

DRAFT EXECUTIVE SUMMARY

KINNEY ROAD

Improvements Project

Environmental Assessment and Mitigation Report



August 2007

URS

DRAFT EXECUTIVE SUMMARY

PROJECT OVERVIEW

The Pima County Department of Transportation proposes to improve approximately 6,785 feet of Kinney Road, from approximately 860 feet south of Ajo Way (State Route 86) to approximately 1,300 feet north of Sarasota Boulevard. The project limits are located in unincorporated Pima County, west of Tucson city limits, with Kinney Road generally situated in a northwest-southeast direction. Figure ES-1 depicts the project location within Pima County and Figure ES-2 shows the project limits within the context of the area's major roads.

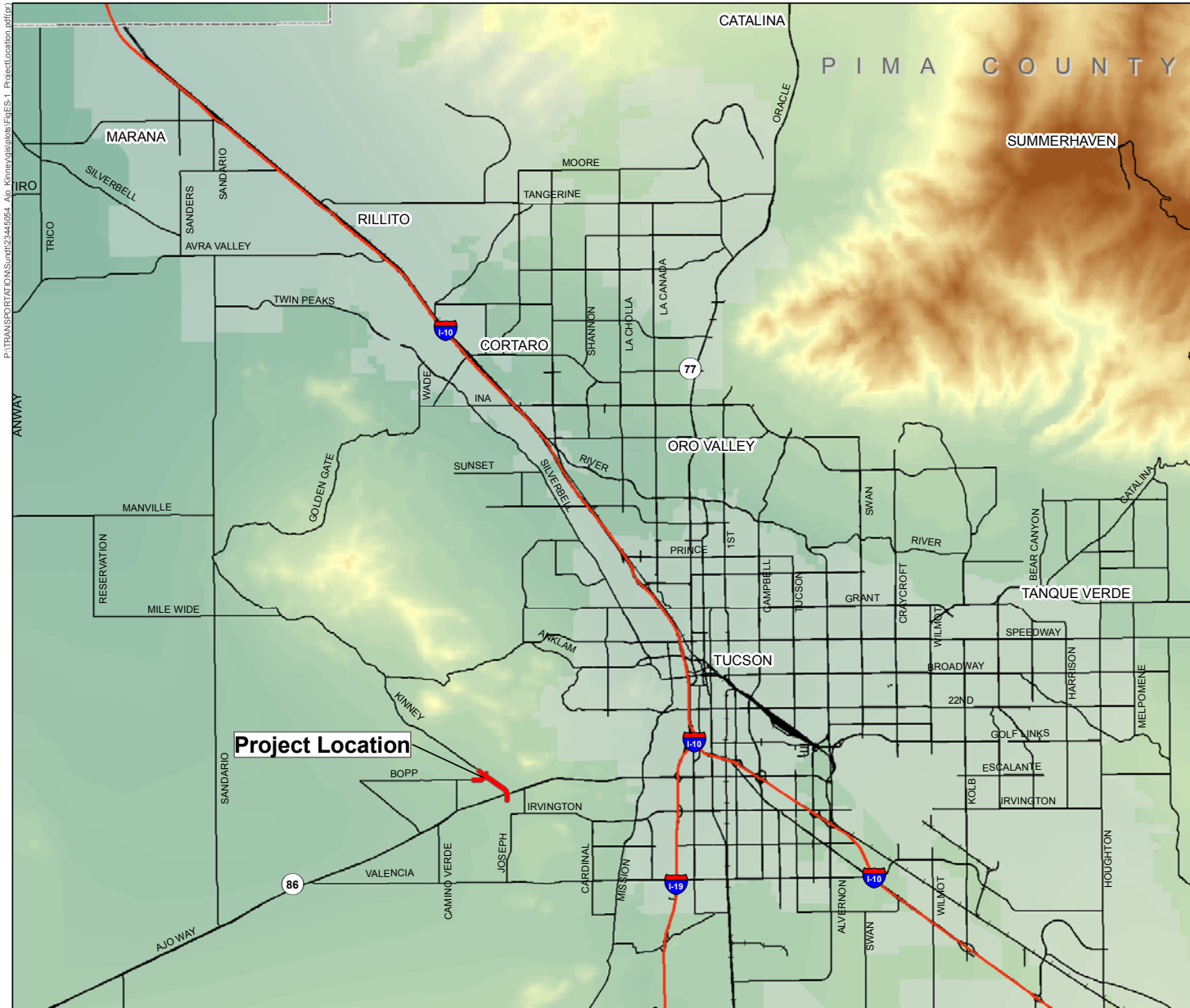
In conjunction with the Kinney Road project, approximately 350 feet of new roadway will be constructed within the Sarasota Boulevard right-of-way east of the Kinney Road and Sarasota Boulevard intersection. As part of this roadway project, approximately 2,300 feet of Bopp Road will be improved and realigned between Calgary Avenue and Kinney Road. Proposed construction associated with Kinney Road, Sarasota Boulevard, and Bopp Road is collectively referred to throughout the document as the Kinney Road Improvements Project. The proposed project construction is anticipated to occur over a period of 18 months.

Kinney Road is designated as a Major Scenic Route north of Ajo Way and as a Major Route south of Ajo Way. The *Pima County Roadway Design Manual*, second edition (2003) (PCRDM) states that all designated scenic routes are subject to the Environmentally Sensitive Roadway (ESR) design guidelines found in Chapter 4 of the PCRDM. The PCRDM also states that projects located in roadways designated as ESRs require completion of an Environmental Assessment and Mitigation Report (EAMR). The environmental analysis presented in this EAMR describes existing conditions, impacts, and mitigation measures associated with the proposed Kinney Road Improvements Project, the associated rights-of-way, and temporary construction easements.

PROJECT NAME: Kinney Road Improvements Project
PROJECT NUMBER: 4KRAWB
PROJECT LOCATION: Sections 26 and 36, Township 14 South, Range 12 East of the Salt and Gila River Base and Meridian in unincorporated Pima County, Arizona

ESTIMATED COST

AND FUNDING SOURCES: Development and intergovernmental agreements documenting cost-sharing arrangements are among Donahue Schriber, Arizona Department of Transportation, and Pima County. The design/build team will develop firm costs for the project as the design progresses.

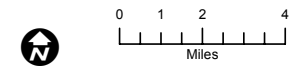
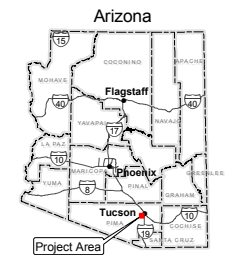


Project Location

Kinney Road Improvements Project

Legend

- █ Project Location
- Interstate
- County
- Railroad
- Major Road
- Cities



Source: ALRIS 1997 - 2005

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DOT

Figure ES-1

PROJECT PURPOSE AND NEED

This project is designed to improve traffic flow and enhance safety along Kinney Road. Kinney Road is currently a 2-lane facility with limited capacity and few provisions for alternate modes. According to traffic counts conducted in 2006, Kinney Road accommodates 18,470 vehicles per day between Ajo Way and Bopp Road. In recent years, the construction of residential developments adjacent to Kinney Road Improvements Project study area has further increased the need for improvements and capacity along the corridor. Twenty-seven accidents occurred between 2002 and 2004 at the Ajo Way and Kinney Road intersection.

In anticipation of future regional and local growth, Pima County has required improvements along Kinney Road. With the expected increase in residential and proposed retail associated with the Mountain Vista Shopping Center, Kinney Road will no longer be able to provide sufficient traffic flow. The Kinney Road Improvements Project is also included in the 2030 *Regional Transportation Plan*, adopted by the Pima Association of Governments on June 29, 2006. The *Regional Transportation Plan* is a long-range plan that identifies potential multi-modal projects, policies, and strategies in response to current transportation needs and continuing population growth.

PROJECT ELEMENTS

- Widening of Kinney Road to two travel lanes and a multiuse lane in each direction
- Raised medians with landscaping
- Installation of left-turn lanes
- Curbs at intersections, and curbs and gutters along the length of Kinney Road from Ajo Way to Sarasota Boulevard
- A sidewalk or paved path along the eastern extent of Kinney Road from Ajo Way north to the shopping center's traffic signal and on the west side of Kinney Road from Sarasota Boulevard to Ajo Way
- Drainage improvements, including graded channels, culverts, and culvert extensions
- Circulation improvements at the Ajo Way and Kinney Road intersection
- Realignment of Bopp Road to the Sarasota Boulevard right-of-way, resulting in the elimination of the existing intersection of Bopp Road and Kinney Road

PROJECT IMPACTS AND RECOMMENDED MITIGATION

The following sections describe the potential impacts on resources and the recommended mitigation measures to be incorporated during construction and operation of the improved roadways. Table ES-1 lists the potential impacts, recommended mitigation measures, agency

responsible for overseeing or recommending mitigation (where applicable), and entity responsible for implementing mitigation.

For several resources, it was determined no direct adverse impacts will occur as a result of the Kinney Road Improvements Project; therefore, mitigation measures are not required. Resources that will not be impacted adversely as a result of the project include the following:

- Special status species
- Historical, cultural, and archaeological resources
- Adjoining land uses and property values
- Recreation
- Neighborhood character

Topography

Roadway improvements along Kinney and Bopp Roads and Sarasota Boulevard generally will follow the existing grade. Accommodating the proposed roadway and intersection improvements will result in minimal changes to the existing topography. The final horizontal alignment and vertical grade will be designed to create safe vehicular and pedestrian circulation.

Drainage

Several intermittent washes that cross the project area originate from the southwestern slopes of Cat Mountain, located east of the project site. Several culverts that convey surface-water flow currently do not have the capacity to handle storm events; during storms, water overtops most of the existing culverts. The proposed project will provide improved drainage through the installation of new and upgraded culverts and drainage ditches along Kinney and Bopp Roads designed in accordance with the PCRDM.

At this stage in the design process, the project design team is coordinating with the U.S. Army Corps of Engineers (USACE) to determine the level of effort necessary to obtain a Section 404 Clean Water Act permit.

Vegetation

The proposed roadway improvements will result in the removal of native vegetative communities associated with Sonoran paloverde-mixed cacti desertscrub and xeroriparian scrub land covers in the project right-of-way. Permanent impacts will include areas where vegetation will be replaced by the pavement, roadway shoulders, and a clear area. Temporary impacts will occur where vegetation is cleared but revegetated at the completion of construction.

The *Environmentally Sensitive Roadway Design Guidelines* require a survey of the project area's native plant community. Based on survey results, the proposed project will result in a total impact (permanent and temporary) on approximately 30 acres of species associated with Sonoran paloverde-mixed cacti desertscrub and approximately 3.5 acres of species associated with Xeroriparian Scrub. The mitigation measures used for impacts on vegetation along the ESR roadway, provided in the PCRDM, will be different than those applied along Bopp Road and Sarasota Boulevard. For example, vegetation mitigation along Kinney Road will require that a similar number and equivalent caliper size of plants be replaced for those removed. Mitigation for the remaining project area, however, will be subject to a revegetation plan that is to be completed and approved by Pima County prior to construction.

Impacts on native vegetation along Bopp Road and Sarasota Boulevard will be in compliance with the PCRDM. Trees and cacti removed as a result of the proposed project will be replaced in accordance with Pima County's *Environmentally Sensitive Roadway Design Guidelines*. A revegetation plan will be developed prior to construction.

General Wildlife

Construction activities associated with the Kinney Road Improvements Project have the potential to impact wildlife and wildlife habitat. Unavoidable impacts on general wildlife habitat could include injury or death of individual members of species, temporary loss of suitable habitat within temporary construction areas, noise impacts from construction activities, and impeded movement across the study area. As previously mentioned, a revegetation plan will be developed prior to construction, which could involve replacing wildlife habitat while replacing vegetation removed to accommodate the project. Drainage improvements associated with newly installed culverts will be designed not to hinder wildlife passage under Kinney Road.

Viewsheds – Visual Analysis

The project area is located in the eastern portion of the Avra Valley Basin, which is a broad alluvial valley bounded by rugged mountain ranges. The visual backdrop includes the Tucson Mountains to the east and the Silverbell Mountains to the northwest. Directly adjacent to the project area, the immediate viewshed is dominated by residential dwellings, commercial buildings, and public facilities.

Since Kinney Road, within the project area, is designated as an ESR, Chapter 4 of the PCRDM applies. Chapter 4 outlines methods to assess visual qualities of the study area. Based on several key observation points selected throughout the project area to assess its visual character, moderate- to low-quality scenic landscapes were determined to exist within the immediate area, particularly since views have already been somewhat compromised by existing development.

Since the proposed roadway improvements and construction will be constructed at-grade, no visual impacts on important scenic features such as the Tucson Mountains and Silverbell Mountains will occur. Ancillary features such as medians, landscaping, and signage will be designed so as not to dominate surrounding viewsheds and to remain consistent with the surrounding landscape.

Historical, Cultural, and Archaeological

A Class III archaeological survey completed in May 2007 concluded that no sites of historical, cultural, or archaeological significance are present within the project area. If during construction a potential cultural resource is discovered, all work will immediately cease and the contractor will be required to have an archaeologist examine the site before construction resumes in compliance with Arizona state laws ARS 41-844 and ARS 41-865.

Air Quality

During construction, an increase in particulates can be anticipated as a consequence of topsoil disturbance and operation of heavy equipment. These short-term impacts may be minimized by implementing Pima County dust-abatement procedures such as using water to minimize dust leaving the site, covering stockpiles, and performing additional mitigation as outlined in the Pima County air quality permit.

Water Quality

At this stage in the design process, no impacts on water quality are anticipated. Mitigation measures provided in the Section 401 certification in compliance with the Clean Water Act, administered by the Arizona Department of Water Quality, may be required to protect water quality.

Hazardous Materials

Two Phase I environmental site assessments, conducted in accordance with the American Society for Testing and Materials (ASTM) Standard E 1527-05, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, were conducted to determine the presence of potentially hazardous materials sites within the project area. An assessment of the South Forty parcels (parcel nos. 212-50-0020, 212-50-0030, and 212-50-005D) was completed in June 2007. In addition, a Phase I environmental site assessment conducted in March 2007 identified potentially hazardous materials sites within the rest of the project area.

The Phase I reports noted two locations as potential recognized environmental conditions (RECs) sites within the project area: a gas-pumping station associated with the Tucson Mountain Trading Post at 3864 Kinney Road (within the South Forty complex) and a leaking underground storage tank associated with the Circle K located directly southeast of the Ajo Way and Kinney Road intersection. Three underground storage tanks were also identified at the Circle K property. The June 2007 Phase I report identified asbestos containing materials at the South Forty facility that are considered a potential REC. Two underground storage tanks at the South Forty property are considered potential RECs due to their age and years of service.

Improvements along Kinney Road will infringe upon the Tucson Mountain Trading Post property and will require the removal of the underground storage tanks at the South Forty property. It is unclear at this time if the project will result in impacts on the leaking underground storage tank or other underground storage tanks at the Circle K. Prior to construction, further analysis of the impacts on these sites will occur to determine if remedial activities are warranted.

Adjoining Land Uses and Property Values

During property acquisition, landowners will be compensated for the market value of the acquired portion of their property. The section of Sarasota Boulevard, which is currently unimproved but will be paved as a result of the Kinney Road Improvements Project, is already owned by Pima County.

Access

The project will result in temporary and permanent impacts on adjacent access and parking. Additionally, new medians are proposed at seven locations along Kinney Road, which will modify current circulation in the project area. Medians will be designed to accommodate vehicles turning left onto most local access roads. Current access to both McDonald's and Circle K from the northbound and southbound lanes along Kinney Road will be affected by the project. The current access onto Kinney Road from Bopp Road will be terminated, and access from Bopp Road will be provided via a paved Sarasota Boulevard.

The proposed access modifications will be discussed with property owners prior to construction. During construction, appropriate mitigation measures will be implemented to assure that access is provided through traffic control and/or detours with clear signage.

Utilities

Several utility providers serve the project area, and utility facilities are located along both Kinney and Bopp Roads within the project area. Some utilities and utility structures will need to be

relocated to accommodate the roadway improvements project. Prior to roadway construction, the design team will coordinate with utility companies to identify the location of utility structures so service disruptions will be minimized during the project's construction phase.

Noise

A comprehensive noise study in accordance with the Federal Highway Administration's Traffic Noise Model (version 2.5) was performed within the study area to determine the existing peak-hour noise level and the predicted peak-hour noise level for the year 2030. (Refer to the noise analysis study attached to this draft EAMR as Appendix D for additional information.) Noise measurements were taken during peak hours (7 to 9 a.m. and 4 to 6 p.m.) on May 17, 23, and 30, 2007, all weekdays. Noise was measured during weekday peak hours to obtain the existing noise levels when school was in session and seasonal visitors still resided within the local area.

Data from the 11 noise-measurement locations ranged from a low of 46 A-weighted decibels (dBA) near the western extent of Bopp Road to a high of 64 dBA near the intersection of Kinney Road and Alexandrite Avenue. Existing data collected from the study area were then modeled to predict the highest possible dBA reading for specific locations, using factors such as roadway surface, distance from roadways, topography, physical barriers, traffic count, and vehicle mix (i.e., heavy trucks versus passenger vehicles).

Chapter 10 of the Pima County Code states that noise mitigation is required for roadway projects when existing or design year projections exceed 67 dBA or there is an increase in noise measurements of 15 dBA or greater compared to existing measurements. Pima County credits a 3-dBA reduction in noise if rubberized asphalt concrete is incorporated in roadway projects. Because rubberized asphalt concrete will be used in the improvements along Kinney and Bopp Roads and the paved portion of Sarasota Boulevard, the project area will not exceed Pima County noise criteria and will not warrant additional noise mitigation.

Noise associated with construction activities will be mitigated through the use of standard measures.

Table ES-1 EAMR Summary of Impacts and Mitigation Matrix

Potential Impacts	Recommended Mitigation	Agency Coordination and Consultation	Parties Responsible for Implementation
Topography	No adverse impacts on topography will occur; therefore, no mitigation measures are warranted.	PCDOT	Project design consultant, construction contractor
Drainage and water quality	The design incorporates the installation of new and upgraded culverts and drainage ditches to convey numerous intermittent washes that cross the project area.	PCDOT Pima County Regional Flood Control District USACE	Project design consultant, construction contractor
Potential disturbance of USACE jurisdictional waterways during construction	Implement mitigation stipulated in the USACE Section 404 permit.	USACE	Project design consultant, construction contractor
Vegetation – removal of native plants	Reseed disturbed soils using species native to the project vicinity. Replace plants removed from the project area using a similar number and equivalent caliper size in compliance with the <i>Environmentally Sensitive Roadway Design Guidelines</i> . Where saguaros must be removed, replace at a 1:1 ratio. Monitor the status of vegetation through establishment period.	PCDOT <i>(Environmentally Sensitive Roadway Design Guidelines)</i>	Project design consultant, construction contractor
Disturbance of wildlife habitat	Revegetate wildlife habitat where feasible based on the revegetation plan. Install culverts that allow passage for small wildlife species under Kinney and Bopp Roads	PCDOT	Project design consultant, construction contractor
Special status species	No special status species or their habitats are present within the project area; therefore, mitigation will not be warranted.	U.S. Fish and Wildlife Service Arizona Game and Fish Department	Pima County
Viewshed	Plantings within medians will use native vegetation. If the removal of National Parks signage is required, new signage will include similar language and layout. Artwork will be incorporated in the project design.	PCDOT	Project design consultant, construction contractor, public artist

Potential Impacts	Recommended Mitigation	Agency Coordination and Consultation	Parties Responsible for Implementation
Cultural resources	According to the archaeological survey (Appendix C of the draft EAMR), impacts on cultural resources are unlikely.	PCDOT Pima County Cultural and Historic Preservation Office State Historic Preservation Office	Not applicable
Particulate disturbance during construction – air quality	Implementation of Pima County dust-abatement procedures include watering to minimize dust leaving the site, covering stockpiles, and performing additional mitigation as stipulated in the Pima County air quality permit.	PCDOT PDEQ	Project design consultant, construction contractor
Hazardous materials	Should the project design encroach on either of the two recognized environmental conditions sites of properties identified as leaking underground storage tank, underground storage tank, or asbestos-containing sites (Circle K or South Forty property), further analysis will be undertaken to determine if remedial activities are warranted.	Arizona Department of Environmental Quality	Project design consultant, construction contractor
Land use and property values	Private property will be acquired for right-of-way purposes. Property owners will receive fair compensation for land rights to be acquired.	PCDOT, Pima County Real Property	PCDOT
Recreation	No recreational features are located within the project area; therefore, mitigation is not warranted.	PCDOT	Not applicable
Local access	Pima County will coordinate with property owners so they are aware of the proposed access revisions. Traffic control and/or signed detours will be applied during construction.	PCDOT	Project design consultant, construction contractor
Utilities – potential to temporarily disrupt service	Coordination with all local utility companies will take place throughout the design process to minimize inadvertent impacts on utility service.	PCDOT	PCDOT, construction contractor

Potential Impacts	Recommended Mitigation	Agency Coordination and Consultation	Parties Responsible for Implementation
Noise	A noise study performed specifically for the project determined further mitigation was not warranted. During construction, standard mitigation will be implemented to minimize noise. Rubberized asphalt concrete will be used to minimize roadway noise.	PCDOT	PCDOT, construction contractor

Notes: EAMR = Environmental Assessment and Mitigation Report, PCDOT = Pima County Department of Transportation, PDEQ = Pima County Department of Environmental Quality, USACE = U.S. Army Corps of Engineers

AGENCY COORDINATION

During the preliminary data-gathering stage of the Kinney Road Improvements Project, SWCA Environmental Consultants (SWCA) accessed the U.S. Fish and Wildlife Service (USFWS) Web site on May 2, 2007, for the current list of endangered, threatened, candidate, and conservation agreement species for Pima County. Consultation with the USFWS list was conducted in the production of the *Biological Evaluation of the Kinney Road Improvement Project* (SWCA 2007). USFWS provides updated lists of federally listed species on the agency's Web site. The design team is currently in coordination with the USACE to determine the appropriate measures to comply with the Clean Water Act.

During development of the biological evaluation, SWCA received correspondence from the Arizona Game and Fish Department on April 20, 2007. A copy of the letter received from Arizona Game and Fish Department is included in Appendix A of the *Biological Evaluation of the Kinney Road Improvement Project*. SWCA performed a search of the National Register Information System, the online database for historic properties listed in the National Register of Historic Places. The Arizona State Historic Preservation Office maintains the database and the results of the database search are included in the *Archaeological Survey for the Kinney Road Improvement Project West of Tucson, Pima County, Arizona* (2007), attached as Appendix C of this draft EAMR.

The project team will continue to coordinate with appropriate agencies as the design-build process proceeds along the project corridors associated with Kinney Road, Bopp Road, and Sarasota Boulevard.

PUBLIC INVOLVEMENT

In accordance with the 1992 Pima County Community Participation and Mitigation Ordinance (No. 1992-69), prior to the completion of the 2002 *Kinney Road: Ajo Way to Sarasota Boulevard EAMR*, a Community Advisory Committee (CAC) was established for the project. The original CAC included six property owners located within a 0.25-mile-wide corridor along the alignment of the originally proposed Kinney Road Improvements Project. A summary of the original CAC concerns, and comments based on CAC meetings, and comments from an open house held for the general public on April 24, 2001, are summarized in the 2003 *Kinney Road: Ajo Way to Sarasota Boulevard Design Concept Report*.

The development agreement prepared by the Pima County Board of Supervisors in November 2006 for the proposed Mountain Vista Shopping Center created the Neighborhood Advisory Committee (NAC). NAC membership is similar to that of the CAC, with one member of the

original CAC represented on the NAC. The NAC will serve in the role of the CAC for the Kinney Road Improvements Project, jointly referred to as the NAC/CAC in this document.

Several meetings with the NAC/CAC have been scheduled as the EAMR proceeds, including:

- May 30 – Discuss the project approach and scope.
- June 27 – Discuss the public art component and the project status.
- July 25 – Discuss the open house and noise analysis results.
- September 6 – Discuss the NAC/CAC comments on the EAMR Executive Summary.
- September 19 – Discuss NAC/CAC comments on the draft EAMR, potential content of the NAC/CAC recommendation to the Pima County Board of Supervisors, and the project status.

An open house to discuss the Kinney Road Improvements Project was held on July 11, 2007, at Tucson Estates. The public also was provided an opportunity to discuss the Mountain Vista Shopping Center and proposed Ajo Way improvements. Attendees receive a survey questionnaire and were encouraged to provide comments on the project at the open house, in accordance with the public participation requirement in the PCRDM.

Public involvement materials from prior to 2002 are available in the design concept report and in Addendum Number 1, *Report of Public Participation*, to the 2002 EAMR.