onsite and/or plants indigenous to the site.
The Landscape Plan identifies two types of entry features: the primary or Community entry, and the secondary or Residential. Entry features, like doorways, delineate passage into or out of the community. The Sabino Springs entry points shall include signage and accent landscaping to communicate the theme and identity of the community. The residential entry statements will be smaller in scale than the primary entry statement and communicate the name and entrance into a residential area.

The primary entry is along the southeast boundary of the Specific Plan area. This is the "front door" of the community. Residential entry statements delineate entrances into individual residential areas. The majority of the residential entry statements are along the collector or residential road. There are two residential entry points off Houghton Road, along the east boundary of the site.

There are three levels of streetscape identified: Primary, Collector, and Residential. The design for all three levels of streetscape will include a Sonoran Desert theme. The Primary Road Landscape will provide a safe and aesthetic progression along the core road. The scale will vary from a larger scale at the primary streetscape, to a smaller scale at the residential street level.

A bufferyard with a wall, no higher than six feet, will be located along portions of the lower southwest section of the Specific Plan area. This landscaped bufferyard takes into consideration Sabino High School. Sabino High School students have routinely used the Sabino Springs site for a variety of non-school sponsored activities. For this reason, a six-foot wall is imperative adjacent to the high school site. Consistent within the overall project, landscaping and revegetation will include drought tolerant and indigenous plant materials.

Retention/detention areas will be landscaped per Pima County Standards with plant materials able to withstand inundation.

The Sabino Springs plant palette includes all plant species identified onsite and those listed in the Buffer Overlay Zone Approved Plant List, Resolution No. 1988-151.

A plant preservation plan based on the methodology included in Section VII-C.1 will be completed prior to approval of a final plat.
J. Recreation and Trails Concept

The Sabino Springs Specific Plan is a private recreation based community. The major recreational elements include the championship 18-hole golf course with its path system, a tennis/swim facility, the club house facility and the pedestrian path system associated with the entry drive and the local collector (see Exhibit V-J).

K. Air Quality (Vehicular Traffic)

The proposed development will not include any industrial facility and no significant effect from emission will be created. Air quality may be positively impacted as a result of paving numerous on and off-site roadways and driveways resulting in the reduction of particulate pollution.

L. Water Harvesting/Solar Access

There are no specific parameters within this specific plan that address water harvesting or solar access. The development proposes a Reclaimed Water Reservoir to provide irrigation water for the golf course. Retention/detention areas will serve a dual purpose by controlling floodwaters and directing water for irrigation purposes in such areas as the proposed driving range.
Sabino Springs
Specific Plan

Note: Final access road alignment to be determined by Pima County Department of Transportation
ENTRY DRIVE
A-A

LOCAL COLLECTOR
B-B

ESTATE AREA LOCAL STREET
D-D

LOCAL STREET
C-C

LOCAL STREET
E-E
HYDROLOGY

SECTIONS I

TYPICAL NATURAL WASH OR CLASS I HABITAT

- Transitional Desert Edge
- Natural Wash ( ephemeral)
- Preserved Vegetation
- Transitional Desert Edge

Class I Habitat Area enhanced by adjacent undisturbed or revegetated areas.
- Allows for additional wildlife movement, increases amount of contiguous native connected open space.
- Provides wildlife habitat in addition to natural wash area.

TYPICAL NATURAL WASH W/ GOLF COURSE

- Transitional Desert Edge
- Natural Wash (ephemeral)
- Transitional Desert Edge
- Golf Course
- Transitional Desert Edge
- Preserved Vegetation
- Preserved Vegetation
- Preserved Vegetation
- Preserved Vegetation
- Preserved Vegetation
- Preserved Vegetation

Maximum use of existing vegetation incorporated into golf course landscaping.

- Limited access to resistant to protect natural wash habitat and revegetated areas and reduce golf course liability
- Existing disturbed areas revegetated with species native to the area
- No bank protective or stabilization except as shown for western redcedar wash and all-weather crossings for roads
- Natural cooling springs to be protected and preserved
- No grading except to provide for golf cart crossings
- Minimal selective tree removal to allow for golf shots
- Sensitive clearing of native vegetation in conjunction with the installation of the golf course to provide salvaged native and non-native trees for re-landscape into transition areas
- Course landscaping to consist of plants from the Ottawa Overlay Zone Approved Plant list
- Existing vegetation to remain in place as much as possible
- Where limited grading occurs, revegetation shall include transplanted trees and shrub, native species of trees, shrub, and ground cover from nursery stock, and
- All revegetated areas will be irrigated until completely established

NO SCALE
RECREATION/PEDESTRIAN PATH SYSTEM

Sabino Springs Specific Plan

A PLANNED COMMUNITY BY:
PERINI LAND & DEVELOPMENT CO.

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VI. DEVELOPMENT REGULATIONS

A. Purpose and Intent

These regulations will serve as the primary mechanism for implementation of the land uses for the Sabino Springs Specific Plan area. The regulations contained herein provide the direction for present and future needs and to achieve compatibility between land uses. This Specific Plan will abide by applicable adopted Pima County Regulations not included or specifically addressed within this document.

Land use designations for the Specific Plan shall be as follows:

- Residential Areas (RA) 1 - 5
- Recreational Facility (RF- 1)
- Preservation Area (PA)

B. Definitions

The terms and definitions used in this Plan shall mean those defined in Chapter 18.03 of the Pima County Zoning Code, with the following exceptions:

1. Builder. The person or entities who acquire planning areas (as defined below) in the Sabino Springs Specific Plan Area from the Master Developer.

2. Desert Trees. Mesquite, Palo Verde, Ironwood, Acacia and other trees listed within the B.O.Z.O. approved plant list.

3. Development Envelope. The sum of the areas of the permit holder’s land to be graded, including the building envelope, accessory buildings, and areas of related parking, driveways, swimming pools, walls and other accessory structures, but excluding individual sewage disposal systems, as per Pima County Code Chapter 18.81 (Grading Standards).

4. Dwelling Unit Cap. The maximum number of dwelling units permitted within the Specific Plan.

5. Gross Acres. The total number of acres within a planning area.
6. Master Developer. Perini Land and Development Company, 940 N. Finance Center Drive, Suite 207, Tucson, Arizona 85710 or their successors or assigns.

7. Maximum Density. The maximum permitted number of residences per acre (RAC) of a planning area.

8. Minimum Landscape Coverage. That area (by %) to be landscaped (including all required buffers, trees, shrubs, ground cover, areas and preserved and/or salvaged native plants) of the gross area being developed as a development plan and/or plat.

9. Planning Area. A designated sub-area of the Specific Plan with specified permitted uses and regulations covering the development of those uses.

10. Recreational Facility. Any private or public land use which relates to the pursuit of active or passive movement to refresh body or mind, such as; tennis, golf, baseball, soccer, swimming, walking, jogging and it’s associated structures.

C. General Provisions

1. If an issue, condition or situation arises or occurs that is not sufficiently addressed by this plan, those regulations of the Pima County Zoning Code that are applicable are as follows:

   Residential Area 1 (RA-1):
   (Includes Planning Areas N, O, P, Q, S)
   CR-1 (18.21)
   Single Residential.

   Residential Area 2 (RA-2):
   (Includes Planning Areas A, I, M, R, T, U)
   CR-2 (18.23)
   Single Residential.

   Residential Area 3 (RA-3):
   (Includes Planning Areas G, H, J, K, L)
   CR-4 (18.27)
   Mixed Dwelling.

   Residential Area 4 (RA-4):
   (Includes Planning Areas B, C, D)
   TR (18.31)
   Transitional.

   Residential Area 5 (RA-5):
   (Includes Planning Area F)
   TR (18.31)
   Transitional.

   Recreational Facility 1 (RF-1):
   (Includes Clubhouse, Golf Course, Tennis and Swimming)
   MR (18.40) Major Resort and
   GC (18.59) Golf Course.
2. For the most similar issue, condition or situation shall be used by the Chief Zoning Inspector as guidelines to resolve the unclear issue, condition or situation. This provision shall not be used to permit uses or procedures not specifically authorized by this Specific Plan or the Pima County Zoning Code.

3. This Specific Plan may be amended by the same procedure as it was adopted by ordinance. Each amendment shall include all sections or portions of the Specific Plan that are affected by the change.

4. Any persons, firm or corporation, whether a principal, agent, employee or otherwise, violating any provisions of these regulations shall be made to comply with the Pima County Zoning Code pertaining to zoning violations.

5. Whenever a use has not specifically been listed as being a permitted use in a particular zone classification within the Specific Plan, adherence must be established with Section 18.90.080-C of the Specific Plan Ordinance.

6. This plan does not propose changes to Pima County Zoning Code Chapter 18.73, 18.75, 18.77, or 18.79 as in effect at the time of adoption of this Specific Plan.

7. This Specific Plan will abide by all applicable adopted Pima County ordinances, existing or as may be adopted or amended not included or specifically addressed within this specific plan.

8. Model Homes are allowed in all residential areas in accordance with the Pima County Zoning Ordinance without restriction on number.

9. Individual planning areas will not be divided between subdivision plats. In addition, the Estate area (RA-1) will be included entirely within a single plat.

10. Setbacks for all permitted accessory structures shall be the same as those required by the Pima County zoning Code under the most closely equivalent zoning classification.
D. **Land Use Plan Summary**

Development categories have been assigned to each planning area identified in the Sabino Springs Specific Plan as shown on Exhibit VI-A. The categories include land use designation, area in acres, dwelling units and density per acre. These statistics are shown on the following page.

<table>
<thead>
<tr>
<th>Development Category</th>
<th>Planning Areas</th>
<th>Acres</th>
<th>Density Range (Homes/Acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA-1</td>
<td>N, O, P, Q, S (Estate)</td>
<td>14.6*</td>
<td>0.5 - 1</td>
</tr>
<tr>
<td>RA-2</td>
<td>A, I, M, R, T, U</td>
<td>43.6</td>
<td>1 - 2</td>
</tr>
<tr>
<td>RA-3</td>
<td>G, H, J, K, L</td>
<td>57.5</td>
<td>4 - 6</td>
</tr>
<tr>
<td>RA-4</td>
<td>B, C, D</td>
<td>23.6</td>
<td>4 - 8</td>
</tr>
<tr>
<td>RA-5**</td>
<td>F</td>
<td>9.3</td>
<td>3 - 7</td>
</tr>
<tr>
<td>RF-1</td>
<td>Clubhouse, Golf Course, and Tennis/Swimming/Realigned Wash and Transitional Desert Edge</td>
<td>170.1</td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>Class I and Natural Washes, Resource Area and Estate natural areas</td>
<td>111.3</td>
<td></td>
</tr>
</tbody>
</table>

Total: 430.0

*Total acreage of RA-1 Category is 73.1 acres, of which 80% is to remain as natural open space.
**Planning Area E has been deleted and combined into Clubhouse Area.
LEGEND

- A-8: Residential
- RA-1: Development Category
- Open Space w/in Estate Lots
- Open Space

NOTE: GOLF COURSE IS WITHIN RF-1 DEVELOPMENT CATEGORY

Sabino Springs
Specific Plan

A PLANNED COMMUNITY BY:
PERINI LAND & DEVELOPMENT CO.

THE PLANNING CENTER
3601 N. FINANCE CENTER DRIVE, SUITE 210
TUCSON, AZ 85710 (520) 823-8145

page 98a
## LAND USE PLAN SUMMARY

<table>
<thead>
<tr>
<th>Development Category</th>
<th>Planning Areas</th>
<th>Acres</th>
<th>Density Range* (Homes/Acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA-2</td>
<td>A</td>
<td>6.1</td>
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<tr>
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<td>4.6</td>
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<td>C</td>
<td>0.8</td>
<td>4 - 8</td>
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<tr>
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<td>D</td>
<td>18.2</td>
<td>4 - 8</td>
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<td>4 - 6</td>
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<td>RA-1</td>
<td>N-Estate**</td>
<td>23.4</td>
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<tr>
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<td>P-Estate</td>
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</tr>
<tr>
<td>RA-1</td>
<td>Q-Estate</td>
<td>17.0</td>
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<td>R</td>
<td>7.5</td>
<td>1 - 2</td>
</tr>
<tr>
<td>RA-1</td>
<td>S-Estate</td>
<td>10.4</td>
<td>0.5 - 1</td>
</tr>
<tr>
<td>RA-2</td>
<td>T</td>
<td>4.7</td>
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<tr>
<td>RA-2</td>
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<td>7.5</td>
<td>1 - 2</td>
</tr>
<tr>
<td>RF-1</td>
<td>T</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>RF-1</td>
<td>CH-Clubhouse/Tennis/Swim</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td>RF-1</td>
<td>Realigned Wash</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>RF-1</td>
<td>Golf Course/Transitional</td>
<td>158.9</td>
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<tr>
<td>PA</td>
<td>Preservation Area¹</td>
<td>111.3</td>
<td></td>
</tr>
</tbody>
</table>

¹Preservation Area Includes:
- Class I Washes 15.3
- Natural Washes 37.5
- Estate (80%) (58.5)

* Maximum number of dwelling units for the Sabino Springs Specific Plan is 516.
  Density transfers between planning areas are not permitted.

** The Estate planning area shall not exceed a total of 45 dwelling units. An average of 80% of each lot will be designated as natural open space.

Note: All acres are approximate to the nearest 0.5 acres and are calculated from a hand held planimeter on a 1" = 200' scale map.
E. Residential Area Development Categories  

1. RA-1, Estate Lots, N, O, P, Q, S  
   a. Uses Permitted:  
      1. Single Family Detached Residential  
      2. Accessory Structures  
   b. General Development Standards:  
      1. Minimum Lot: 21,780 square feet.  
      2. Maximum Development Envelope: As permitted under Hillside Development Zone ordinance (Section 18.61.080) Remainder of lot to be left in natural state, under conservation easement.  
      3. Maximum Building Height: Not to exceed 18’.  
      4. Parking Requirements: Shall be in accordance with Chapter 18.75 of the Pima County Zoning Code.  
      5. Maximum Density: One RAC and shall not exceed a combined total of forty-five (45) dwelling units for all RA-1 areas. Consult monitoring sheet for number of units remaining.  
      7. Driveway Setback: Driveways shall not be within 100’ from the Coronado National Forest Boundary. (Per Pima County Ordinance 18.67. B.O.Z.O.)
2. RA-2, Residential Areas A, I, M, R, T, U
   
a. Uses Permitted:
   1. Single Family Detached Residential
   2. Accessory Structures

b. General Development Standards:
   1. Minimum Lot: 12,000 square feet.
   2. Maximum Lot Coverage: 60%
   3. Maximum Building Height: Not to exceed 18’.
   4. Parking Requirements: Shall be in accordance with Chapter 18.75 of the Pima County Zoning Code.
   5. Maximum Density: Two RAC and shall not exceed the overall Specific Plan dwelling unit cap of 516 homes.
   6. Minimum Yard Requirements: Front = 20’
      Side = None
      Rear = 10’

3. RA-3, Residential Areas G, H, J, K, L
   
a. Uses Permitted:
   1. Single Family Detached Residential
   2. Accessory Structures

b. General Development Standards:
   1. Minimum Lot: 5,000 square feet.
   2. Maximum Lot Coverage: 60%
3. Maximum Building Height: Not to exceed 24’.

4. Parking Requirements: Shall be in accordance with Chapter 18.75 of the Pima County Zoning Code.

5. Maximum Density: Six RAC and shall not exceed the overall Specific Plan dwelling unit cap of 516 homes.

6. Minimum Yard Requirements: Front = 20’
   Side = None
   Rear = 8’

4. RA-4, Residential Areas B, C, D
   a. Uses Permitted:
      1. Single Family Detached or Attached residential
      2. Accessory Structures
   b. General Development Standards:
      1. Minimum Lot: 4,000 square feet.
      2. Maximum Lot Coverage: 50%
      3. Maximum Building Height: Not to exceed 24’.
      4. Parking Requirements: Shall be in accordance with Chapter 18.75 of the Pima County Zoning Code.
      5. Maximum Density: Eight RAC and shall not exceed the overall Specific Plan dwelling unit cap of 516 homes.
      6. Minimum Yard Requirements: Front = 20’
         Side = None
         Rear = 5’

5. RA-5, Residential Area F
   a. Uses Permitted:
      1. Single Family Detached or Attached residential
2. Accessory Structures

b. General Development Standards:

1. Minimum Lot: 3,000 square feet.

2. Maximum Lot Coverage: 65%

3. Maximum Building Height: Not to exceed 24’.

4. Parking Requirements: Shall be in accordance with Chapter 18.75 of the Pima County Zoning Code and any non-residential parking lots shall be screened by vegetation to reduce visibility (per Pima County Ordinance 18.67, B.O.Z.O.).

5. Maximum Density: Seven RAC and shall not exceed the overall Specific Plan dwelling unit cap of 516 homes.

6. Minimum Yard Requirements: Front = 20’
   Side = None
   Rear = 5’

F. RF-1, Recreation Facility Development Categories

1. Club House/Recreational Facilities

   a. Uses Permitted:

      1. Golf Course
      2. Clubhouse
      3. Recreational Facilities
      4. Food and Liquor Licensed Facilities
      5. Specialty Commercial ancillary to the clubhouse.
      6. Open Space
b. General Development Standards:

1. Maximum Building Coverage: 60%

2. Maximum Building Height: Not to exceed 34’.

3. Minimum Lot Area: None

4. Maximum Lot Width: None

5. Parking Requirements: Shall be in accordance with Chapter 18.75 of the Pima County Zoning Code and any non-residential parking lots shall be screened by vegetation to reduce visibility (per Pima County Ordinance 18.67, B.O.Z.O.).

6. Shall be in conformance with Pima County Code, Chapter 18.59, Golf Course Zone.

7. Irrigation Allowed: Reclaimed water only.

G. PA, Preservation Area Development Category

1. Uses Permitted:

   a. Utility, sewer, road and golf course crossings.

   b. Maintenance roads.

   c. Trails and/or passive recreation.

2. General Development Standards:

   a. Utility and road crossings per Pima County Flood Control District approval.

   b. Maintenance road per Pima County Department of Transportation and Flood Control.
H. Environmental Resource Regulations

1. Habitat Preservation and Mitigation

a. Vegetation.

1. Construction: Natural open space areas of vegetation designated to be preserved shall be protected during grading and construction activities by fencing and flagging.

2. Plant Salvage: Where impacts to existing vegetation are unavoidable all reasonable effort shall be made to salvage the plant material for transplanting on-site. Vegetation shall be evaluated based upon the transplant rating criteria. A minimum of 30% of the salvageable vegetation will be left in place or transplanted and/or augmented with nursery grown native plants at a ratio of 3:1, per the Buffer Overlay Zone requirements, Pima County Ordinance 18.67.050.6.

3. Enhanced habitat areas/revegetation: Shall utilize only those plants listed on the Buffer Overlay Zone approved plant list or native species occurring on site as listed in Appendix E.

4. Grading: All non-built graded areas will be landscaped or revegetated.

5. A preservation and salvage program/plan: This plan shall be developed for all subsequent plats and development plans identifying on-site vegetation preserved in place, salvaged for transplant and/or mitigated by planting nursery stock.

b. Wildlife

1. Springs: Naturally and augmented water sources occurring along drainages shall be preserved and shall be protected during and after all construction activities. All springs will be located within natural open space areas.
2. Class I Habitat: All areas within the 100 year flood plain of the Tres Hombres Wash (Class I Habitat) will be preserved in their natural state with the exception of the two road crossings as described under Section V.H.1., Environmental Resource Concept Plan, Habitat Resources.

3. Washes: Approximately 90% of the flood plain of the other natural washes will be preserved in natural state. Limited encroachment will be allowed in these washes for road and utility crossings, and golf course and cart path crossings, subject to approval of a mitigation plan as per B.O.Z.O., Chapter 18.67.050.

4. Construction Monitoring: On-site monitoring of all aspects of site grading shall be provided at the expense of the master developer during project development in order to insure protection of preserved vegetation and water sources and to identify protected species of plants and wildlife. Monitoring shall be performed by an individual qualified in resource identification and protection, who shall be a third-party professional to be approved by Pima County in consultation with the Arizona Game and Fish Department.

a. All Grading: During clearing, grubbing and grading activities, the resource professional shall visit the site twice daily and shall be available on an on-call basis to respond to considerations found during these activities. Affected interest groups, including at least the Sabino Canyon Coalition and Saguaro Forest Associates, shall be invited to observe the grading activities through site inspection. The resource professional shall also review the siting of construction fencing and flagging prior to the start of site grading and shall make recommendations as needed. The adopted specific plan, County ordinances and supplementary site analysis to be prepared for the Estate development area shall guide the resource professional.

b. Golf Course Grading: The resource professional shall interact with the golf course architect and resource consultants employed by the developer to
ensure the environmental integrity of golf course design and construction by modifying, if necessary, areas proposed for grading. The resource professional shall evaluate the field location of the major features of the golf course for compliance with this specific plan and to ensure the least amount of grading in areas that are adjacent to or within ecological resource areas.

5. Construction Process/Mitigation Plan: A mitigation plan shall be developed for protected and endangered species in the event they are found on-site during the construction process, as described on page 77.

6. Construction Process Protection: If endangered or threatened species are found during the construction process, they shall be protected and their location monitored until appropriate measures have been taken by the construction biologist to relocate the animals per the conditions of the mitigation plan.

2. Vegetation Transplant Rating Criteria

1. Transplant Rating Criteria.

The following criteria will be used to evaluate vegetation for possible salvage and transplant:

**HIGH:** A "HIGH" rating will be assigned to trees meeting the following criteria:

1) Overall plant dimensions suitable for transplanting.
2) Tree health is good to excellent with no major infestations or apparent diseases.
3) Tree age is young enough to suggest a likely chance of transplant survival.
4) Tree is undamaged, has an attractive form and is conducive to box transplanting (upright branching).
5) Soils can be excavated, were cohesive and seemed capable of supporting a boxed rootball.
6) Surrounding topography permits access with the appropriate equipment needed to box and remove plant.
7) Adjacent plants do not pose a likely interference with root systems or interfere with plant removal.

**MEDIUM:** A "MEDIUM" rating will be given to trees which do not meet all of the criteria for a high rating, but do have enough merit to consider transplant.

**LOW:** A "LOW" rating will be given to trees meeting any one or more of the following:

1) Trunk caliper at the tree base is excessive as a result of natural unpruned development or perhaps new growth from old, large dead trunks.
2) Tree health is poor. Generally the result of severe mistletoe infestations, other diseases, lack of water over time, or old age.
3) Tree age appears to be old and suggested a low chance of transplant survival.
4) Tree character and form is unattractive or not conducive to transplanting. This includes new branches from large, old dead trunks, low branching horizontally developed branch systems and old age deterioration and discoloration of trunks.
5) Soils are too rocky, sandy or shallow to excavate a cohesive rootball.
6) Local topography limits access by the appropriate equipment where necessary (i.e. steep banks).
7) Adjacent plants interfere with removal or presented likely conflicts with the root system.
a. **SAGUAROS:**

**HIGH:** A "HIGH" rating will be assigned to saguaros meeting the following criteria:

1) Overall plant dimensions are suitable for transplanting.
2) Plant health is good to excellent with few visible signs of disease or stress.
3) Plant age is young enough to suggest a likely chance of transplant survival.
4) Plant is undamaged and has an attractive form and character representative of the species.
5) Soils permit a significant portion of the root structure to be removed increasing the chances of transplant survival.
6) Local topography allows manual or vehicular access as required for removal.
7) Adjacent plants do not pose a likely interference with root structure or interfere with plant removal.

**MEDIUM:** A "MEDIUM" rating will be given to saguaros which do not meet all of the criteria for a high rating, but do have enough merit to consider saving should time and money allow.

**LOW:** A "LOW" rating will be given to saguaros meeting any one or more of the following:

1) Plant dimensions are very large suggesting a difficult and expensive salvage operation.
2) Plant health is poor and displays visible signs of stress and/or damage.
3) Plant deterioration from old age is visible.
4) Plant form is unattractive, misshapen, damaged and/or deformed.
5) Soil development is extremely shallow and/or roots are anchored in bedrock precluding the removal of a sufficient portion of the root structure.
6) Topography does not permit equipment access for larger plants.
7) Adjacent plants significantly interfere with plant removal and/or root systems.
c. Barrel Cacti

**HIGH:** A "HIGH" rating will be assigned to barrel cacti meeting the following criteria:

1) Overall plant dimensions are suitable for transplanting.
2) Plant health is good to excellent with few visible signs of stress.
3) Plant age is young enough to suggest a likely chance of transplant survival.
4) Plant form is undamaged, attractive and representative of the species. Some plants have multiple heads and were marked as having unique form.
5) Soils permit a significant portion of the root structure to be removed increasing the chances of transplant survival.
6) Topography allows manual or vehicular access where necessary.
7) Adjacent plants do not interfere with plant removal or root system.

**MEDIUM:** A "MEDIUM" rating will be given to barrel cacti which do not meet all of the criteria for a high rating, but do have enough merit to consider saving should time and money allow.

**LOW:** A "LOW" rating will be given to barrel cacti meeting any one or more of the following:

1) Plant health is poor and displayed visible signs of stress.
2) Plant deterioration from old age is visible.
3) Plant is unattractive, damaged, misshapen or deformed - generally the result of falling over after becoming large and top-heavy.
4) Soils are too rocky to excavate a sufficient portion of the root structure.
5) Topography limits access by the appropriate equipment where necessary.
6) Adjacent plants interfere with plant removal and/or root system.
c. **OCOTILLOS:**

**HIGH:** A "HIGH" rating will be assigned to plants meeting the following criteria:

1) Overall plant dimensions are suitable for transplanting.
2) Plant health is good to excellent with few visible signs of stress or disease.
3) Plant age is young enough to suggest a likely chance of transplant survival.
4) Plant form and character is undamaged, attractive and representative of the species.
5) Soils permit removal of a sufficient portion of the root structure to increase the chances of transplant survival.
6) Topography allows manual or vehicular access where necessary.
7) Adjacent plants do not interfere with root system or removal.

**MEDIUM:** A "MEDIUM" rating will be given to plants which do not meet all of the criteria for a high rating, but do have enough merit to consider saving should time and money allow.

**LOW:** A "LOW" rating will be given to plants meeting any one or more of the following:

1) Plant health is poor and displays visible signs of stress.
2) Plant displays visible signs of deterioration from old age.
3) Plant is unattractive, misshapen or deformed.
4) Soils are extremely rocky inhibiting or preventing the removal of a significant mass of the root system.
5) Topography limits access by the appropriate equipment.
6) Adjacent plants significantly interfere with plant removal or root system.

3. **Mitigation Measures for Impacts Within Ecological Resource Areas**

a. The project pre-grading survey, which shall determine the vegetative volume removed by all grading operations within the ecological resource areas and shall be used as a basis to determine the minimum mitigation required for the project. Vegetative volume shall be measured for any tree or shrub to be removed which has a single trunk circumference of nine inches as measured six inches above the ground.
b. The total volume of canopy vegetation impacted within the ecological resource areas shall be replaced in either the ecological resource areas or in the following project areas:

1) areas within 100-year floodplains;
2) upland areas adjacent to 100-year floodplains; and
3) within the golf course transition area.

c. Mitigation shall be by the transplanting of native indigenous plant species, predominantly mesquite.

d. The number and size of species to be planted shall be equal to those necessary to replicate the disturbed canopy volume within five years.

e. Drip irrigation systems shall be used to ensure survival of planted or transplanted vegetation.

f. Where possible, existing vegetation to be removed shall be salvaged.

g. All saguaros in the graded areas shall be avoided. Where avoidance is not possible, saguaros are to be salvaged and replanted in mitigation areas.

h. In all areas of mitigation, appropriate upland or riparian under-story shall be established.

I. Public Facilities Regulation (Per Pima County Ordinance 18.67, B.O.Z.O.)

1. Utility Lines: All new or relocated lines within the Sabino Springs Specific Plan area shall be placed underground, unless the relocated line is a one-hundred fifteen kilovolt (or greater) transmission line. All utility lines relocated due to improvement projects shall be placed underground unless such relocated line is a forty-six kilovolt (or greater) transmission line.

2. Underground Utility Lines: Location of underground utility lines (including sanitary sewers) within the Sabino Springs Specific Plan area shall be planned, joint trenched where possible, and located beneath the paved portions of roadways or within twenty-five feet of the edge of the paved portions whenever possible so as to minimize vegetative disruption.
J. Hydrology/Drainage Regulations

1. Encroachments Into Mapped Floodplains.

Encroachments into mapped floodplains within the specific plan area, will be limited to:

- all-weather roadway crossings
- roadway dip crossings
- the realignment of the site's two westernmost existing channels
- the regional detention basin at the southwest corner of the plan area.
- utility, sewer and golf course crossings

2. Erosion Maintenance

Any flooding or erosion damage to the site's golf course will be addressed through standard golf course maintenance. No attempt will be made to address any such potential problem through subsequent requests for encroachment and bank protection.

K. Architectural Regulation (Per Pima County Ordinance 18.67, B.O.Z.O).

1. Color

a. Allowable colors: Muted, blending with local colors and textures.
b. Reflective finishes: None allowed.
c. Mechanical equipment: Screened and painted to reduce visibility.
d. External lighting: In conformance with Ordinance 18.67 B.O.Z.O. allowed. (See section K.2)
L. Archaeological Regulations

1. The Master Developer will require that all documents and activities relevant to the management, preservation and recovery of archaeological and historic resources will be prepared or undertaken by a professional archaeologist. Research designs and mitigation plans will be presented to and reviewed by the Pima County archaeologist, and when appropriate, the State Historic Preservation Office. All documents requiring such review will be submitted prior to or at the time a development plan or plat is provided to Pima County. Off-site developments and ancillary construction (utility trenches, water/sewage treatment facilities, roads, etc.) will also be investigated and evaluated and treated by the same criteria as cultural resources within the Specific Plan boundaries.

a. **Sites:** Eleven areas were identified in 1987 as having potentially significant cultural resources which through further field work have been consolidated into six recorded sites. Additional sites may be identified following field survey of the remaining 100 acres.

b. **Sub-surface Testing:** Sufficient sub-surface testing will be conducted to establish the significance, nature and extent of the archaeological and historic sites. The goals of the sub-surface test will be directed toward providing salient information for the development of a research design as well as establishing a cost effective data recovery plan.

c. **Research Design/Mitigation Plan:** The cultural resources within the Specific Plan area and ancillary projects will be encompassed by a comprehensive research design and mitigation plan. The research design will delineate productive areas of scientific investigation that may be pursued given the information the sites can yield and provide direction to the development of a mitigation plan. The mitigation plan will detail strategies for the management of the cultural resources and include standards for the evaluation of sites with respect to further testing, sampling strategies, preservation, interpretive exhibition, protection, and data recovery (excavation). Guidelines for curation, analysis, report preparation, and public exhibits will be established and such activities undertaken. If
the development activities are phased, a specific mitigation plan and scope of work will be developed for each planning area of the Specific Plan that contains significant cultural resources. In the event an archaeological site spans more than one planning area, a single mitigation plan will be prepared and implemented for the entire archaeological site regardless of planning unit boundaries.

d. **Implementation of Mitigation and Data Recovery Plan**: Prior to ground disturbing activities for development within the Specific Plan area, documentation shall be forwarded to the County Archaeologist verifying that the relevant portion(s) of the mitigation plan have been executed. This will be done at the time of or prior to application for a grading permit. Elsewhere in this document a table synchronizing such activities is offered.

e. **Resource Protection**: (1) Unless specifically indicated in the mitigation plan, no physical disturbance (including collection of artifacts or excavation) of archaeological or historic site within the Specific Plan area will be permitted. (2) Cultural resources identified for in place preservation or not in apparent danger of direct negative impacts by development activities will also be protected. This will be done in consultation with the County Archaeologist and may include the periodic inspection of sites and the possible erection of fences or other physical barriers. (3) Unrecorded archaeological materials unearthed during construction activities by the builder, contractors or individuals will be reported immediately to the Master Developer and the County Archaeologist. (4) Except as necessary for avoidance and protection of the cultural resources, the Master Developer will restrict information on the location and nature of the cultural resources within the Specific Plan area. No site will be promoted for public or private access except if so stipulated in the mitigation plan.

f. **Technical and Professional Standards and Guidelines**: All aspects of the archaeological studies will be carried out using accepted professional archaeological standards and practices consistent with guidelines included in the Advisory Council on Historic Preservation 1980 Handbook; draft regulations 36CFR66, dated January 28, 1977; the Standards of Research Performance of
the Society of Professional Archaeologists; and the Secretary of Interior's "Standards and Guidelines for Archaeological Documentation" (Federal Register, 9/29/83).

M. Landscape/Vegetation Regulations

1. Fences and Walls - These regulations will require a special exemption from the requirements of Chapter 18.67, Buffer Overlay Zone.
   a. Height: A fence or wall shall not exceed six (6) feet in height.
   b. Location: A fence or wall will be permitted along the property lines (as delineated in Exhibit V-1) but shall not be constructed to impede wildlife movement within wildlife corridors (i.e., the washes).

2. Lighting
   a. No high pressure sodium (except for tennis courts and horse corrals) or mercury lighting is allowed.
   b. External lighting shall be limited to that necessary to provide the functional requirements of safety, security and identification. High-pressure sodium and mercury vapor lighting shall not be used. Except for lighting that is attached to a building, light standards for roads, parking lots, driveways and all other outdoor areas shall not exceed forty-two inches in height and shall consist of bollard or other low-intensity, low-profile type of lighting. Standards shall be spaced sufficiently to create isolated pools of light rather than a contiguous, saturated condition.
   c. Tennis Courts: In conformance with Pima County Code, Chapter 15.12.
   d. Shields: All lights will be shielded. Lights will be directed away from the Coronado National Forest.

3. Vegetation
a. Public and Common Area Plant Types: Only plant types from the Pima County Landscape Design Manual, 18.73.030 shall be allowed.

b. Private Area Plant Types: Any plants may be utilized, excluding those on the prohibited plant lists (per B.O.Z.O.) in private areas enclosed by a fence, wall or native vegetative screening, not to exceed one-half acre in size. This provision does not apply to areas within a conservation easement.

c. Golf courses may be planted with bermuda grass.

d. Nursery-grown native species may be planted in lieu of salvaging mature on-site material at a 3:1 ratio of nursery stock to on-site material. However, at least thirty percent of the on-site material shall be salvaged when physical conditions permit.
VII. DESIGN GUIDELINES

A. Introduction

These guidelines have been developed as a framework to express the community character of the Sabino Springs Specific Plan.

These guidelines are to ensure a development of consistently high quality, sensitive to the surrounding environment, and in conformance with the Buffer Overlay Zone Ordinance. These guidelines will provide a documented basis for evaluating and directing the planning and design of improvements to each parcel.

The Design Guidelines are criteria to be used by developers, architects, engineers, landscape architects, builders and other professionals to maintain the design quality proposed herein. They are also presented to give guidance to County staff, the Planning and Zoning Commission and the Board of Supervisors in their review of development projects within the Specific Plan Area.

The goals of the Design Guidelines are:

- Conservation of existing natural features and minimum adverse impact on the ecosystem.

- Encouragement of imaginative and innovative planning of facilities and sites and flexibility to respond to changes in market demand.

- Variety, interest and high standards of architectural and landscape design.

- Protection of property values and enhancement of investment.

As guidelines, they are non-regulatory and if there is any conflict with existing Pima County ordinance, the most restrictive will apply.

B. Site Planning

The emphasis of site planning is the integration of buildings and improvements with the natural setting. Site planning utilizes information gathered during the site inventory and analysis phase to understand the opportunities and constraints of the site. Site planning concentrates on the
proper placement of buildings, roads, and services within the site. This requires an understanding of building form, orientation, coverage, setbacks, parking and such support services as utilities, loading, storage and driveway location.

The objectives of the site planning guidelines are:

- Site buildings in a manner sensitive to topography, drainage, native vegetation, soil stability and views.
- Achieve a cohesive identity within Sabino Springs Specific Plan.
- Protect uses and ensure non-encroachment of conflicting uses.

1. Grading

Grading guidelines are formulated with the intent of preserving and enhancing natural landscape whenever possible. This involves integrating buildable parcels with the existing topography and to maximize views from building pads while maintaining a low visual impact from surrounding properties.

Site grading design should complement and reinforce the architectural and landscape design character by helping to screen parking and driveways, reduce the perception of height and mass on larger buildings, by providing reasonable transitions between onsite uses, by providing elevation transitions contributing to the efficiency of onsite and offsite movement systems, and by providing reasonable transitions between lots.

The grading of the site terrain should reflect the natural topography and result in a harmonious transition of the man-made grade with the natural terrain.
Design measures which can be used to achieve a more natural transition include:

- Grading new banks with rounded forms to blend into the natural terrain.
- Grading slopes with flowing edges to reflect natural rounded terrain.
NOTES:
- Maximum size Development Envelope is 13,500 sf, average Development Envelope shown = 12,000 sf.
- 80% of Estate Area (RA-1) is Natural Open Space (NOS)
- No Development Envelopes occur on slopes >25%

Sabino Springs
Specific Plan

A PLANNED COMMUNITY BY:
PERINI LAND & DEVELOPMENT CO.

THE PLANNING CENTER
2921 N. FINANCE CENTER DRIVE, SUITE 210
TUCSON, AZ 85710 (602) 623-6148

Page 118a
2. **Drainage**

Collection and onsite detention of storm water runoff is required. Introduce low rock check dams for detention of storm water runoff wherever possible. All detention/retention systems should be maintained for optimum efficiency.

All drainage should exit from the planning area in a manner identical to the original natural drainage conditions. Increased runoff rates from streets or other surface areas should be retained onsite so that the offsite quantity and rate of flow should not be greater than the original hydrological conditions at any existing point. All proposed drainage shall comply with standards administered by Pima County Department of Transportation and Flood Control.

Drainage velocities shall be minimized to protect from erosion, debris accumulated on streets and drainageways and to prevent hazardous flow conditions.

Riparian vegetation shall be used predominately throughout drainageway revegetation and enhancement. Plant selection shall be from the Approved Plant List as stated in the Buffer Overlay Zone Ordinance, 18.57.050, section I.2. Where construction has impacted the Class I Habitat, plantings shall be in a natural spatial arrangement similar to pre-development vegetative conditions.
3. **Building Setbacks**

Varied building setbacks from roadways provide variety and interest along a circulation route. Where feasible, varied setbacks shall be used to reduce the tunnel effect of uniform facade setbacks.

![Diagram of varied setbacks](image)

Uniform setbacks depend on landscaping to add variety and to soften the obvious repetition from house to house. Landscape design should be used to enhance building setback variations.

Structures and/or private driveways along the northern boundary adjacent to the Coronado National Forest shall be a minimum of one hundred feet from the National Forest property line, as per the Buffer Overlay Zone Ordinance, 18.67.050 G.

4. **Building Orientation and Siting**

The project should be planned to maximize the feeling of open space within the development. Design approaches include curving streets, orienting the road axis to open areas and the creation of views.

Buildings should be designed and sited to minimize the impact and silhouette of built forms on the natural landscape. Roof line silhouettes should minimize their visual impact by keeping a low profile, not dominating the horizon line.
Utilizing passive solar energy offers benefits in terms of comfort and economy. Maximizing passive solar energy may include orienting buildings to utilize the southern exposure during winter months, along with window coverings during the summer months. Interior and exterior shading devices are encouraged.

5. Refuse and Servicing Areas

Walls or hedges are required as screening for a service yard, if any, to enclose all above-ground garbage and trash containers and other outdoor maintenance and service facilities.

6. Utilities and Exterior Equipment

All exterior onsite utilities including, but not limited to, sewers, gas lines, water lines, electrical, telephone and communication wires and equipment shall be installed and maintained underground wherever possible, as per Buffer Overlay Zone Ordinance 18.67.50 H. To minimize vegetative disturbance, the underground utilities shall be joint-trenched and located beneath the paved portions of roadways or within twenty-five feet of the edge of the pavement.
Solar panels should be "flush-mounted" onto roof plane or fully screened so as not to create any adverse visual impact from the surrounding areas. Natural silver aluminum frames are not permitted. Support solar equipment shall be enclosed and screened to reduce visibility.

If practical, exterior transformers, utility pads, cable television and telephone boxes shall be located out of view in public rights-of-way, or screened with walls, fences, or vegetation.

All utility and other public rights-of-way shall be landscaped and maintained.

C. Landscape

The Upland Sonoran Desert landscape setting is unique and can be dramatic. The land and vegetation forms are informal and asymmetrical. There is a subtleness with occasional angularities. Everything is exposed and has a sense of boldness.

The landscape theme for Sabino Springs Specific Plan area is to create a high desert backdrop as the community framework for all common and public areas. The plant palette is comprised of indigenous plants as listed on the Buffer Overlay Zone Ordinance Approved Plant List.
The objectives for the Landscape Guidelines are:

- Utilize a set landscape palette for public rights-of-ways, streets, parking lots, and setbacks.

- Establish landscape design guidelines for development of residential and community areas, including street trees, street furniture and view corridors.

- To achieve uniformity within the community, establish guidelines for the following categories:
  
  - Transplant Rating Criteria
  - Streetscapes
  - Entries
  - Project Edges
  - Hardscape Design elements
  - Drainageways
  - Retention/Detention

2. Streetscape

Internal streetscapes shall be designed so that the core road has a more formalized landscape element to provide a strong sense of community continuity and distinguish it from the residential collectors. Trees shall be selected from the Buffer Overlay Zone Approved Plant List.

The landscape character shall be of an enhanced desert corridor. This includes random clusters of trees, shrubs and groundcover native to the site. Preservation and transplanting onsite vegetation shall be done when feasible.
3. Entries

a. Primary Entry

The primary entry at the southern end of the property shall serve as the "front door" into the community. The design of the entry shall symbolically form a gateway and transition into the development. Special landscape treatment shall be used to emphasize and contrast the entryway with the rest of the environment.

The specialty components to create a sense of entry at this point may entail a combination of architectural elements and/or massing of trees to form symbolic gateways. Clear views for traffic safety and project signage must be maintained.

b. Secondary Entry

The secondary, or residential entry shall be similar treatments as the primary entries but smaller in scale. These entries are into individual residential projects within the Specific Plan area.
4. Project Edges

The perimeter edge of the project shall not be an abrupt edge. It shall be a transition to the surrounding landscape. The landscape concept for the perimeter is to develop a desert scene, creating a definition between the development and the surrounding environment. The southern edge, along with the lower east and west edge of the Specific Plan area shall contain landscaping and a wall treatment not higher than six feet.

The landscape treatment may include a naturalistic, desert design using plants appropriate to the site itself and B.O.Z.O.

The walls shall be constructed of material similar to the building materials and be consistent along the southern edge. Walls, semi-open in design may be constructed of materials such as stone pilasters with brick caps or similar materials that portray the image of the area.

5. Hardscape Design Elements

Hardscape design elements include lighting design and standards.

Onsite lighting shall be in conformance with the Buffer Overlay Zone, 18.67.050. E.I. All onsite street and parking lot lighting shall be shielded to reduce glare and dispersal of light onto neighboring sites. High pressure sodium and mercury vapor lighting shall be prohibited.

Tennis court light shall be also shielded to minimize or eliminate the dispersal of ambient light. High-pressure sodium lighting may be used for tennis courts.

6. Drainageways

The Open Space corridors shall maintain and/or be enhanced with native plant materials found within the area. The unchanneled, open space area in the eastern portion of the property shall be preserved in its natural state. Abutting disturbed areas, shall be revegetated/renaturalized with plant material indigenous to the area.
D. Signage Guidelines

The purpose of sign standards is to establish a framework of comprehensive guidelines that inform, direct and reflect the Sabino Springs Specific Plan community character. The signage guidelines following shall apply to all the developments within the Specific Plan area. It is intended that the application of these guidelines, in conjunction with the recommended character development guidelines will provide the structure for an integrated visual character and continuity throughout the buildout of the Plan area.

The character of the signage shall integrate with the surrounding desert ambiance. All signage shall conform to Pima County Sign Standards, Chapter 18.79. Color schemes shall relate to other signs and graphics in the vicinity to achieve an overall sense of identity. Appropriate colors are the same as those stated in the Architectural Guidelines.

General Signage Standards:

- As specified in the Buffer Overlay Zone, Chapter 18.67.050, G.3, "signage shall not be internally illuminated nor shall the source of illumination be visible from the public preserve."

- All light sources provided to illuminate signage shall be placed or directed away from public streets, highways, sidewalks or adjacent premises so as not to cause glare or reflection that may constitute a traffic hazard or nuisance.

- The exposed backs of all signs visible to the public shall be suitably covered, finished, properly maintained or screened by landscape planting.

- All signs shall be maintained in good repair, including display surface, which shall be kept neatly painted or posted.

- Any sign which does not conform to the provisions contained herein shall be made to conform or shall be removed.

- Directional signage shall direct a visitor to their destination in a safe, convenient and efficient manner. They may be located onsite and offsite provided they are not located within the public right-of-way. The number of such signs shall be determined on a case-by-case basis for each planning area as submitted for development plan review.
The Specific Plan entry monumentation signage shall be permitted at the southern key entry point as identified on the Landscape Plan, Exhibit V-P. For both the entry signage and secondary entries, appropriate material may include stone, brick, masonry, stucco and adobe.

E. Architectural Guidelines

Architectural guidelines are provided to ensure the integration of buildings with the natural setting and to maintain a cohesive community character. It is architectural designs that are most prominent in the built environment. The character of Sabino Springs Specific Plan is based on influences of the climate and the environmental setting. The guidelines are not intended to limit designs, but to provide a flexible framework to accomplish an overriding design concept.

The objectives of the architectural guidelines are:

- Establish architectural design criteria to give guidance on the desired external three dimensional building form, materials, and appearance.

- Encourage and utilize a high quality and variety of indigenous Arizona architectural styles to be constructed within the Sabino Springs Specific Plan area.

1. Exterior Character and Materials

Exterior building materials shall be consistent with the overall community character. Recommended major colors are subdued earthen colors such as browns, tans and greys with additional accent colors. As stated in the Buffer Overlay Zone chapter 18.67.50.C, exterior treatments will not include any highly reflective finishes and mechanical equipment shall be screened and painted to reduce visibility.

Recommended building material include, but are not limited to:

- Masonry
- Concrete block
- Stucco
- Adobe
- Slump block

Metal siding is not allowed.
2. Residential

Residential designs which complement and integrate with the surrounding environment are encouraged. Residential homes should be of simple geometry with traditional rectangular forms. The buildings should have shadow reliefs such as offsets, popouts, overhangs, and recesses.

No fences such as wood or T-11 is allowed.

3. Clubhouse/Community Building

Clubhouse architecture provides exciting opportunities to create quality community/recreational centers. The design shall integrate with the Sabino Springs Specific Plan community theme.

Roofs should be constructed of clay tile, slate, metal, concrete or asphaltic compound shingles with roof projections over windows.

Parking shall be located to the side and/or rear portion of the site, wherever possible. Parking lots shall be landscaped with a minimum of one shade tree per 10 stalls.

LANDSCAPED BERM TO SCREEN PARKING AREAS
VIII. SPECIFIC PLAN IMPLEMENTATION

A. Purpose

The regulations and guidance contained within the Specific Plan prescribes the implementation of development. Procedures for the administration of Specific Plan provisions are contained in this section, including the Phasing Plan for the development of the proposed planning areas. These planning areas define the type, location, intensity and timing of development. Programs for the projected sequence of development are also included. In order for the County to track the progress of Specific Plan development, associated improvements and budgetary needs, a fully developed monitoring program is provided.

This chapter also provides information regarding general administration, subdivision, amendment procedures, and the linkage between these elements. In addition to these provisions, the Sabino Springs Specific Plan will be implemented through the subdivision process. The subdivision process will allow for the creation of lots as tentative plat maps which will allow for implementation of the project phasing. The Sabino Springs Specific Plan, and other official County plan maps will guide the platting.

B. Definitions

Two entities must be identified in order to assign responsibility for implementation of the improvements for Sabino Springs. These entities are the master developer and the builder.

The master developer is the entity responsible for insuring that the basic infrastructure facilities are planned and constructed to serve the development areas within the Sabino Springs Specific Plan. Perini Land and Development Company is presently the master developer per the definition in Section V.

The builder is the purchaser of a development area, or portions of a development area, who will either build or provide for building within their areas of ownership.

C. General Implementation Responsibilities

Implementation of the Sabino Springs Specific Plan shall be the responsibility of the master developer and the builders, except as noted. The master
developer shall be responsible for engineering and implementation of the spine infrastructure systems. The spine infrastructure systems are defined as those systems which are necessary to provide development opportunities in the individual development areas. These systems include retention/detention basins, access roads, residential collectors and their associated streetscapes, trunk sewers, water mains, electric lines, gas lines and cable television facilities in the major streets. Once these spine infrastructure systems are put into place, the builder is responsible for implementation of facilities within each of the development area, as well as ancillary facilities within the spine infrastructure system that would be damaged or destroyed by secondary development if installed by the master developer.

Approval of a subdivision plat, development plan or building permit is subject, among other conditions, to the following requirements:

1. Conformance with the Sabino Springs Specific Plan as adopted.
2. Provision of development-related assurances as required by the applicable agencies.
3. Dedication of appropriate rights-of-way for roads and drainage by plat, or by separate instrument if the property is not to be subdivided.

D. Phasing Plan

In order to allow an adequate level of infrastructure to be built to accommodate new development, the Sabino Springs Specific Plan land uses will generally be developed in four phases, see Exhibit VIII-D. Market considerations have been considered in order to stagger the introduction of a variety of units onto the housing market.

Three assumptions have guided the preparation of the phasing plan for this development. These assumptions are:

1) The rate of growth for the Sabino Springs project will remain consistent and as calculated;

2) The rate of growth of other regional projects, which were used in assessing cumulative impacts and phased infrastructure and services, will remain consistent and as calculated; and

3) The market need for the proposed residential product type and mix will remain the same throughout the phasing period.
If any of these assumptions change during the project build-out horizon, the Phasing Plan and County monitoring program must be flexible enough to make adjustments. This flexibility will be especially important in relation to infrastructure and service requirements.

A block plat will be prepared to delineate the areas for development. As part of this process, natural areas, rights-of-ways and other common areas will be identified and dedicated wherever possible. Additional dedications and conservation easements will be granted at the time individual subdivision plats are approved for development areas.

The first phase provides the initial skeleton of the project. A significant level of infrastructure for the project will be completed during this phase.

The overall land use and phasing plan has been designed with two goals in mind; to minimize and buffer development from surrounding homeowners and to maximize the feasibility and economy of construction.

Phase 1: Land uses will include the Phase 1: Infrastructure (see Section VIII-E & F and Exhibit VIII E & F) and the following specific areas:

**PHASE 1:**

Phase 1 will include six residential planning areas (three internal to the project and three within the estate area), the 18-hole golf course, the clubhouse and recreational facilities.

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<th>PLANNING AREAS</th>
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<td>Recreational Facility (Tennis/Swim)</td>
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PHASE 2:

Phase 2 will include five residential planning areas, two are internal to the project, one is on the west/northwest side of the site and two are within the estate area.

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PHASE 3:

Phase 3 will include three residential planning areas, one is internal to the project and two are located on the southern boundary, adjacent to an existing subdivision.

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PHASE 4:

Phase 4, will include five planning areas; all five are internal to the project.

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PHASE 5:

Phase 5, the final phase, will involve two planning areas.

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The primary intention of the phasing plan is to relate land uses to infrastructure requirements of the proposed development. The phasing plan implies a building sequence, but there is nothing in this plan to preclude a different order of development, or a different combination of subphases, as long as the related infrastructure is adequately in place. This flexibility is insured by the Specific Plan due to the fact that the actual sequence of development may be affected by
external factors which are not controlled by the master developer.

Sewer facilities, water facilities, streets, drainage improvements and grading designed to serve the project will be constructed and extended as necessary to meet the requirements of the phased build-out of the project. A water master plan will be prepared and submitted by the Master Developer prior to final plat approval.

The master developer and builders shall be responsible for implementation of the Sabino Springs Specific Plan, except as noted. The master developer will be responsible for engineering and implementation of the spine infrastructure systems. These are defined as those systems which are necessary to provide for development of the individual land use areas. These include:

- primary streets
- off-site sewer
- on-site sewer within primary streets
- water distribution within primary streets
- supplemental spine water facilities as determined by the master plan
- utilities within primary streets

The builder is responsible for implementation of facilities within each of the development areas, as well as ancillary facilities within the spine infrastructure system that would be damaged or destroyed by secondary development if installed by the master developer.

Minor modifications to the boundaries and acreage of planning areas, adjustments because of final road alignments, drainage (including retention/detention) and golf course design will occur during technical refinements in the tentative plat map process and shall not require an amendment to the Specific Plan. Maximum dwelling units per cumulative planning area will not be affected by these modifications. The Sabino Springs Specific Plan residential dwelling unit maximum shall be 516.
E. Circulation Phasing Plan

The circulation system will be implemented in two phases, Exhibit VIII-E, to respond to Phase 1 and 2 of the Land Use Phasing Plan. The required major street improvements as shown on the Specific Plan Circulation Map will be provided by the master developer to Pima County standards prior to the release of assurances or certificates of occupancy.

F. Public Facilities Phasing Plan

1. Sewer System Implementation

Off-site Sanitary Sewers: The master developer will construct the off-site sewer conveyance facilities required to provide service to the Sabino Springs Specific Plan area. Onsite sewer collection facilities, generally located within the primary street system, will also be implemented. Phasing of the sewer construction will generally coincide with the phasing of the streets. See Exhibit VIII-F.1.

On-site Sanitary Sewers: The master developer will be responsible for providing sewer lines, within the primary street system adjacent to each planning area, of an adequate size for the development of those planning areas. Stub lines terminated with manholes, will be installed from the primary system to each planning area/block at the time the primary street system is constructed. The builder(s) will be responsible for installation of manholes in the sewer line which are necessary to provide points of connection and the extension of facilities throughout the planning system. See Exhibit VIII-F.1.

2. Water Distribution System: Water service and storage facilities for the project will be provided by the City of Tucson. The master developer will be responsible for installation of water mains in the primary street system. Construction of the water system shall be phased in accordance with the phasing plan. The builder(s) will be responsible for the installation of water facilities throughout the planning areas. See Exhibit VIII-F.2.

3. Utilities: Electric, telephone, gas and cable television utilities shall be provided in compliance with the tariffs of the utility companies, maintaining the various improvements and the regulations and provisions of the Arizona Corporation Commission. Utility phasing will be determined by each utility company according to their requirements.
G. **Monitoring Program**

**Land Uses:** The Specific Plan Monitoring Program is designed to provide assurances to the County and the developer that the Specific Plan is operating properly as the development is built out. The monitoring program for this Specific Plan will serve two functions. The first function is to establish a system of monitoring the phasing of development and the implementation of corresponding infrastructure. The second function of the program is to establish a system which allows periodic adjustments within the project planning area. This system provides mechanisms for accomplishing and documenting these adjustments. The monitoring program effectively establishes an accounting system to insure that all changes, upon approval, are properly recorded at the scale of the total project and each planning area reflected in this Specific Plan.

The first phase of project monitoring deals with phasing of development and the implementation of corresponding required infrastructure. This program will ensure that the required infrastructure is in place at the completion of each phase. The phasing plan is responsive to the needed services for each level of development. Each individual phase has a corresponding monitoring sheet which indicates the required facilities and services which are to be completed with the phasing of planning areas.

In order to accommodate possible changes and to insure conformance with adopted County Code and the Buffer Overlay Zone Ordinance, the following provisions shall guide and govern incremental allocation and provision of residential dwelling units within the project area.

1. The overall assigned dwelling unit yield of 516 residential dwelling units shall not be exceeded.

2. A development plan or plat shall be submitted to the County for review and approval prior to development occurring in any development area. Such plans shall be consistent with this Specific Plan and are subject to conditions of approval set forth by the County.
3. All drafts of such tables and the final approved version shall be identified by a revision date located in the title block. Said table shall be a part of the adopting ordinance.
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<tr>
<th>PHASE NO.</th>
<th>PLANNING AREA</th>
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</tr>
<tr>
<td>3</td>
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<td></td>
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<tr>
<td>4</td>
<td></td>
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<td></td>
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<tr>
<td>5</td>
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<td></td>
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<tr>
<td>6</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL** 496

Note: Estate lots within development category RA-1 will not exceed 45 dwelling units.
4. The Planning Director shall cause to be established and maintained an official project file for the Sabino Springs Specific Plan, which contains an original and certified copy of every revision to the Specific Plan, including a record of dwelling unit potential remaining in each development area.

H. Site Plan Review Procedures

The Specific Plan shall be implemented through the review process of development plans and/or plats (Pima County Subdivision Ordinance). The review process shall include the developer and the County. A plan will be required for all development within the Specific Plan area requiring a building permit in accordance with the Pima County Subdivision Code, 18.69.

All proposed projects within the Specific Plan area shall be required to have an approved plat prior to issuance of building permits or concurrent with subdivisions, conditional use permits or any other Pima County permit for the property. The plan review procedure is necessary for the following reasons:

1. To ensure consistency with the Specific Plan, the Comprehensive Land Use Plan, the Buffer Overlay Zone Ordinance and all implementing ordinances.

2. To promote the highest contemporary standards of site design.

3. To adapt to specific or special development conditions that occur from time to time while continuing to implement the Specific Plan and conform development to the Comprehensive Land Use Plan, the Buffer Overlay Zone Ordinance and implementing ordinances.

4. To facilitate complete documentation of authorized land use entitlements and pertinent conditions.

5. To adapt to substantial changes that may occur with respect to the circumstances under which the project is undertaken.

I. Substantial Change

The Sabino Springs Specific Plan shall be administered and enforced by Pima County Planning and Development Services Department in accordance with the provisions of the Pima County Zoning Code.
Certain changes to explicit provisions in the Specific Plan may be made administratively by the Planning Director, subject to appeal to the Planning Commission and, subsequently, the Board of Supervisors.

a. The addition of new information to the Specific Plan maps or text that does not change the effect of any regulations or guidelines.

b. Changes to the community infrastructure, such as drainage, water and sewer systems which do not have the effect of increasing or decreasing development capacity in the Specific Plan area, nor change the concepts of the Plan.

c. The determination that a use be allowed which is not specifically listed as permitted, but which may be determined to be similar in nature to those uses explicitly listed as permitted, is made by the Chief Zoning Inspector.
APPENDIX A

BIBLIOGRAPHY


Arizona Department Game and Fish, 1988 *Threatened Native Wildlife in Arizona.* Arizona Department of Game and Fish Publication, Phoenix, Arizona.


APPENDIX A  Continued

Pima County Transportation and Flood Control District, Critical and Balanced Basin Map, 1989.

Pima County Transportation and Flood Control District Subdivision Street Standards. Map 1989.

Pima County Wastewater Base Maps, 1989.


APPENDIX B

LEGAL DESCRIPTION OF PLAN BOUNDARY
for the Sabino Springs Specific Plan

A portion of Section 14, Township 13 South, Range 15 East, Gila and Salt River Base and Meridian, Pima County Arizona and being more particularly described as follows:

Beginning at the northwest corner of said section 14:

Thence south 01° 19' 22" E upon the west line of said section 14, a distance of 1317.90 feet to the northwest corner of GLO lot 4:

Thence north 89° 50' 26" east upon the north line of said GLO lot 4, a distance of 30.01 feet to the TRUE POINT OF BEGINNING;

Thence S 01° 19'22" E a distance of 1312.58 feet;
Thence S 03° 29'58" E a distance of 627.84 feet;
Thence N 89° 01'35" E a distance of 1310.52 feet;
Thence S 02° 54'43" E a distance of 635.20 feet;
Thence N 89° 23'07" E a distance of 1334.42 feet; to a point on the north-south mid section. The South 1/4 corner bear S 02°20'21" E at 1286.77 feet.

Thence N 89° 23'48" E a distance of 2591.38 feet;
Thence N 03° 10'43" W a distance of 1319.92 feet;
Thence N 01° 34'27" W a distance of 1203.17 feet;
Thence S 89° 54'53" W a distance of 169.99 feet;
Thence N 01° 34'27" W a distance of 200.00 feet;
Thence N 89° 54'53" E a distance of 200.00 feet;
Thence N 01° 34'27" W a distance of 1119.29 feet; to the northeast corner of said section.

Thence S 89° 58'45" W a distance of 2637.49 feet;
Legal Description
Sabino Springs Spec. Plan
Page Two

Thence S 89° 44'56" W a distance of 1323.64 feet;
Thence S 01° 50'05" E a distance of 1073.84 feet;
Thence N 89° 33'35" W a distance of 666.85 feet;
Thence S 01° 34'44" E a distance of 253.42 feet; to a point on the north line of G.L.O. Lot 4.

Thence S 89° 50'27" W a distance of 637.74 feet; to the TRUE POINT OF BEGINNING.

Said parcel contains: 17,844,587 sq. ft. or 409.65 acres.
Legal Description

TRACT 4:

THE WEST HALF OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF
SECTION 14, TOWNSHIP 13 SOUTH, RANGE 15 EAST, GILA AND SALT RIVER
MERIDIAN, PIMA COUNTY, ARIZONA.

EXCEPT THAT CERTAIN ROADWAY CONVEYED TO SABINO SPRINGS HOMEOWNERS
ASSOCIATION BY DEEDRecordedJULY 29, 1993, IN DOCKET 9594, PAGE 2005.

EXCEPT ALL OIL AND GAS AS RESERVED IN THE PATENT FROM THE UNITED STATES OF
AMERICA.
### APPENDIX D

**Average Cross Slope Calculation**

<table>
<thead>
<tr>
<th>Contour</th>
<th>Linear Footage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3080</td>
<td>200</td>
</tr>
<tr>
<td>3070</td>
<td>280</td>
</tr>
<tr>
<td>3060</td>
<td>320</td>
</tr>
</tbody>
</table>

**Average Cross Slope Calculation**

<table>
<thead>
<tr>
<th>Contour</th>
<th>Linear Footage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3050</td>
<td>440</td>
</tr>
<tr>
<td>3040</td>
<td>480</td>
</tr>
<tr>
<td>3030</td>
<td>560</td>
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<tr>
<td>3020</td>
<td>620</td>
</tr>
<tr>
<td>3010</td>
<td>640</td>
</tr>
<tr>
<td>3000</td>
<td>1,240</td>
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<td>2990</td>
<td>1,820</td>
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<tr>
<td>2980</td>
<td>2,560</td>
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<td>2970</td>
<td>3,360</td>
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<td>4,000</td>
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<td>2950</td>
<td>4,240</td>
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<td>2870</td>
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<td>2850</td>
<td>7,280</td>
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<td>2800</td>
<td>6,660</td>
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<td>2790</td>
<td>7,540</td>
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<tr>
<td>2780</td>
<td>8,620</td>
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<tr>
<td>2770</td>
<td>8,540</td>
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<td>2760</td>
<td>9,120</td>
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<tr>
<td>2750</td>
<td>10,700</td>
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<tr>
<td>2740</td>
<td>11,060</td>
</tr>
</tbody>
</table>
APPENDIX D Continued

**Average Cross Slope Calculation Continued**

<table>
<thead>
<tr>
<th>Contour</th>
<th>Linear Footage</th>
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<tbody>
<tr>
<td>2730</td>
<td>9,960</td>
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<td>7,860</td>
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<tr>
<td>2710</td>
<td>5,500</td>
</tr>
<tr>
<td>2700</td>
<td>2,600</td>
</tr>
</tbody>
</table>

194,440 TOTAL LINEAR FEET

**Equation:**

\[
\frac{(10) \times (194,400) \times (.0023)}{(409.65 \text{ Acres})} = 10.92\% \text{ Average Cross Slope}
\]
APPENDIX E

TABLE 1
VASCULAR PLANT SPECIES OBSERVED ON THE PROPERTY
(continued)

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Percent Cover (Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shrubs (cont.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creosote bush</td>
<td><em>Larrea tridentata</em></td>
<td>0-10%</td>
</tr>
<tr>
<td>Desert thorn bush</td>
<td><em>Lycium berlandieri var. longistyllum</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Lycium andersonii</em></td>
<td></td>
</tr>
<tr>
<td>Subshrubs and Herbs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canyon ragweed</td>
<td><em>Ambrosia ambrosiodes</em></td>
<td></td>
</tr>
<tr>
<td>Western ragweed</td>
<td><em>Ambrosia psilastachya</em></td>
<td></td>
</tr>
<tr>
<td>Desert marigold</td>
<td><em>Baileya multiradiata</em></td>
<td></td>
</tr>
<tr>
<td>Desert senna</td>
<td><em>Cassia covesii</em></td>
<td></td>
</tr>
<tr>
<td>Pincushion</td>
<td><em>Chaenactis macrantha</em></td>
<td></td>
</tr>
<tr>
<td>Thistle</td>
<td><em>Cirsium neomexicanum</em></td>
<td></td>
</tr>
<tr>
<td>Horseweed</td>
<td><em>Conyza canadensis</em></td>
<td></td>
</tr>
<tr>
<td>Cryptantha</td>
<td><em>Cryptantha sp.</em></td>
<td></td>
</tr>
<tr>
<td>Jimmisonweed</td>
<td><em>Daunia discolor</em></td>
<td></td>
</tr>
<tr>
<td>American carrot</td>
<td><em>Daucus pusillus</em></td>
<td></td>
</tr>
<tr>
<td>Dogweed</td>
<td><em>Dysodia pentachaeta</em></td>
<td></td>
</tr>
<tr>
<td>Buckwheat</td>
<td><em>Eriogonum sp.</em></td>
<td></td>
</tr>
<tr>
<td>Filaree</td>
<td><em>Erodium sp.</em></td>
<td></td>
</tr>
<tr>
<td>Snake weed</td>
<td><em>Gutierrezia serotina</em></td>
<td></td>
</tr>
<tr>
<td>Spiny haploppappus</td>
<td><em>Haploppappus spinulosus var. australis</em></td>
<td></td>
</tr>
<tr>
<td>Rush</td>
<td><em>Juncus sp.</em></td>
<td></td>
</tr>
<tr>
<td>Duckweed</td>
<td><em>Lemna sp.</em></td>
<td></td>
</tr>
<tr>
<td>Sand pepper grass</td>
<td><em>Lepidium lasiocarpum</em></td>
<td></td>
</tr>
<tr>
<td>Monkey-flower</td>
<td><em>Mimulus glabratris var. glabratris</em></td>
<td></td>
</tr>
<tr>
<td>Mistletoe</td>
<td><em>Phoradendron californicum var. californicum</em></td>
<td></td>
</tr>
<tr>
<td>Wooly plantain Odora</td>
<td><em>Plantago insularis var. fastigiata</em></td>
<td></td>
</tr>
<tr>
<td>Devil's claw</td>
<td><em>Porophyllum gracile</em></td>
<td></td>
</tr>
<tr>
<td>Cooper's paperflower</td>
<td><em>Proboscidea arenaria</em></td>
<td></td>
</tr>
<tr>
<td>Chia</td>
<td><em>Psilostrophe cooperi</em></td>
<td></td>
</tr>
<tr>
<td>Spike moss</td>
<td><em>Salvia columbariae</em></td>
<td></td>
</tr>
<tr>
<td>Sow thistle</td>
<td><em>Selaginella arizonica</em></td>
<td></td>
</tr>
<tr>
<td>Desert mallow</td>
<td><em>Sonchus oleraceus</em></td>
<td></td>
</tr>
<tr>
<td>Desert straw</td>
<td><em>Sphaeralcea ambugua</em></td>
<td></td>
</tr>
<tr>
<td>London-rocket</td>
<td><em>Stephanomeria pauciflora</em></td>
<td></td>
</tr>
<tr>
<td>Trixis</td>
<td><em>Systirium irio</em></td>
<td></td>
</tr>
<tr>
<td>Cattail</td>
<td><em>Trixis californica</em></td>
<td></td>
</tr>
<tr>
<td>Gooodding verbena</td>
<td><em>Typha domingensis</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Verbena gooddingii</em></td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX E

### TABLE 1

**VASCULAR PLANT SPECIES OBSERVED ON THE PROPERTY**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Percent Cover (Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cactus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saguaro</td>
<td><em>Cereus giganteus</em></td>
<td>2-5%</td>
</tr>
<tr>
<td>Hedgehog cactus</td>
<td><em>Echinocereus fasciculata var. fasciculata</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Echinocereus engelmannii var. engelmannii</em></td>
<td></td>
</tr>
<tr>
<td>Barrel cactus</td>
<td><em>Ferocactus wislizenii</em></td>
<td></td>
</tr>
<tr>
<td>Fishhook cactus</td>
<td><em>Mammillaria microcarpa</em></td>
<td></td>
</tr>
<tr>
<td>Buckhorn cholla</td>
<td><em>Opuntia acanthocarpa var. major</em></td>
<td></td>
</tr>
<tr>
<td>Teddy bear cholla</td>
<td><em>Opuntia bigelovii</em></td>
<td></td>
</tr>
<tr>
<td>Jumping cholla</td>
<td><em>Opuntia fulgida var. fulgida</em></td>
<td></td>
</tr>
<tr>
<td>Desert Christmas cactus</td>
<td><em>Opuntia fulgida var. mammillata</em></td>
<td></td>
</tr>
<tr>
<td>Prickly pear</td>
<td><em>Opuntia phaeacantha var. discata</em></td>
<td></td>
</tr>
<tr>
<td>Cane cholla</td>
<td><em>Opuntia phaeacantha var. major</em></td>
<td></td>
</tr>
<tr>
<td>Staghorn cholla</td>
<td><em>Opuntia spinosior</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Opuntia versicolor</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total for all cacti species = 5-35%</td>
<td></td>
</tr>
<tr>
<td><strong>Trees</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foothill palo verde</td>
<td><em>Cercidium microphyllum</em></td>
<td>2-25%</td>
</tr>
<tr>
<td>Cottonwood</td>
<td><em>Populus fremontii</em></td>
<td></td>
</tr>
<tr>
<td>Mesquite</td>
<td><em>Prosopis juliflora var. velutina</em></td>
<td>2-100%</td>
</tr>
<tr>
<td>Black willow</td>
<td><em>Salix gooddingii</em></td>
<td></td>
</tr>
<tr>
<td><strong>Shrubs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whitethorn acacia</td>
<td><em>Acacia constricta</em></td>
<td>1-15%</td>
</tr>
<tr>
<td>Catclaw</td>
<td><em>Acacia gregii</em></td>
<td></td>
</tr>
<tr>
<td>Triangle-leaf bursage</td>
<td><em>Ambrosia deltoidea</em></td>
<td>0-20%</td>
</tr>
<tr>
<td>Saltbush</td>
<td><em>Atriplex canescens</em></td>
<td></td>
</tr>
<tr>
<td>Desert broom</td>
<td><em>Baccharis sarothroides</em></td>
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</tr>
<tr>
<td>Fairyduster</td>
<td><em>Calliandra eriophylla</em></td>
<td></td>
</tr>
<tr>
<td>Hackberry</td>
<td><em>Celis ptilida</em></td>
<td>0-10%</td>
</tr>
<tr>
<td>Graythorn bush</td>
<td><em>Condaliaopsis tucoides</em></td>
<td>0-5%</td>
</tr>
<tr>
<td>Coursetia</td>
<td><em>Coursietia glandulosa</em></td>
<td></td>
</tr>
<tr>
<td>Brittlebush</td>
<td><em>Encelia farinosa</em></td>
<td>0-5%</td>
</tr>
<tr>
<td>Long-leaved joint-fir</td>
<td><em>Ephedra trifurca</em></td>
<td></td>
</tr>
<tr>
<td>Ocotillo</td>
<td><em>Fouquieria splendens</em></td>
<td></td>
</tr>
<tr>
<td>Burrobush</td>
<td><em>Hymenoclea salsola</em></td>
<td>5-20%</td>
</tr>
<tr>
<td>Burroweed</td>
<td><em>Haploappus tenissectus</em></td>
<td>5-30%</td>
</tr>
</tbody>
</table>
## APPENDIX E

### TABLE 1
VASCULAR PLANT SPECIES OBSERVED ON THE PROPERTY
(continued)

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Percent Cover (Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subshrubs and Herbs (cont.)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jackass clover</td>
<td><em>Wislizenia refracta var. refracta</em></td>
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</tr>
<tr>
<td>Common cocklebur</td>
<td><em>Xanthium strumarium</em></td>
<td></td>
</tr>
<tr>
<td>Desert zinnea</td>
<td><em>Zinnea acerosa</em></td>
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</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total for all species=1-50%</strong></td>
</tr>
<tr>
<td><strong>Grasses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triple-awn grass</td>
<td><em>Aristida adscensionis</em></td>
<td></td>
</tr>
<tr>
<td>Slender oat</td>
<td><em>Avena barbata</em></td>
<td></td>
</tr>
<tr>
<td>Red brome</td>
<td><em>Bromus rubens</em></td>
<td></td>
</tr>
<tr>
<td>Bermuda grass</td>
<td><em>Cynodon dactylon</em></td>
<td></td>
</tr>
<tr>
<td>Desert saltgrass</td>
<td><em>Distichlis stricta</em></td>
<td></td>
</tr>
<tr>
<td>Muhiy</td>
<td><em>Muhlenbergia porteri</em></td>
<td></td>
</tr>
<tr>
<td>Fountain grass</td>
<td><em>Pennisetum sp.</em></td>
<td></td>
</tr>
<tr>
<td>Common reed</td>
<td><em>Phragmites communis</em></td>
<td></td>
</tr>
<tr>
<td>Bluegrass</td>
<td><em>Poa scabrella</em></td>
<td></td>
</tr>
<tr>
<td>Rabbitfoot grass</td>
<td><em>Polypogon monspelensis</em></td>
<td></td>
</tr>
<tr>
<td>Arabian grass</td>
<td><em>Schismus arabicus</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total for all species=0-2%</strong></td>
</tr>
</tbody>
</table>

Nomenclature follows Shreve and Wiggans (1964); Benson 1981.

Note: Cover values were estimated in the field by visual analysis. Values are given for dominant species, and where no one species was dominant, a total value for the growth form is provided.
## APPENDIX F

### WILDLIFE SPECIES OBSERVED

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Habitat</th>
<th>Number Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reptiles and Amphibians</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zebra-tailed lizard</td>
<td>Callisaurus draconellus</td>
<td>SIDS</td>
<td>3</td>
</tr>
<tr>
<td>Regal horned lizard</td>
<td>Phrynosoma solare</td>
<td>SIDS</td>
<td>1</td>
</tr>
<tr>
<td>Side-blotched lizard</td>
<td>Uta stansburiana</td>
<td>SIDS</td>
<td>4</td>
</tr>
<tr>
<td>Arizona desert whiptail</td>
<td>Cnemidophorus getulus</td>
<td>SIDS</td>
<td>1</td>
</tr>
<tr>
<td>Whiptail</td>
<td>Cnemidophorus sp.</td>
<td>SIDS</td>
<td>10</td>
</tr>
<tr>
<td>Tiger rat snake</td>
<td>Crotalus terrificus</td>
<td>SIDS</td>
<td>1</td>
</tr>
<tr>
<td><strong>Mammals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bat</td>
<td>At least 3 species; unidentifiable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coyote</td>
<td>Canis latrans</td>
<td>O.CMC,CM,FW,SIDS</td>
<td>6</td>
</tr>
<tr>
<td>Gray fox</td>
<td>Urocyon cinereoargenteus</td>
<td>C.FCM,FW,SIDS</td>
<td></td>
</tr>
<tr>
<td>Kit fox</td>
<td>Vulpes macrotis</td>
<td>SIDS</td>
<td>1 den</td>
</tr>
<tr>
<td>Bobcat</td>
<td>Lynx rufus</td>
<td>C.FCM.SIDS.W</td>
<td></td>
</tr>
<tr>
<td>Valley pocket gopher</td>
<td>Thomomys bottae</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Harris' antelope</td>
<td>Anomalo prvialis harridi</td>
<td>O.G.O,SIDS,W</td>
<td>7</td>
</tr>
<tr>
<td>Ground squirrel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kangaroo rat</td>
<td>Dipodomys spp.</td>
<td>CACCS,SIDS</td>
<td></td>
</tr>
<tr>
<td>Mouse</td>
<td>Peromyscus spp.</td>
<td>CACCS,SIDS</td>
<td></td>
</tr>
<tr>
<td>White-tailed woodrat</td>
<td>Neotoma albigula</td>
<td>CACCS,SIDS</td>
<td>1</td>
</tr>
<tr>
<td>Porcupine</td>
<td>Erythrix dorsata</td>
<td>SIDS</td>
<td></td>
</tr>
<tr>
<td>Black-tailed jay</td>
<td>Lepus californicus</td>
<td>O.C.S.SIDS</td>
<td>1</td>
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<tr>
<td>Desert cottontail rabbit</td>
<td>Sylvilagus auduboni</td>
<td>C.F.C.M.C.C,OG,SIDS</td>
<td>10</td>
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<tr>
<td>Mule deer</td>
<td>Odocoileus hemionus</td>
<td>C.F.C.M.C.C,SIDS,W</td>
<td>3</td>
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<tr>
<td><strong>Birds</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey vulture</td>
<td>Cathartes aura</td>
<td>All</td>
<td>4</td>
</tr>
<tr>
<td>Red-tailed hawk</td>
<td>Buteo jamaicensis</td>
<td>All</td>
<td>1</td>
</tr>
<tr>
<td>American kestrel</td>
<td>Falco sparverius</td>
<td>A.G.S.ISU</td>
<td></td>
</tr>
<tr>
<td>Mourning dove</td>
<td>Zenaida macroura</td>
<td>A.C.M.C.R.U,W,S,SIDS</td>
<td>11</td>
</tr>
<tr>
<td>White-winged dove</td>
<td>Zenaida asiatica</td>
<td>SIDS,W</td>
<td>Many</td>
</tr>
<tr>
<td>Greater roadrunner</td>
<td>Geococcyx californianus</td>
<td>CACCS,SIDS</td>
<td></td>
</tr>
<tr>
<td>Great banded owl</td>
<td>Bubo nigrogularis</td>
<td>A.G.O.S,S,R,W,U</td>
<td>1</td>
</tr>
<tr>
<td>Gambel's quail</td>
<td>Callipepla gambelii</td>
<td>SIDS</td>
<td></td>
</tr>
<tr>
<td>Elf owl</td>
<td>Microhyla whistula</td>
<td>SIDS</td>
<td>1</td>
</tr>
<tr>
<td>White-throated swift</td>
<td>Acanthisitta caytonia</td>
<td>CHER</td>
<td></td>
</tr>
<tr>
<td>Anna's hummingbird</td>
<td>Archilochus colubris</td>
<td>CACCS,S,R,S,SIDS,A</td>
<td>2</td>
</tr>
<tr>
<td>Gila woodpecker</td>
<td>Melanopseus angustilis</td>
<td>O.W.S.IS</td>
<td></td>
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<tr>
<td>Common flicker</td>
<td>Colaptes auratus</td>
<td>A.F.C.M.C.R.W.U,SIDS</td>
<td>24</td>
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<tr>
<td>Cassin's kingbird</td>
<td>Trachyphonus rufus</td>
<td>CACCS,W</td>
<td>3</td>
</tr>
<tr>
<td>Vidette-groove swallow</td>
<td>Tachyphonus bicoloratus</td>
<td>A.G.O.U,W</td>
<td></td>
</tr>
<tr>
<td>Barn swallow</td>
<td>Hirundo rustica</td>
<td>A.P.M.O.R.W,W,E</td>
<td>3</td>
</tr>
<tr>
<td>Common raven</td>
<td>Corvus corax</td>
<td>CACCS,S,S,G,O,S,D,R,W,E</td>
<td>1</td>
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<tr>
<td>Vireo</td>
<td>Arctornis nuchalis</td>
<td>SIDS</td>
<td>19</td>
</tr>
<tr>
<td>Bushtit</td>
<td>Pycnonotus sinuatus</td>
<td>CACCS,R,W,S,SIDS</td>
<td></td>
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<tr>
<td>Canary</td>
<td>Cryptospalax brachyotis</td>
<td>CACCS,S</td>
<td>9</td>
</tr>
<tr>
<td>Curve-billed thrasher</td>
<td>Tachoma curvirostris</td>
<td>CACCS,S,S</td>
<td>16</td>
</tr>
<tr>
<td>Black-throated nietra</td>
<td>Parorepsis melanura</td>
<td>SIDS</td>
<td>4</td>
</tr>
<tr>
<td>American goldfinch</td>
<td>Carduelis tristis</td>
<td>A.G.R,W</td>
<td></td>
</tr>
<tr>
<td>Northern cardinal</td>
<td>Carduelis cinctus</td>
<td>SIDS</td>
<td>6</td>
</tr>
<tr>
<td>Pinyon jay</td>
<td>Cryptospalax montanus</td>
<td>SIDS</td>
<td>7</td>
</tr>
<tr>
<td>House finch</td>
<td>Cistothorus mexicanus</td>
<td>A.C.O,S,S,SU,R,W,S</td>
<td>8</td>
</tr>
<tr>
<td>Lucy's warbler</td>
<td>Vireo luciae</td>
<td>R.W.S</td>
<td></td>
</tr>
<tr>
<td>Magpie-stripped finch</td>
<td>Geospiza aberti</td>
<td>W.S</td>
<td>4</td>
</tr>
<tr>
<td>Wilson's warbler</td>
<td>Wilsonia pusilla</td>
<td>R.W,R,S,SIDS</td>
<td></td>
</tr>
<tr>
<td>Black-throated sparrow</td>
<td>Ammodramus bilineatus</td>
<td>SIDS</td>
<td></td>
</tr>
<tr>
<td>Brown-headed cowbird</td>
<td>Molothrus ater</td>
<td>A.D.R,W</td>
<td>6</td>
</tr>
<tr>
<td><strong>Introduced Species</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European starling</td>
<td>Sturnus vulgaris</td>
<td>O.U.AA</td>
<td></td>
</tr>
</tbody>
</table>

**Habitats**

- **A** = Agriculture
- **C** = Coastal waters
- **CD** = Coastal dune
- **CF** = Coastal forest
- **CMC** = Coastal mixed chaparral, mixed chaparral, coastal chaparral
- **CS** = Coastal sage scrub, inland sage scrub
- **DD** = Desert dunes
- **F** = Flying overhead
- **FM** = Freshwater marsh
- **FW** = Foreshore woodland D-Bays
- **G** = Grassland, pasturelands, etc.
- **HSS** = Inland sage scrub
- **M** = Meadis and wetlands
- **Mu** = Mud flats
- **O** = Open places, waste places, roadbeds, burns, etc.
- **OW** = Open water (reservoirs, ponds, streams, lakes)
- **P** = Palisic
- **RW** = Riparian woodland
- **SIDS** = Saltmarsh
- **StM** = Saltmarsh
- **U** = Urban
- **W** = Woodlands

**NOTE:** Underlined habitats are those in which the species was observed.
Ms. Nancy Nicolai  
Ecologist  
RECON  
2922 N. 70th Street  
Scottsdale, AZ 85251

Dear Ms. Nicolai:

Re: Nongame Database request; T13S, R15E, Section 14.

In response to your request dated May 18, 1989, we have accessed the Department's Nongame Data Management System for the above-referenced locality. The following special status species have been documented in the project vicinity.

- **Tumamoc macdougallii** (Tumamoc globeberry) – Federal listed Endangered. Documented west of the site in Sabino Canyon.

- **Xerobates agassizii** (Desert tortoise) – State candidate species and a Federal candidate Category 2 species. Suitable habitat occurs in undisturbed areas throughout section 14.

In addition to these species, the project area contains several drainages, including Tres Lomas Wash and Woodland Wash, which are classified as Class I riparian habitats by Pima County. These washes provide high quality habitat for many species of wildlife, especially migratory birds, and also function as wildlife movement corridors into the relatively protected lands within the Coronado National Forest. Development plans for this area should stress the retention of these washes as wildlife habitat and open space.

We appreciate the opportunity to comment on this proposal. If we can be of further assistance, please contact Mr. Rick Gerhart, Tucson Habitat Evaluation Specialist, at (602) 628-5376.

Sincerely,

Robert K. Weaver  
Habitat Evaluation Coordinator  
Planning and Evaluation Branch

cc: Gerry Perry, Supervisor, Tucson Regional Office
APPENDIX G

Arizona State Game & Fish Letter

THE STATE OF ARIZONA

GAME & FISH DEPARTMENT
2211 West Greenway Road, Phoenix, Arizona 85023-4399 (602) 542-3000
155 N. Greenwood Rd., Tucson, AZ. 85745 (602) 628-8374

9 March 1995

Ms. Kelly Butowinski
The Planning Center
450 W. Paso Redondo, Ste. 202
Tucson, Arizona 85701

Re: Site Analysis Information for 20-Acre Parcel Bounded by Sabino Springs Specific Plan Area an Snyder Road; T13S, R15E, Section 14.

Dear Ms. Butowinski:

The Arizona Game & Fish Department (Department) has reviewed the above-referenced project for potential impacts to special status species, habitats of special concern, and wildlife resources in the project area. Due to time and personal constraints, we were unable to do an on-the-ground review of resource conditions; comments are based on review of aerial photographs and other reference material.

Information contained in Region V's special status species database is dynamic and is updated on a periodic basis. Any information, therefore, is likely to become outdated shortly after its release. Such information is intended to serve as a guide regarding what species may be found in a particular area. It does not represent the results of comprehensive species-specific surveys. These comments provide the context from which to evaluate the information provided below.

The area is known to support Sonoran desert tortoise (Gopherus agassizii). This tortoise is a federal Category 2 Candidate species and a Candidate for inclusion on the State's list of Threatened Native Wildlife in Arizona. It is generally found in rocky foothills, semi-desert scrublands, bajadas, and creosote flats. Guidelines for handling desert tortoise encountered on development-related projects are enclosed.

Gila monsters (Heloderma suspectum) are also known to occur in the area. Like other 'prohibited wildlife' species, Gila monsters cannot be collected (alive or dead), imported, sold, leased, or offered for sale except under very specific circumstances. In the
Ms. Butwinski
9 March 1995

Sonoran Desert, habitat includes saguaro - palo verde communities and riparian areas.

According to Pima County's 1986 Map of Critical and Sensitive Wildlife Habitats, a major northeast-southwest riparian corridor, designated as Class I habitat, crosses the project site. Upland areas support a saguaro - palo verde vegetation community which is recognized as Class II wildlife habitat.

The Department understands that this property is to be developed according to the conditions and requirements set forth in the Sabino Springs Specific Plan. As required by the Specific Plan, the Department provided guidance in the development of procedures designed to minimize impacts to wildlife during the time of construction (Reference A Protocol for Dealing With Wildlife at Sabino Springs Development, Tucson, Arizona - June 1994; prepared by Doctors Wm. Shaw and Lisa Harris). The Department believes that the application of this protocol effectively reduces the potential impacts to wildlife resources.

The Specific Plan also states that Class I Wildlife Habitat shall not be disturbed. Extending this standard to the unnamed Class I wash that occurs on this project site will minimize the potential for development-related impacts to degrade the wash's hydrological and biological functions.

The Department further recommends that all revegetation and plant salvage activities conform to those standards set forth in the Specific Plan.

Sincerely,

Sherry A. Ruther
Habitat Specialist
Tucson Regional Office

SAR: sr
CAPACITY RESPONSE NO. B9-45

Dear Ms. Ogata:

We have reviewed your request of August 10, 1989 regarding the availability of sewer service for the following proposed use and property:

Residential Community with a golf course and appurtenant recreational facilities on 405 acres located north of Snyder Road between Bowes and Houghton Road.

Under existing conditions (actual developments and commitments for service through approved Sewer Service Agreements), there is capacity for this proposed development in the downstream sewerage system and in the existing 8 inch line (S-500) in Vallarta Drive at Bowes Road, the 8 inch line (S05-109) in Bowes Road at Sabino High School and the 8 inch line (S-435-3) at Tierra Alta Drive and Wolford Road.

Depending on densities, it may be necessary to distribute wastewater flows among the above referenced sewer lines.

This response is not to be construed as a commitment for conveyance capacity allocation, but rather an analysis of the existing sewerage system as of this date.

Should you desire to enter into a Sewer Service Agreement, a Development Plan or Tentative Plat, showing the preliminary sewer layout for the proposed project, must be submitted and approved.

To qualify as a public conveyance system, flow must be by gravity to an existing public sewer system.

Should you desire additional information regarding this subject, please contact this office (740-8676).

Very truly yours,

Glen Spangenberg
Wastewater Planning Engineer
APPENDIX H

Pima County Wastewater Management Letter

PIMA COUNTY
WASTEWATER MANAGEMENT DEPARTMENT
201 NORTH STONE AVENUE
TUCSON, ARIZONA 85701-1207
February 6, 1995

Re: CAPACITY RESPONSE NO. 95-13

Dear Ms. Butwinski:

We have reviewed your request of January 20, 1995 regarding the availability of sewer service for the following proposed use and property:

Approximately 15 homes on 20 acres on the north of side of Snyder Road Between Bowes Road and Houghton Road.

Under existing conditions (actual developments and commitments for service through approved Sewer Service Agreements), there is capacity for this proposed development in the downstream sewerage system and in the existing 8-inch diameter sewer located in Snyder Road.

This response is not to be construed as a commitment for conveyance capacity allocation, but rather an analysis of the existing sewerage system as of this date.

Should you desire to enter into a Sewer Service Agreement, a Development Plan or Tentative Plat, showing the preliminary sewer layout for the proposed project, must be submitted and approved. To qualify as a public conveyance system, flow must be by gravity to an existing public sewer system.

Should you desire additional information regarding this subject, please contact this office (740-6547).

Very truly yours,

[Signature]

Glenn W. Hitz, P.E.
Civil Engineer

Copy: Jon C. Schladweiler
Steve Kagelli
Annette Duarte/Reference File
Capacity Response File/131514

Revised October 17, 1995
APPENDIX I

CULTURAL RESOURCES

I-L Existing Site Characteristics
Cultural Resources: Archaeological and Historic Sites

In September of 1987 archaeologists from P.A.S.T. conducted a 10 person/day, intensive archaeological survey of 300 acres of the Bear Canyon property. The presence of natural springs on the property probably accounts for the wide dispersal of artifacts and range of cultural resources discovered. A total of 6 archaeological and historic sites were documented for the property (AZ BB:9:50, BB:9:239, BB:9:240, BB:9:241; BB:9:242, and BB:9:243). The archives at the Arizona State Museum indicated one site (AZ BB:9:50 ASM) had been previously recorded in 1978. This site was visited and shows signs of extensive vandalism. The site card for BB:9:50 was also updated. Subsequently, the portion of the property containing BB:9:50 was mapped using high resolution aerial orthophotography (1"=40') and an archaeological base map was developed by the Pima Community College Archaeology Centre. Data on the other sites were also updated and brief descriptions are found in Appendix A. Additional information is available for staff review from the Pima Community College Archaeology Centre. Given the hydrological features of the property, additional buried archaeological resources are likely.

II-P Cultural Resources: Archaeological and Historic Sites

The Primary Developer will require that all documents and activities relevant to the management, preservation and recovery of archaeological and historic resources will be prepared or undertaken by a professional archaeologist. Research designs and mitigation plans will be presented to and reviewed by the Pima County archaeologist, and when appropriate, the State Historic Preservation Office. All documents requiring such review will be submitted prior to or at the time the development plan or plat is provided to Pima County. Off-site developments and ancillary construction (utility trenches, water/sewage treatment facilities, roads, etc.) will also be investigated and evaluated and treated by the same criteria as cultural resources within the Specific Plan boundaries. The following measures serve to protect the cultural resources that exist on the site, as well as off-site in areas proposed for ancillary development related to the Specific Plan area.

I. Archaeological Survey

During the 1987 field work 11 areas were identified as having potentially significant cultural resources which through further field work have been consolidated into 6 recorded sites. If additional property is obtained it will also require field survey to establish the absence or presence of cultural resources. Arizona State Museum numbers will be assigned to sites meeting the Museum's site criteria.
APPENDIX I

II. Sub-surface Testing
Sufficient sub-surface testing will be conducted to establish the significance, nature and extent of the archaeological and historic sites. The goals of the sub-surface test will be directed toward providing salient information for the development of a research design as well as establishing a cost effective data recovery plan.

III. Research Design/Mitigation Plan
The cultural resources within the Specific Plan area and ancillary projects will be encompassed by a comprehensive research design and mitigation plan. The research design will delineate productive areas of scientific investigation that may be pursued given the information the sites can yield and provide direction to the development of a mitigation plan. The mitigation plan will detail strategies for the management of the cultural resources and include standards for the evaluation of sites with respect to further testing, sampling strategies, preservation, interpretive exhibition, protection, and data recovery (excavation). Guidelines for curation, analysis, report preparation, and public exhibits will be established and such activities undertaken. If the development activities are phased, a specific mitigation plan and scope of work will be developed for each planning unit of the Specific Plan that contains significant cultural resources.

IV. Implementation of Mitigation and Data Recovery Plan
The steps outlined in the prior sections will be undertaken in consultation with the County Archaeologist.

V. Monitoring Procedures and Scheduling
Prior to ground disturbing activities for development projects within the scope of the Specific Plan, documentation shall be forwarded to the County Archaeologist verifying that the relevant portion(s) of the mitigation plan have been executed. This will be done at the time of or prior to application for a grading permit. Elsewhere in this document a table synchronizing such activities is offered.

VI. Resource Protection
A. Unless specifically indicated in the mitigation plan no physical disturbance (including collection of artifacts or excavation) of any archaeological or historic site within the Specific Plan limits will be permitted.
B. Cultural resources identified for in place preservation or not in apparent danger of direct negative impacts by development activities will also be protected. This will be done in consultation with the County Archaeologist and may include the periodic inspection of sites and the possible erection of fences or other physical barriers.
C. Unrecorded archaeological materials unearthed during construction activities by developers, contractors or individuals will be reported immediately to the Primary Developer and the County Archaeologist.
APPENDIX I

Appendix A
Brief Site Descriptions

AZ BB:9:50

The southern and western portions of this site are Hohokam. The western portion was most likely primarily an ak-chin farming area containing four check dams and a long rock alignment (compound?). The south central portion is a major village site. Over 40 oval and rectangular structures were mapped including one large midden and a large compound. The northwest portion is Papago and includes four check dams.

AZ BB:9:239

Light scatter of Archaic lithics on a low ridge just east of a spring and pond.

AZ BB:9:240

Bedrock mortar site. Locus 1 is a moderate sherd and lithic scatter with one small area of cultural stain. The core is 30 m in diameter. Locus 2 is two sets of mortars in the granite base of the wash. Set one has five mortars and 24 meters upstream is another set of four mortars.

AZ BB:9:241

The northern end of the site is Rincon and Tanque Verde with one roasting pit and one area of dark cultural stain and includes a 60 m diameter area of moderate to light artifact scatter. The southern portion contains a 40 meter long rock alignment and a light sherd and lithic scatter.

AZ BB:9:242

This is a large multi-component site of great antiquity and tremendous research potential. It contains Papago structures, Hohokam structures and middens, and Archaic roasting pits and chipping stations surrounding the still active springs.

AZ BB:9:243

Moderate sized sherd and lithic scatter.
APPENDIX I

Bear Canyon Cultural Resources, page 3

D. Except as necessary for avoidance and protection of the cultural resources, the Primary Developer will restrict information on the location and nature of the cultural resources within the Specific Plan jurisdiction. No site will be promoted for public or private access except if so stipulated in the mitigation plan.

VI. Technical and Professional Standards and Guidelines
All aspects of the archaeological studies will be carried out using accepted professional archaeological standards and practices consistent with guidelines included in the Advisory Council on Historic Preservation 1980 Handbook; draft regulations 36CFR66, dated January 28, 1977; the Standards of Research Performance of the Society of Professional Archaeologists; and the Secretary of Interior's "Standards and Guidelines for Archaeological Documentation" (Federal Register, 9/29/83).
APPENDIX I

Arizona State Museum Letter

ARIZONA STATE MUSEUM
THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

January 26, 1995

Mr. Kelly Butowski
Project Planner
THE PLANNING CENTER
450 West Paseo Redondo
Suite # 202
Tucson, AZ 85701

Dear Mr. Butowski:

This letter is being sent with regards to yours of January 22nd requesting an archaeological site file check for property located at 3135 N.ISE Sec 14, a twenty acre parcel.

The Archaeological Site Survey Files at the Arizona State Museum have been consulted with the following results. There are no known archaeological survey projects for this property, nor have any sites been reported. There are six sites to the north and east of the subject parcel, and one to the south. There is high potential for the recovery of cultural remains on this land. Therefore the Arizona State Museum recommends that an on-the-ground survey be conducted on this property prior to any ground modification activities. Clearance on this property would not be recommended until after archaeological investigations have been completed by a qualified (based on standards established by the State Historic Preservation Office) archaeologist.

If you have any questions regarding this statement, please feel free to contact me at 621-4011. Billing for this file check is herein enclosed.

Sincerely,

[Signature]

Sharon F. Urban (Miss)
Public Archaeologist

Encl. (1)
sfu
APPENDIX I
SABINO SPRINGS PROJECT
RESOURCE BASED RIPARIAN AND AQUATIC HABITAT BOUNDARY DELINEATION

Objective

The objective is to establish criteria for delineation of riparian and aquatic habitats and to delineate and map the resource boundaries for those habitats on the Sabino Springs project. The criteria for mapping of the boundaries are ecologically based and are intended to provide protection for the most significant aquatic and riparian ecological resources in the project area.

Project Description

The Sabino Springs project is located in the foothills of the Santa Catalina Mountains east of Bear Canyon. The northern portion of the site occurs on the rocky upper bajada of course colluvial deposits, with the lower elevation portions consisting of finer grained colluvial sediments. Running east to west across the site is an elevation break, possibly associated with a geologic fault. Nine springs are known to occur along this geologic feature. The springs are relatively evenly distributed east to west across the property and are characterized by an increased density of riparian and wetland associated vegetation. In addition, numerous washes with mapped floodplain boundaries transect the site from north to south.

Methodology

The methodology for determination of habitat boundaries for the riparian and aquatic communities consist of four steps: a preliminary site evaluation, development of criteria for delineation, mapping of boundaries based upon criteria, and the field verification of mapped boundaries.

During the preliminary site evaluation, the wash and upland areas were evaluated to determine the site-specific ecological characteristics that distinguish riparian, wetland and upland ecological communities. Characteristics typically evaluated to determine these boundaries consisted of vegetative community type, vegetation size and density, and/or the 100 year floodplain boundary. The criteria used for boundary mapping in this study were derived from these characteristics.
Results

The following criteria were identified and used to delineate the ecological resource riparian boundaries:

1. The presence of mesquite, was evaluated. If mesquite constituted the dominant tree species, at densities consistent with those of riparian communities in the vicinity, the area was considered for further evaluation.

2. Those areas were further evaluated for the species composition of the understory. If the understory was dominated by species that are typically riparian in the area, such as lycium, canyon ragweed, and hackberry, the area was included within the resource boundary. It was also included if it contained emergent wetland species such as bulrush or cattail, or included other wetland associated species such as cottonwood and willow.

3. If the site consisted of unusually large mesquite for the area, regardless of understory composition, it was included within the resource boundary.

These criteria were then used to map the boundaries of the riparian and aquatic habitats on the site. The habitat boundaries were field mapped using orthographic 1"=100', black and white, aerial photographs. Significant aquatic features and wash areas with identified 100 year flood boundaries (as identified by Rick Engineering) were pre-identified on the aerial photographs. These were predetermined to be the areas requiring resource boundary identification. Two washes on the west end of the property north of Sabino High School were excluded from the study based upon engineering design requirements to mitigate existing flooding hazards for Sabino High School. However the spring areas associated with those washes were included.

The boundary line was drawn on the aerial photography at the outside edge of the apparent change. between typically riparian dominant or typically upland dominant understory species. Large, or obvious riparian associated mesquite were included within this boundary.

If the area contained a high density of mesquite (typical for the project area in density, of riparian environments), that were smaller in size than riparian mesquite and if the understory was dominated by species typically considered upland including brittlebush, prickly pear, jumping cholla, and burroweed, it was excluded from the primary resource boundary. However, these areas were included
in a secondary resource boundary to recognize their wildlife resource value.

The attached maps show the proposed resource based boundaries for the riparian and aquatic communities. Areas that met two of the three above riparian resource based criteria identified for this property were included within the primary resource boundary. The resource boundaries in many locations coincided with the 100 year floodplain boundary. A few locations, particularly those associated with the spring sites, included areas outside of the 100 year floodplain. Virtually all areas met all three of the above criteria. The spring sites additionally contained emergent wetland species. Wash side slopes, or banks, were not considered in the resource evaluation, however, in virtually all cases, the resource boundary included the banks of the washes and spring areas as well.

Secondary resource areas were identified along the fault line from east to west across the property. These areas were identified to be of high value to wildlife due to the volume of arborescent vegetation present. They are not directly associated with surface runoff, open water or riparian resource areas, however, they serve an important ecological function.

Recommendations

It is recommended that the primary riparian resource areas be preserved in place with a minimum of disturbance. These resource areas provide a significant aesthetic functional and ecological amenity to the project. The edge of the defined resource boundary should become at a minimum the grading and building setback limit. There are portions of the resource area where crossings could occur for golf course fairway, utilities or roads. These areas are identifiable on the aerial photography as providing a lower volume and density of riparian vegetation. These crossings should be executed in a manner so as to have a minimum impact to canopy vegetation. The vegetation removed should be mitigated for within the project area. See additional mitigation guideline discussed below.

Secondary resource areas should be integrated into development or golf course areas to the greatest degree possible. Even if it is only possible to preserve trees, not necessarily understory, a significant portion of the ecological function can be maintained. If impacts to these areas are unavoidable they should be mitigated for, by replacing the lost volume of vegetation as outlined in the mitigation guidelines discussed below.
Mitigation Concept

Vegetative volume should serve as the common denominator in the wildlife mitigation plan. Based upon SWCA’s participation in numerous golf course planning efforts we estimate that no more than 70-80% of the trees within the area of impact should actually be cleared. If not properly mitigated, the clearing will result in a reduction in nesting opportunities for birds as well as impacts to small mammal and reptile populations. It is important to point out that the reduction in wildlife habitat is not directly correlated to the number of native trees removed. However, it is directly correlated to the volume of vegetation removed (Mills et al. 1989). As such, we do not feel that replacement of tree quantities alone, including direct salvage and in-kind replacement of vegetation, serves as a suitable currency for determining mitigation.

At the appropriate time when mitigation is required the mitigation strategy outlined below should be utilized:

1. The total volume of impacted canopy vegetation within the area of disturbance, within the primary or secondary resource boundary, will be measured to establish a mitigation goal. Some of this data has previously been collected for the Sabino Springs site.

2. Areas within the floodplain, adjacent upland areas, areas within the residential and golf course uses, disturbed spring and wetland areas adjacent to and within the areas of impacts will be identified and evaluated to determine their suitability for mitigation planting. Suitable areas include; previously disturbed areas, areas with a disturbed or low volume of vegetation, areas with sufficient intercanopy space for placement of additional trees, areas that can easily receive supplemental irrigation and areas regraded during construction that require revegetation. In addition, new residential landscape plantings will incorporate native tree species in front yards and street right-of-ways.

3. The actual mitigation will be the planting of the selected suitable areas with native indigenous plant species, predominantly mesquite, *Prosopis velutina*. Initial plant species and quantities will be selected based upon their ability to grow sufficiently in
size to meet the volume mitigation goal within five to ten years of the actual disturbance. When practical, tree species in the area of impact will be transplanted to achieve more immediate aesthetic effect. At the time of mitigation, drip type irrigation should be installed until the plantings are established. All saguaros in the area of impact will be avoided when possible and if salvageable, transplanted within the mitigation area. Avoidance does not include saguaros left standing along the fairway that will likely be damaged by future golf activities.

4. Due to the soil conditions in the area of impact (sand and boulders) tree salvage of all of the affected trees is not likely or feasible. The salvage of existing trees requires heavy pruning which will have an effect on the aesthetic and wildlife value for several years following transplant. Smaller, nursery grown stock should be planted when tree salvage is not feasible. In time, nursery grown stock can supply equivalent wildlife values to larger salvaged stock.

Mitigation Summary

The Sabino Springs project site has some unique mitigation opportunities. Of particular interest is the eastern most spring area. Portions of the wetlands in this area have been disturbed by the grading and construction of the existing pond. In addition, the area has sustained heavy grazing in the recent past. This area could sustain intensive facultative and obligate wetland tree plantings over 1 to 2 acres, creating a forested wetland area with a volume nearly twice that of surrounding xero-riparian areas. The use of these plantings, possibly in conjunction with additional fairway and "rough" enhancement along the golf course, could create a significant avian and herpetological wildlife resource in the midst of the Sabino Springs development.

The other spring areas offer mitigation opportunities as well. The two central springs are impacted to one degree or another by intensive recreational use and off-road vehicle activities. These areas could be restored to offset impacts elsewhere. The large western most spring, is overwhelmingly vegetated by exotic wetland species such as bamboo and common reed. This area could be cleaned out and reestablished with some native wetland tree species and native emergent wetland vegetation such as rush and bulrush species. In addition, areas around this spring have been successively excavated to exploit the spring resource. These areas could be replanted or restored as a part of the adjoining residential or golf course uses. They would likely support large riparian trees upon establishment.
SABINO SPRINGS RESOURCE BASED RIPARIAN HABITAT BOUNDARIES