Pinal County Corridors Definition Study

Working Paper No. 3

Evaluation of Corridor Definition Alternatives in the Florence and Coolidge Area

ADOT Project No. T04-49-P0001
ADOT Purchase Order No. PGKG 2465

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June 29, 2006
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1. INTRODUCTION

1.1 Background

In September 2004, the Arizona Department of Transportation (ADOT) Transportation Planning Division initiated three corridor definition studies to determine the need for and feasibility of developing major transportation corridors in Pinal County:

- US 60 Corridor Definition Study;
- Williams Gateway Corridor Definition Study;
- Pinal County Corridors Definition Study.

In February 2006, the State Transportation Board approved the combined recommendations of the three corridor definition studies as illustrated in Figure 1-1. The recommendations approved by the State Transportation Board include a North-South Freeway between Apache Junction and the Florence-Coolidge area.

The recommended corridor definition for the North-South corridor begins at the US 60 and extends south to the Central Arizona Project (CAP) Canal. The definition continues in a south-southeasterly direction adjacent to the CAP alignment and the future Salt River Project 500 kV power line, until it intersects with the Magma Arizona Railroad. South of the intersection of the Arizona Magma Railroad, two alternative corridor definitions were recommended for further analysis that connect the North-South Freeway corridor to SR 79 or alternatively to SR 287. These two alternatives are represented by the 'orange-dash' line in **Figure 1-1** and are described as follows:

- **Alternative 1** connects the North-South Freeway corridor from the intersection with Magma Arizona Railroad near Judd Road to SR 79 north of Florence.
- **Alternative 2** connects the North-South corridor from the intersection with Arizona Magma Railroad near Judd Road to SR 287 generally along Valley Farms Road and following the approved future alignment for the Salt River Project (SRP) 500 kV utility corridor.

South of SR 287, a corridor definition was recommended that connects the North-South Freeway corridor to SR-87 south of Coolidge.

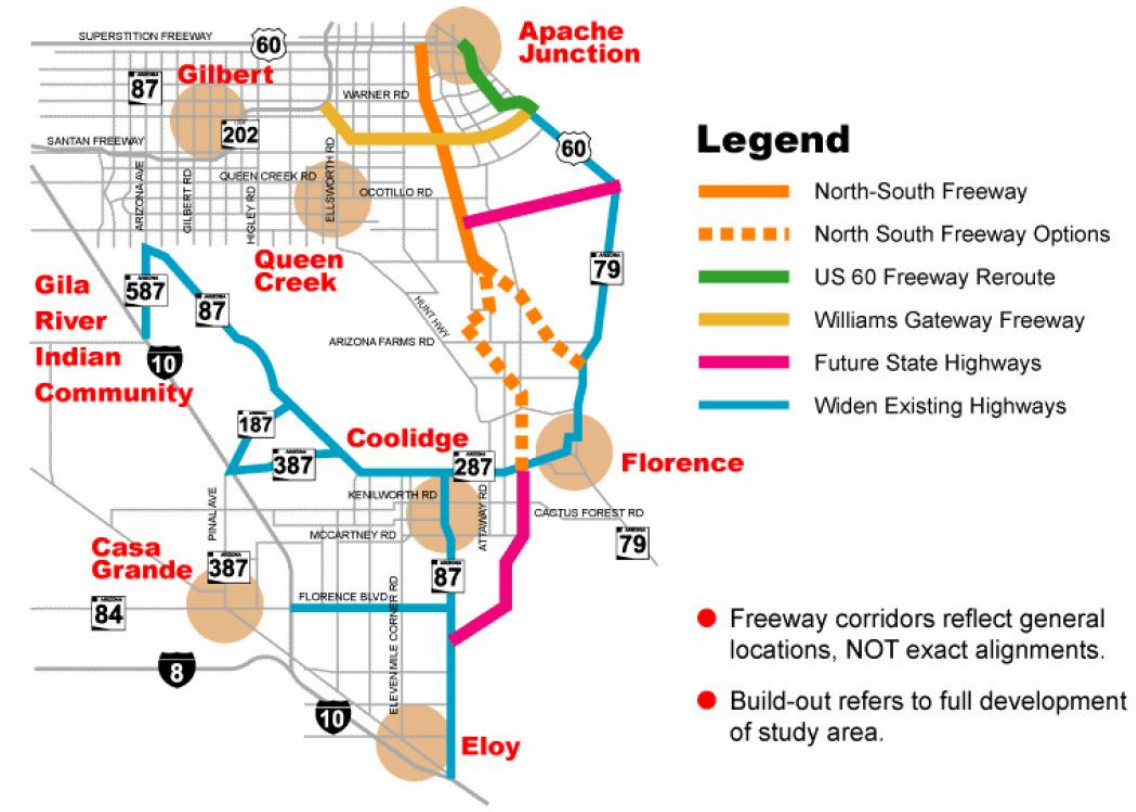


Figure 1-1 – Combined Recommendation for Corridors Definition, Approved by State Transportation Board

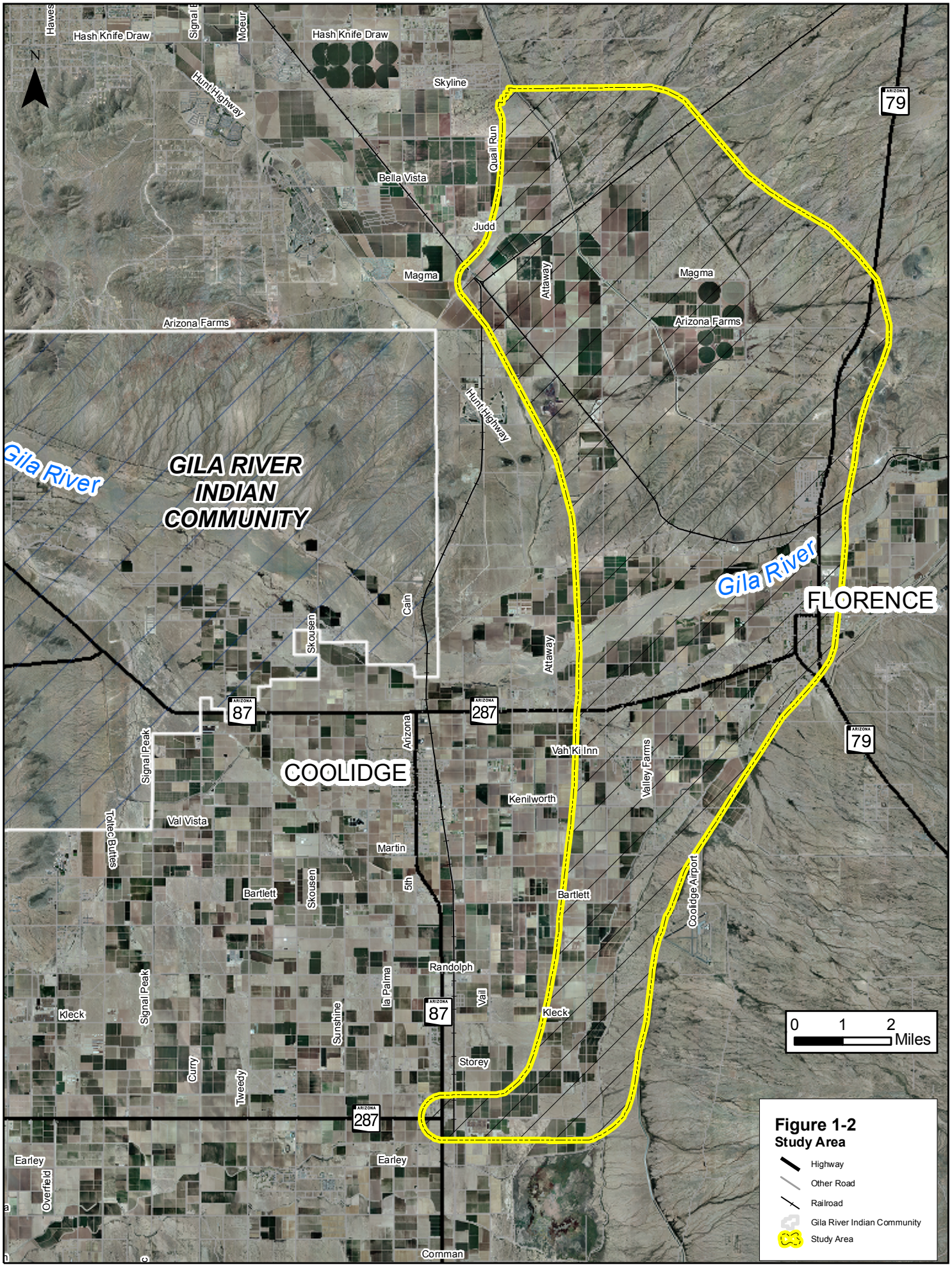
Source: Arizona Department of Transportation, February 2006. Available at *http://tpd.azdot.gov//planning/corridorstudies.php*

1.2 Purpose of Working Paper No. 3

The purpose of *Working Paper No. 3 – Evaluation of Corridor Definition Alternatives in the Florence and Coolidge Area* is to document a planning-level evaluation of the two north-south corridor definition alternatives described above and to select a preferred corridor alternative. The study also considered refinements to the above described corridor alternatives that were identified during stakeholder meetings. This evaluation also refined a corridor definition for the continuation of the corridor south of SR 287 to a connection to SR 87 south of Coolidge. The general study area is illustrated in **Figure 1-2**.

1.3 Working Paper Contents

Section 2 of this working paper includes an update of data and information that was originally compiled during the early stages of the *Pinal County Corridors Definition Study (Working Paper No. 1 and Working Paper No. 2)*, including existing and future conditions, evaluation of future traffic forecasts, a summary of input received at stakeholder meetings and the public, and an evaluation of alternative corridor definitions. A recommended corridor definition is presented in Section 3.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Tweedy
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Figure 1-2
Study Area
Highway
Other Road
Railroad
Gila River Indian Community
Study Area

2. EVALUATION CRITERIA AND ASSESSMENT

2.1 Evaluation Criteria

Five evaluation criteria are utilized in the analysis of corridor definition alternatives. These are:

- **Jurisdictional, Stakeholder, and Public Perspectives:** Jurisdictional input was received from meetings with staff and elected officials held in March 2006. Stakeholder input was received from meetings and communications with representatives of property owner representatives and developers. Public perspectives were received at a June 21, 2006 public information open house and are summarized in this working paper and in *Summary Report No. 3*.
- **Travel Demand Assessment**: 2025 travel demand modeling results were reviewed to determine how many vehicle trips the North-South corridor alternatives attract and how these corridor alternatives affect the travel demand on other roadways in the area. The 2025 travel demand model that was reviewed for this study was developed for the *Pinal County Small Area Transportation Study (2006)*.
- **Land-use Compatibility*:*** Land use compatibility criteria include corridor compatibility with jurisdictional development and local land use plans. Land use information was updated with new data on master–planned communities.
- **Physical and Engineering:** These criteria included road-way conditions and structures, right-of-way, topography, geological characteristics, major drainage features, and major utilities within the study area. The data was updated with new information about the Salt River Project 500kV utility corridor.
- **Social and Environmental:** These criteria include the socioeconomic environment, physical and natural environmental character, cultural resources, and section 4(f) resources of the Transportation Act in the study area.

2.2 Jurisdiction, Stakeholder, and Public Perspectives

Stakeholder and public perspectives are an important element of the study. The following sections summarize input received from stakeholder meetings and from a public open house held on June 21, 2006.

2.2.1 Jurisdiction and Stakeholder Perspectives

Meetings were held with representatives from the jurisdictions and organizations listed below to receive their input on issues and preferences related to the corridor alternatives.

- Arizona State Land Department;
- City of Coolidge;
- City of Florence;
- Salt River Project (SRP);
- Pinal County;
- Property owner representatives.

Highlights of input received from each of these jurisdictions and organizations are presented in **Table 2-1.**

Table 2-1 – Summary of Jurisdictional and Stakeholder Input

Jurisdiction/Stakeholder Organization	Key Input
Arizona State Land Department	• The status of the reconstruction of the Magma Dam should be considered. • The corridor definition should minimize the distances required to cross washes, drainage ways, and the railroad (e.g. they should run perpendicular to washes and the railroad). • The corridor definition should not create unusable parcels of Arizona State Trust Land. • The corridor definition should take advantage of the natural topography.
City of Coolidge	• Coolidge prefers the Valley Farms Road alignment within the Coolidge planning area. • A significant need exists for an additional crossing over the Gila River. • Corridor definition should serve Coolidge Airport and new commercial development planned near Bartlett Road and Attaway Road. • A Planned Area Development (Sontesta) shows 300' of right-of-way designated for a new freeway corridor. • Coolidge will update their General Plan to depict the North-South corridor. Coolidge is beginning to plan around the SRP 500kV line and freeway approved by the State Transportation Board. • Coolidge would not support a toll road.
City of Florence	• Corridor definition should connect to SR 79 to avoid impact to future master planned communities in the Florence area. Corridor definition should not go through Anthem at Merrill Ranch. • A corridor connection to SR 79 could help preserve the Army National Guard testing range located north of Florence. However, there is a possibility that the testing range may be closed. • Several homes on SR 79 in the Florence area are on the Historic Register. • A corridor on SR 287 is acceptable. A natural division already exists with the river. • A corridor definition east of SR 79 and the Arizona Department of Corrections facilities should be considered. However, a bypass of Florence may not be acceptable. To date, there hasn't been interest expressed in development east of SR 79. • Right-of-way acquisition on SR 79 south of Butte Road is feasible. Acquisition on SR 79 north of Butte Road could be more difficult. Business impacts are a major consideration. Existing businesses that could potentially be impacted include McDonald's and Big-O Tire. Sand and gravel operations are an important consideration. Rinker Materials is a significant land owner. • As development continues, developers are being required to box surface canals. • The City of Florence could support a toll road. • A new crossing of the Gila River is desirable, but staff recognizes that it is expensive. • Providing access to the Coolidge Airport is an important planning consideration. • Felix Road and Arizona Farms Road will all be constructed as 6-lane facilities. • Washes east of SR 79 flow into the Magma Flood Dam Retarding Structure. • Residents along Valley Farms Road, south of SR 287 would likely be opposed to a freeway in that area.

Table 2-1 – Summary of Jurisdictional and Stakeholder Input (continued)

Jurisdiction/Stakeholder Organization	Key Input
Salt River Project	• It is feasible to construct a roadway adjacent to the power line. • SRP is not aware of any legal challenges to the approved route for the 500 kV line. • There is a possibility that the Army National Guard intends to relocate the Papago facility to the Rittenhouse Airfield location. • SRP would like to work with ADOT in discussing possibilities for identifying a route for the SRP line across the Rittenhouse Airfield property.
Pinal County	• The City of Mesa is preparing to sell portions of its water rights holdings in Pinal County located west of SR 87 and south of Coolidge. This area of the County is zoned industrial and provides opportunities for a freeway corridor connecting to SR 87. • Pinal County does not support providing North-South Corridor continuity with SR 287 and converting SR 287 to a freeway facility due to existing and future developments along SR 287 (east of Casa Grande) and a planned Westcor commercial development on the northeast corner of SR 287 and I-10. • The Pinal County Small Area Transportation Study identifies SR 287 from I-10 to the future North-South corridor as a route of regional significance. • Establishing North-South corridor continuity with SR 87 and converting to a freeway facility to I-10 in Eloy should be considered, but the corridor should be on an alignment other than the existing SR 87. The existing SR 87 is necessary for north-south mobility and access. However, Pinal County understands that utilizing existing available right-of-way on SR 87 would be the most economically feasible. • The following options were identified for connecting the North-South corridor segments north and south of SR 287: 1. Pinal County prefers a North-South corridor alignment on Plant Road so that another bridge could be constructed across the Gila River. 2. A second option is to follow the canals south of SR 287 and develop a corridor east of the prison to connect with SR 79 in the vicinity of the military preserve. 3. A third option is for the North-South corridor to follow the canals south of SR 287 and to connect directly to SR 79 at the SR 287 / SR 79 intersection. However, this option is not preferred due to the loss of SR 79 as an arterial route for north-south mobility and access. • A connection of the North-South corridor to SR 79, north of Florence is favorable with respect to minimizing impacts on the Anthem and Merrill Ranch developments.
Property owner representatives	• Sunbelt Holdings, Pulte, and Merrill Ranch developments all favor a routing of the North-South corridor to SR 79.

2.2.2 Public Perspectives

A public open house was held at Central Arizona College on June 21, 2006. The purpose of the open house was to receive input from the public regarding the corridor definition alternatives. A comprehensive summary of public input received during the open house is contained in S*ummary Report No. 3*. Key input received during the public meeting included:

- Consider existing communities such as Florence Gardens and Valley Farms when formulating corridor definition. Impacts to and interests of current residents should be prioritized over those of future residents.

- The corridor definition should be located on Arizona State Trust Land as much as possible.
- Impacts to future master planned communities should be minimized.
- The SR 77/SR 79 corridor connects Phoenix and Tucson. Consideration should be given to locating the North-South corridor east of SR-79 and improving the SR-77/SR-79 corridor.
- More communication is needed between ADOT and the elected officials.

2.3 Travel Demand Assessment

Preliminary model runs from the *Pinal County Small Area Transportation Study (SATS)* travel demand model were reviewed to quantify the transportation related impacts of each corridor definition alternative.

In general**,** the modeling results indicate that a direct connection to SR 287 (Alternative 2) attracts a larger travel demand volume on the North-South corridor. Higher traffic volumes on the North-South corridor result in lower traffic volumes on parallel and adjacent arterials in the area. Specific observations from a review of the travel demand model are:

- A corridor definition that connects to SR 287 attracts higher traffic volumes than a corridor definition that connects to SR 79. On the North-South corridor south of Arizona Farms Road in the Florence area, traffic volumes are *nearly double* if a corridor connects to SR 287 in the vicinity of Valley Farms Road as compared to a corridor that connects to SR 79 north of the Gila River.
- Traffic volumes on north-south arterials in the Florence area are approximately 20% higher if the North-South corridor connects to SR 79 north of the Gila River rather than connecting to SR 287 following the Valley Farms Road / SRP 500 kV line corridor.
- Traffic volumes on east-west arterials in the Florence area are slightly higher for a corridor that connects to SR 287 on the Valley Farms Road alignment. This is a result of vehicles traveling on the east-west arterials to access the North-South corridor.

2.4 Land-Use Compatibility Assessment

Land use compatibility criteria include issues of corridor compatibility with jurisdictional development and local land use plans.

Figure 2-1 displays land ownership in the study area. As demonstrated by **Figure 2-1**, a significant percentage of land in the study area is Arizona State Trust Land. Significantly-sized land parcels are also owned by private developers who are in various stages of planning and constructing numerous master planned communities.

2.4.1 Arizona State Trust land

With respect to the two alternatives, a corridor definition to SR 79 could be identified that is located mostly on State Trust Land. A corridor definition that traverses State Trust Land should consider the following:

- The corridor definition should minimize the distance to cross drainage ways and the railroad (crossings should run perpendicular to washes and the railroad).
- The corridor definition should not create island parcels of State Trust Land.
- The corridor definition and ultimate alignment should be planned to take advantage of the natural topography of the area.

The Arizona State Land Department submitted two alternatives alignments that should be considered. These are presented in **Figure 2-2**.

2.4.2 Existing and Future Master Planned Communities

Figure 2-2 displays the location of existing and future master planned communities. Both alternatives will impact to some degree future residential developments and master planned communities. A corridor definition that connects to SR 287 provides fewer opportunities to avoid wide-scale impact to future master planned communities and residential development. A corridor connection to SR 79 affords the most opportunity to minimize impacts to existing and future master planned communities.

2.4.2.1 Merrill Ranch (Florence)

Two of the more significantly sized future master planned communities within the study area are Anthem at Merrill Ranch, and Merrill Ranch. Merrill Ranch is located in the vicinity of Hunt Highway and Felix Road. The CAP borders the development on the north, and the Copper Basin Pacific Railroad runs northwest to southeast through the property. The location of the Merrill Ranch community in relation to the two alternatives is shown in **Figure 2-3**. **Figure 2-4** shows a more detailed depiction of the Merrill Ranch development.

The Merrill Ranch Development will comprise 5,802 acres and a total of 20,897 residential units. Currently-in-development phases of Merrill Ranch include 23 subdivisions, approximately 2,700 homes, community parks, and a waste water treatment plant. Construction is anticipated to begin on Merrill Ranch in mid-2006, and a grand-opening is anticipated by the end of 2007.

A review of the *Merrill Ranch Development, Traffic Impact Analysis (September 2005)* shows that traffic in the area will be significant. As an example, segments of Felix Road are projected to carry 70,000 vehicles daily. The intersection of Merrill Ranch Parkway (future) and Hunt Highway will carry nearly 100,000 vehicles per day. Despite the extremely high traffic volumes in the area, and the potential relief that a freeway corridor could provide to the development, communication with representatives of Merrill Ranch stated that they oppose a corridor definition that would bisect the Merrill Ranch community. They prefer a corridor definition that connects to SR 79 and is located to the east of the Merrill Ranch property.

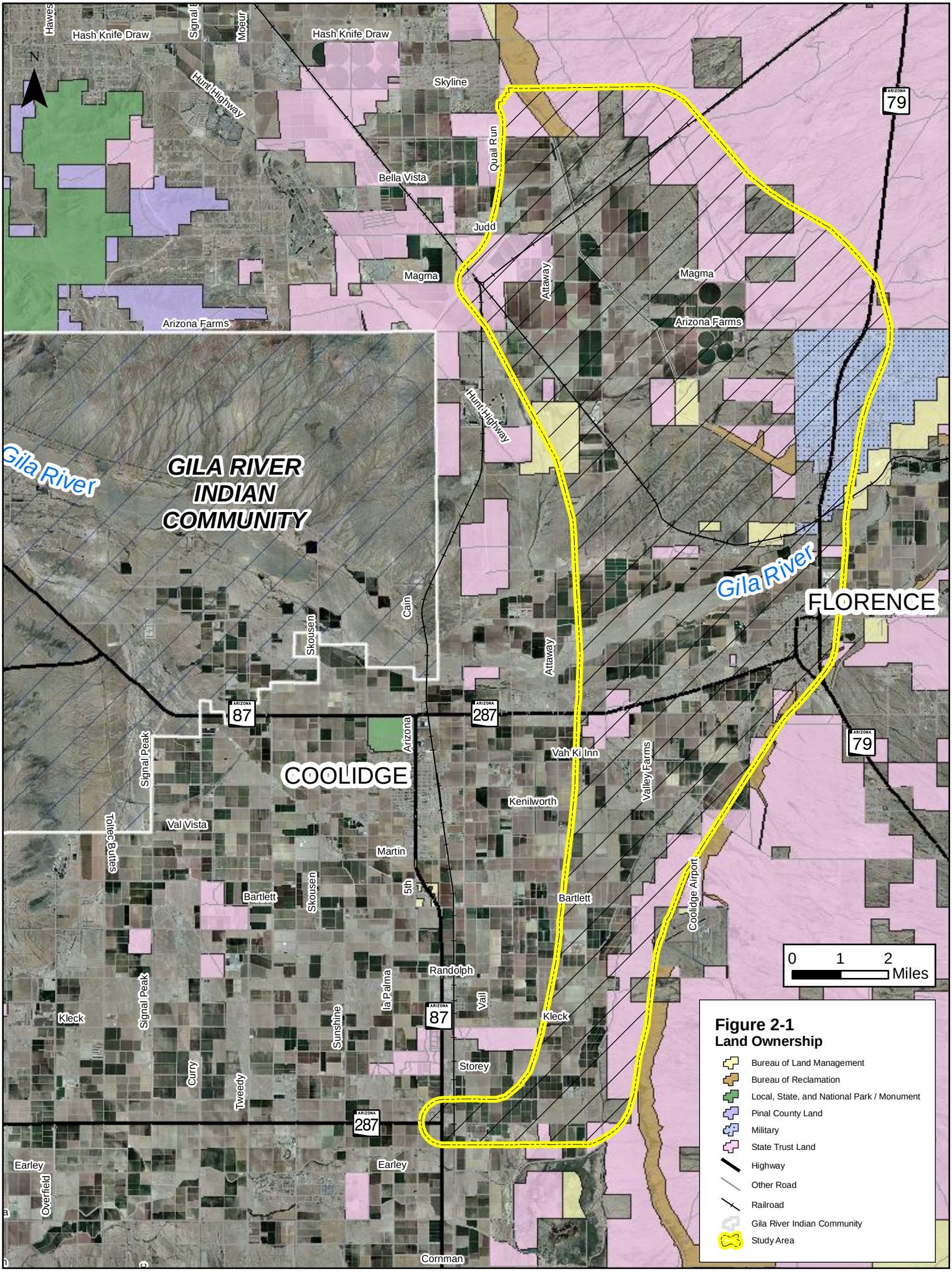
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Figure 2-1
Land Ownership
Bureau of Land Management
Bureau of Reclamation
Local, State, and National Park / Monument
Pinal County Land
Military
State Trust Land
Highway
Other Road
Railroad
Gila River Indian Community
Study Area

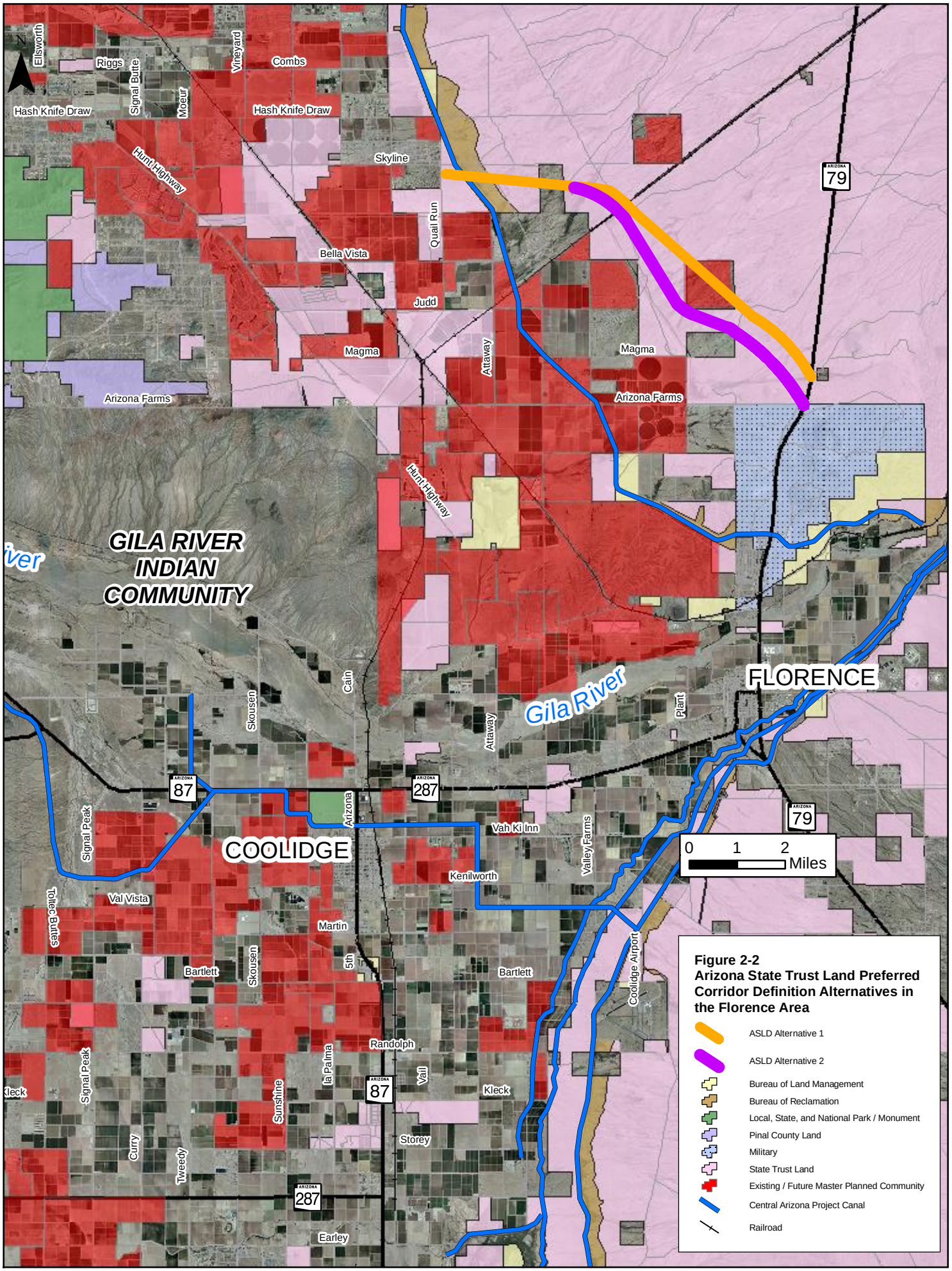
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Figure 2-2
Arizona State Trust Land Preferred Corridor Definition Alternatives in the Florence Area
ASLD Alternative 1
ASLD Alternative 2
Bureau of Land Management
Bureau of Reclamation
Local, State, and National Park / Monument
Pinal County Land
Military
State Trust Land
Existing / Future Master Planned Community
Central Arizona Project Canal
Railroad

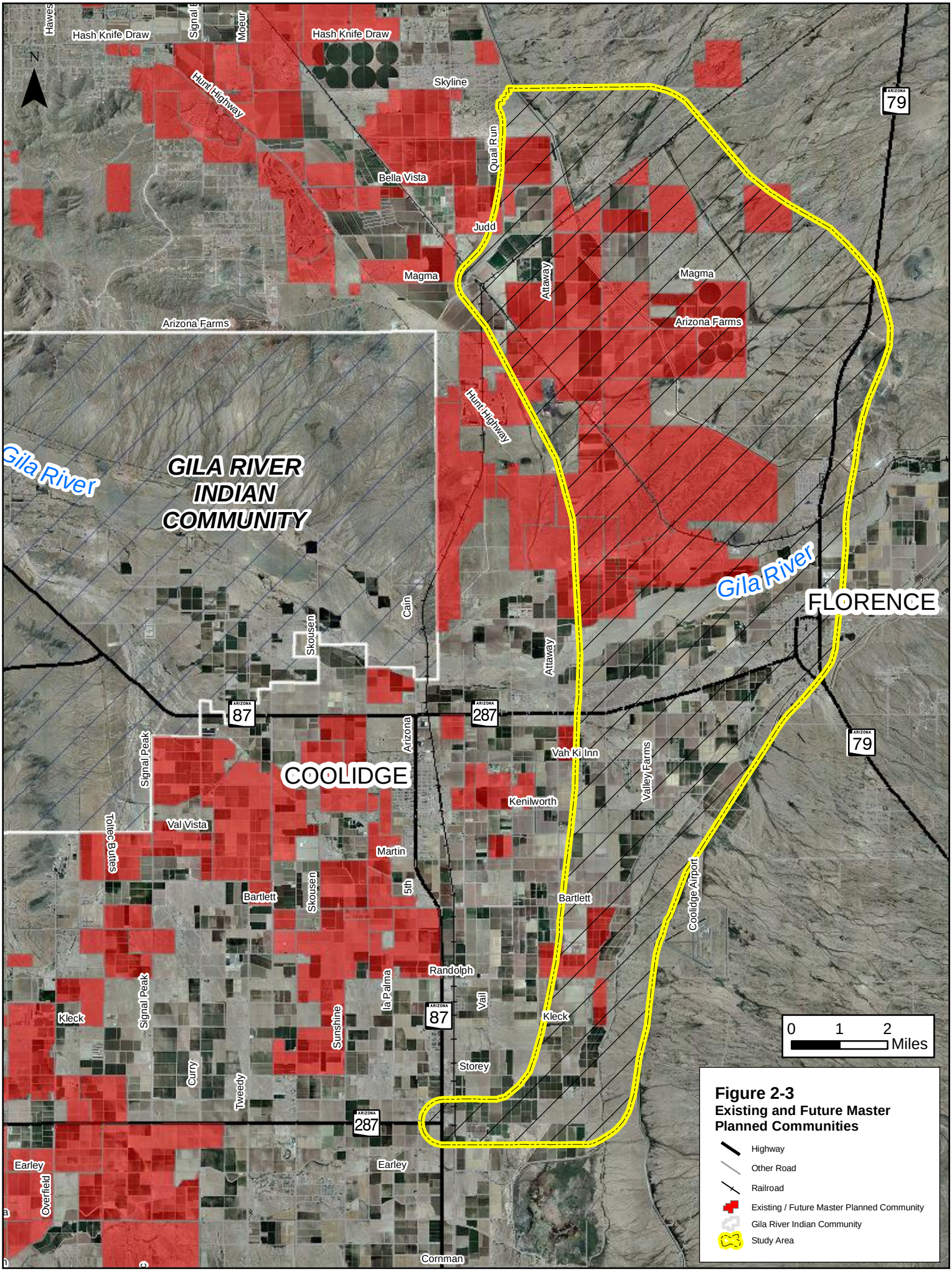


Figure 2-3
Existing and Future Master Planned Communities

- Highway
- Other Road
- Railroad
- Existing / Future Master Planned Community
- Gila River Indian Community
- Study Area

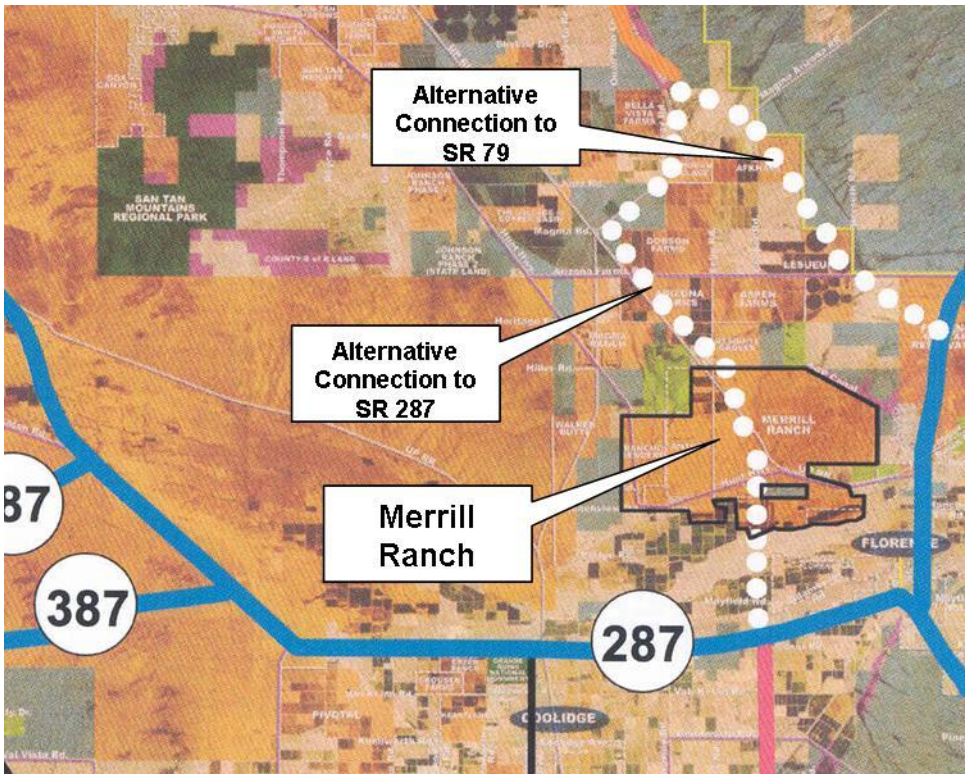


Figure 2-4 – Merrill Ranch Vicnity Map
Source: Vanguard Properties, Inc.

Figure 2-5 – Merrill Ranch Site Map
Source: Merrill Ranch Development Traffic Impact Analysis

2.4.2.2 Sontesta (Coolidge)

The City of Coolidge recently approved the Sontesta Planned Area Development. Sontesta will be located within the City of Coolidge jurisdictional limits on the northeast and southeast corners of Fast Track Road and Randolph Road. The development will encompass 1,372 acres and will include housing, open space, a school site, and commercial areas. The context plan for Sontesta shows that right-of-way will be reserved for a "potential freeway alignment" through the area, as illustrated in **Figure 2-6**. The development plan also shows the location of the future 320-acre Westcor Shopping Mall that is planned for the intersection of Bartlett Road and Attaway Road.

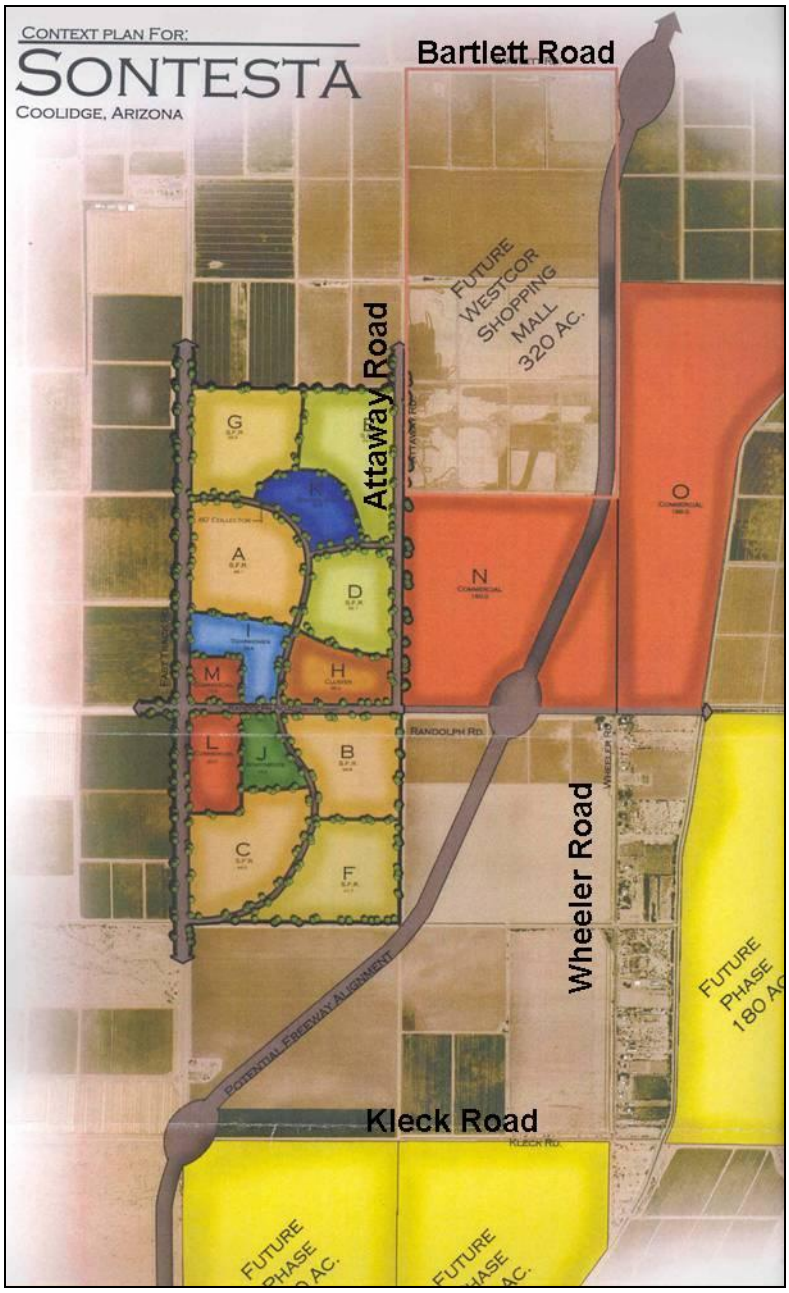


Figure 2-6 – Sontesta Planned Area Development (Coolidge)
Source: City of Coolidge

2.4.3 Consistency with Local Jurisdictional Transportation and Land Use Plans

Local jurisdiction land use and transportation plans for the Coolidge and Florence area were reviewed. Key findings are summarized in the following sections.

2.4.3.1 City of Coolidge

Figure 2-7 depicts future land use within the Coolidge Planning Area. As seen in **Figure 2-7**, within the study area the majority of land use is residential. A large industrial area is anticipated near the Coolidge Airport. West of the Airport, a regional commercial center is planned. The City of Coolidge desires that the North-South Corridor definition serve the regional commercial center, the industrial park and Coolidge Airport.

The City of Coolidge has stated that their General Plan will be updated to show the North-South Corridor. Coolidge will update their General Plan to depict the North-South corridor and begin to plan under the assumption that freeway will be constructed.

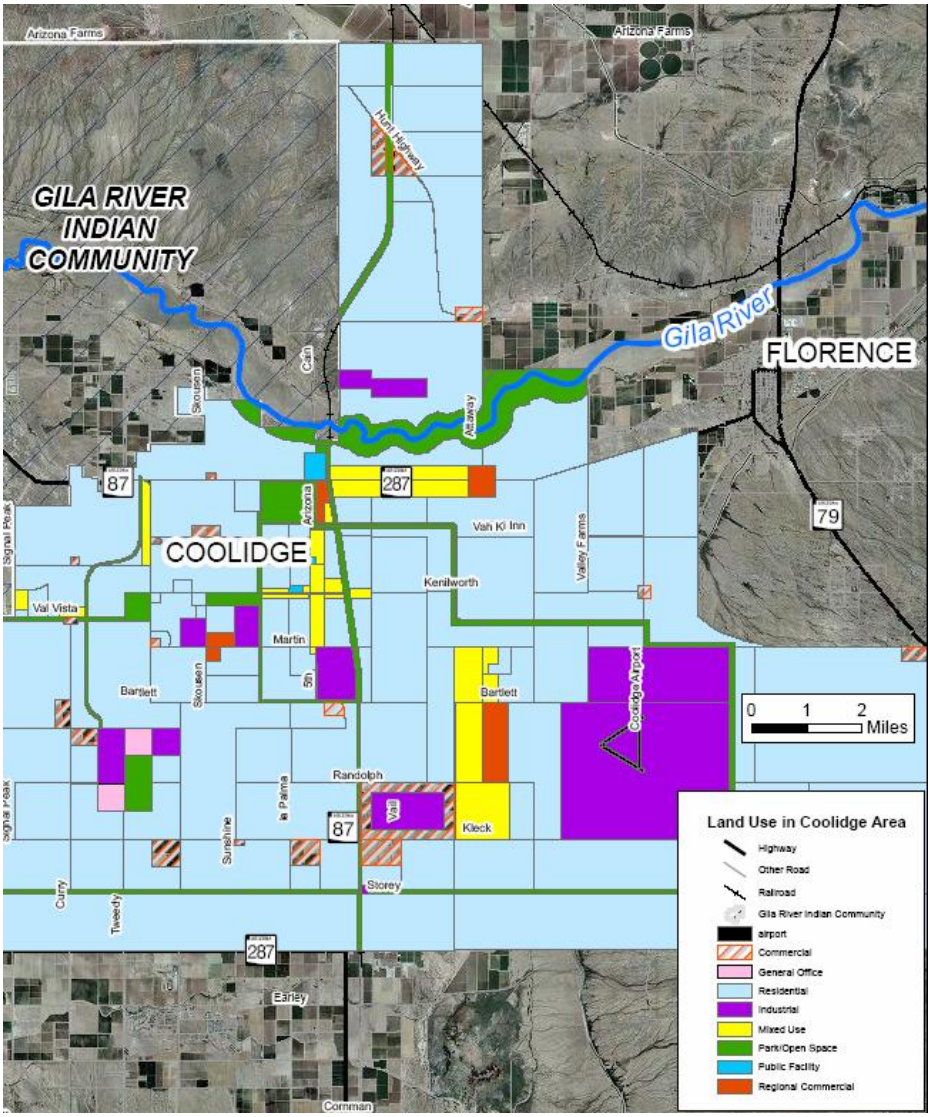


Figure 2-7 – Land Use in Coolidge Area
Source: City of Coolidge General Plan, Updated 2003

2.4.3.2 Town of Florence

Town of Florence land use is depicted in **Figure 2-8**. The following issues related to the corridor definition were identified from a review of the Town of Florence General Plan:

- Several historic resources are located near SR 79 in Florence. A north-south corridor passing through this area may significantly detract from the character of the area.
- Both corridor definition alternatives traverse land currently zoned as rural, medium, or low density residential (RUR, MDR). Both alternatives pass through land currently designated as recreational open space (ROS).
- A corridor definition that connects to SR 79 would have to consider the artillery/small arms impact (AIA) area located in northeast Florence.
- A corridor definition that connects to SR 79 would need to consider the prison (P) located on SR 79.

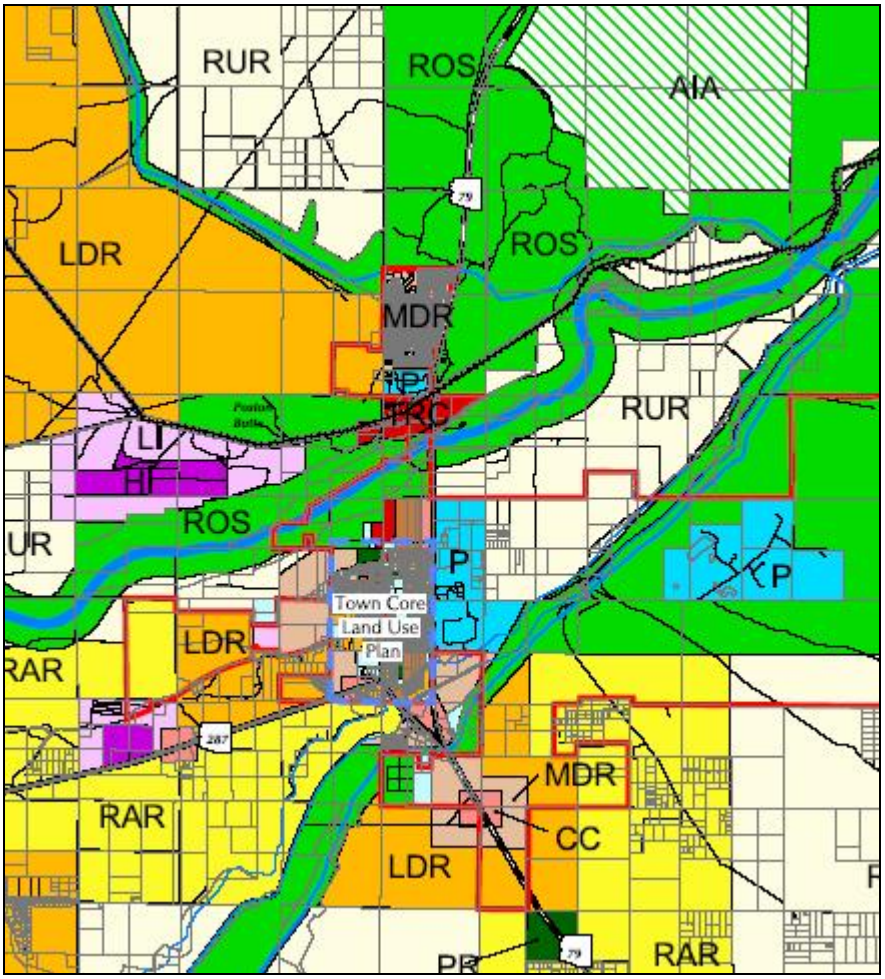


Figure 2-8 – Land Use in Florence Area
Source: Town of Florence General Plan, 2002

2.4.3.3 Pinal County

The *Pinal County Small Area Transportation Study* identifies a system of Roads of Regional Significance. The study defines a Roadway of Regional Significance as a roadway that serves to connect city, town and county regional areas. These roads are typically classified and built to Principal Arterial.

Input received from Pinal County staff stated that Roads of Regional Significance, as identified in the *Pinal County Small Area Transportation Study (2006)*, will ultimately be constructed at approximately a 2-mile spacing. The North-South corridor definition should consider these roads and be defined such that opportunities exist to connect the Roads of Regional Significance to the corridor definition.

A summary of land use and local jurisdiction opportunities and constraints for each corridor definition alternative is presented in **Table 2-2.**

Table 2-2 – Summary of Land-use and Local Jurisdictions Opportunities and Constraints

Corridor Definition Alternative	Land Use Opportunities	Land Use Constraints
Alternative 1: North-South corridor from Arizona Magma Railroad near Judd Road to connection with SR 79	• A connection to SR 79 is more consistent with goals and objectives of the Town of Florence. A definition could be identified that would minimally impact proposed master planned communities.	• A connection to SR 79 may significantly impact existing business located on SR 79, in addition to Arizona Department of Corrections facilities and several historic structures in the area. • A corridor definition can ultimately be identified that would minimize impact to existing and proposed residential development.
Alternative 2: North-South corridor from Arizona Magma Railroad near Judd Road to connection with SR 287 near Valley Farms Road.	• A connection to SR 287 on Valley Farms Road alignment positions the corridor for more direct access to Coolidge airport. Definitions could be identified that provide access to the airport if the corridor is connected to SR 79. • A connection to SR 287 would provide a new crossing over the Gila River which is important for future mobility and accessibility within the study area.	• A connection to SR 287 along Valley Farms Road and approved SRP 500 kV line corridor would significantly impact several future or in-progress master-planned communities.

2.5 Physical and Engineering Assessment

2.5.1 SRP 500kV Line

The Arizona Corporation Commission voted on August 16, 2005 to confirm a Certificate of Environmental Compatibility for the Pinal West-to-Southeast Valley/Browning project. The project includes new 500 kilovolt (kV) and 230 kV transmission lines and substations that will serve Pinal and Maricopa Counties. The project is managed by the Salt River Project (SRP)[1]. The approved route for the transmission line is depicted in **Figure 2-9**, *Approved Route for SRP 500 kV*, and **Figure 2-10**. The approved route generally provides SRP with a 1000 ft. corridor of which it will ultimately select 160 feet for an easement.

Immediately following the August 16, 2005 Corporation Commission decision, it was unclear whether legal challenges would be filed in opposition to the approved 500 kV line remained. During stakeholder meetings conducted during February and March 2006, stakeholders indicated that the approved line would likely not be the subject of additional legal action.

[1] *Salt River Project, "AZ Power Planning for Arizona's Future, PW-SEV/BRG transmission project", August 12, 2005.* http://www.azpower.org/pwsevbob/

In order to minimize the impact of the SRP 500 kV line and a transportation corridor on future master planned communities and developments, it was suggested by stakeholders during the Pinal County Corridors Definition Study to locate the transportation corridor, where feasible, adjacent to the 500 kV transmission line. Because of the potential common 'footprint' of the utility corridor and a future north-south corridor, stakeholders suggested that consolidation of infrastructure into a common corridor would minimize adverse impacts to future residents and reduce the mitigation that will be required as development continues. Salt River Project has stated that they would not object to a transportation corridor being constructed directly adjacent to the 500 kV line. SRP would need to consider a transportation corridor in the design and construction of the transmission line structures.

However, during the February and March stakeholder meetings, landowners, developers, and jurisdiction representatives stated a strong preference against consolidating the North-South corridor and the SRP 500 kV line into a single corridor. They indicated that mitigating a utility line is much easier than mitigating a major freeway. In essence, they can proceed to plan and design the future master planned communities and mitigate the 500 kV line. They feel that a transportation corridor is more difficult to mitigate.

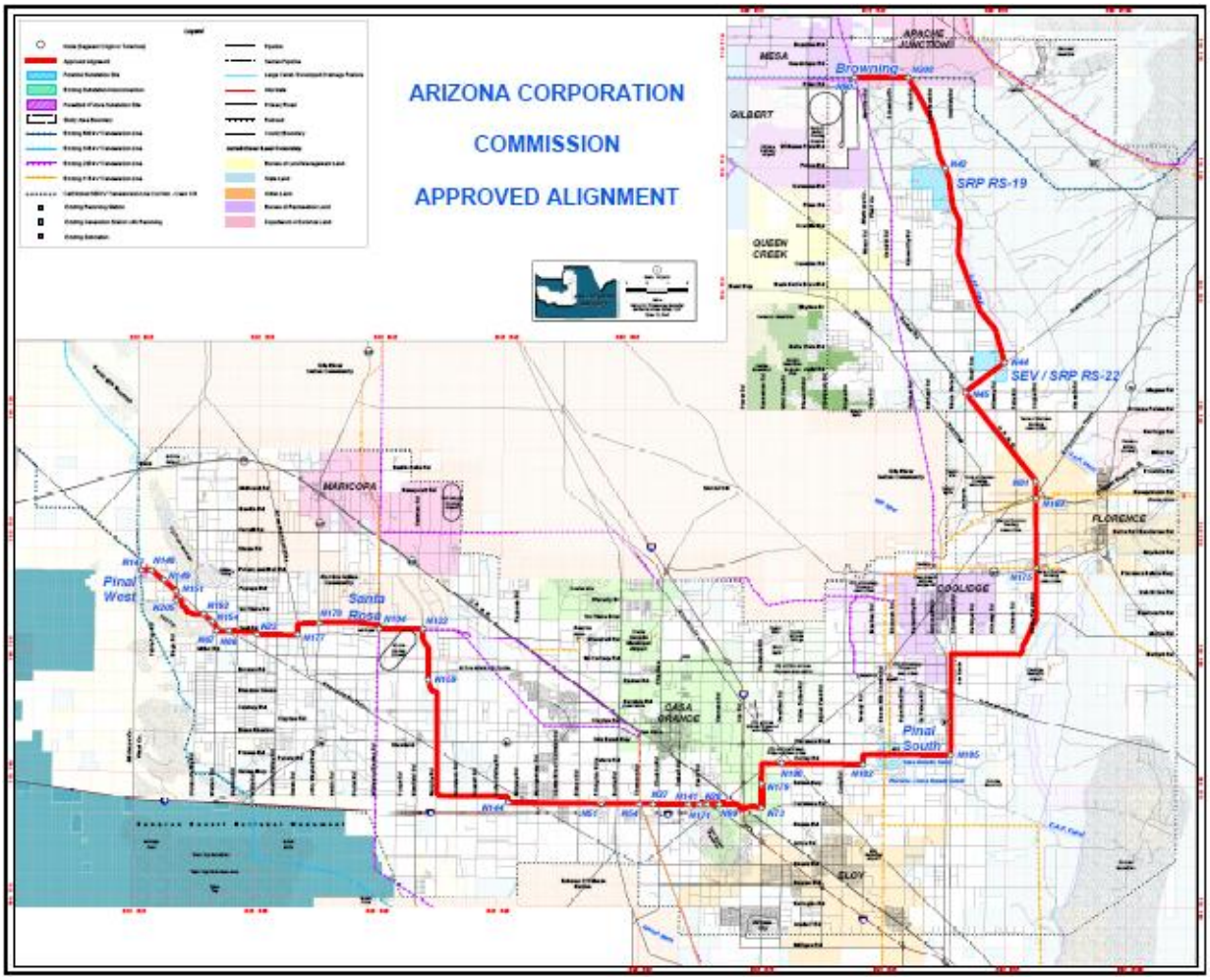
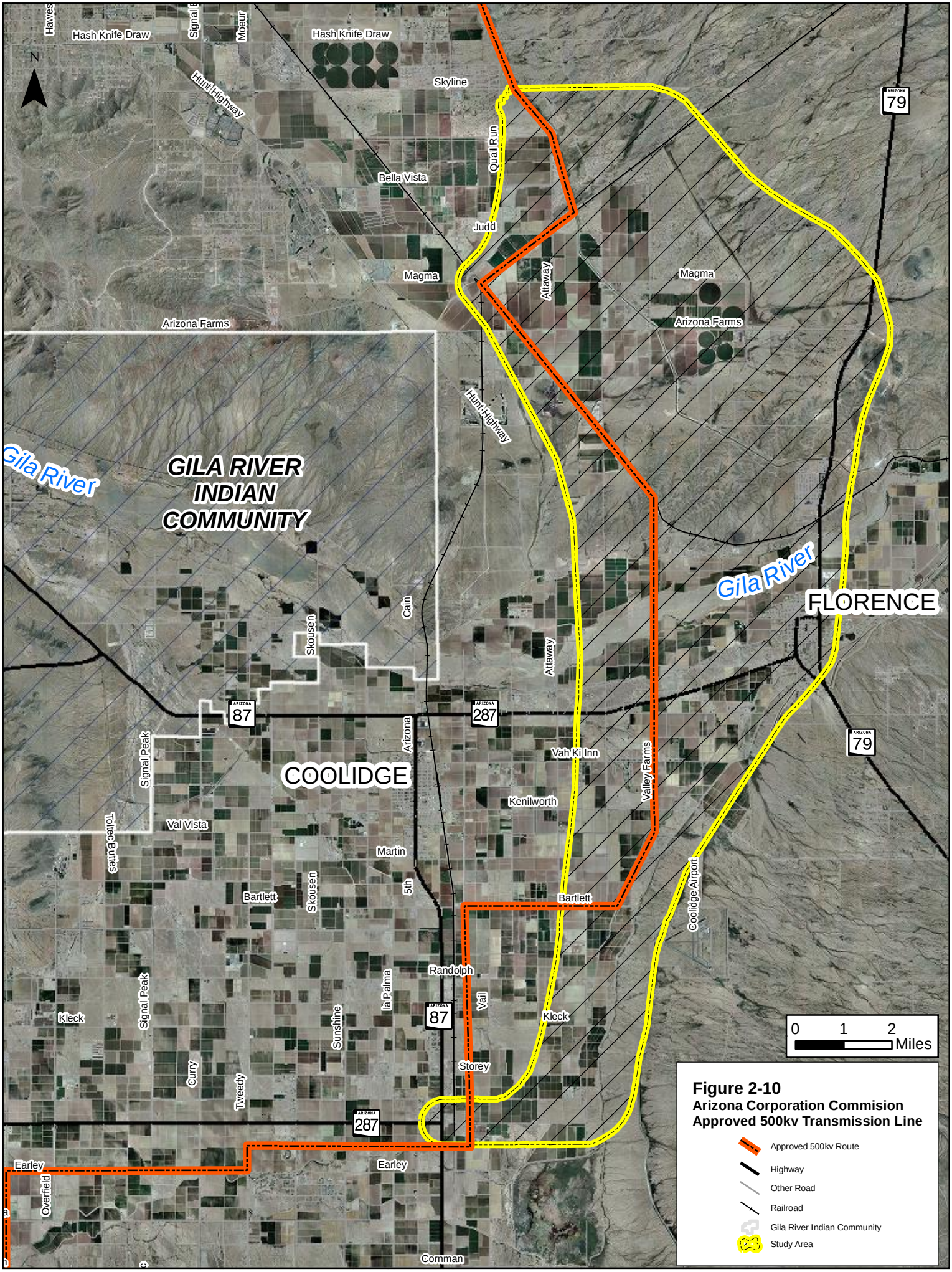


Figure 2-9 – Arizona Corporation Commission Approved 500-kv Transmission Line (Entire Route)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Curry
Tweedy
287
Earley
Earley
Overfield
Cornman
0 1 2 Miles
Figure 2-10
Arizona Corporation Commision
Approved 500kv Transmission Line
Approved 500kv Route
Highway
Other Road
Railroad
Gila River Indian Community
Study Area

2.5.2 Magma Dam Flood Retarding Structure

The Magma Dam Flood Retarding Structure is depicted **Figure 2-11**. The Magma Flood Retarding Structure was designed and constructed in the late 1960s by the National Resources Conservation Service (NRCS). The Magma Flood Retarding structure is located south of the Sonoqui Detention Dam and begins on the south side of the Magma Arizona Railroad, approximately two miles upstream of the CAP. The dam is owned by the NRCS and operated and maintained by the Magma Flood Control District. The NCRS is currently conducting an evaluation of the condition of the structures. The study is scheduled to be completed by 2007.

From an engineering perspective, the North-South corridor definition, if located upstream of the Flood Retarding Structure, should be located outside of the inundation area. A corridor definition located downstream of the flood retarding structure would be protected from upstream alluvial flooding.

2.5.3 Drainage /Washes

The location of the corridor with respect to drainage crossings is an important consideration to minimize impacts and costs. A corridor definition that cross washes at perpendicular will minimize the length of the drainage structure required.

2.5.4 Gila River Crossing

The Gila River is a major east-west feature that passes through the study area. The river, particularly during times of inclement weather, can significantly inhibit north-south travel. Stakeholders have expressed a strong desire for an additional crossing of the Gila River. A new crossing of the Gila River would be required to connect the North-South corridor to SR 287. A connection to SR 79 would not require a new crossing of the Gila River, though improvements to the existing crossing on SR 79 may be required to accommodate larger traffic volumes.

2.5.5 Right-of-Way Requirements

A controlled access freeway would require approximately 300 feet of right-if-way. Connections to both SR 79 and SR 287 would require that new right-of-way be obtained for the entire length of the corridor.

Existing right-of-way within the study area is shown in **Figure 2-12**. A corridor definition that connects to SR 79 offers the advantage that some right-of-way is available for the new corridor, though new right-of-way would need to be obtained in many areas. A corridor that connects to SR 287 would require that new right-of-way be acquired for the entire length of the corridor.

2.5.6 Summary of Engineering Opportunities and Constraints

A summary of engineering opportunities and constraints for the southern corridor alternatives is presented in **Table 2-3**.

Table 2-3 – Summary of Engineering Opportunities and Constraints

Corridor Definition Alternative	Engineering Opportunities	Engineering Constraints
Alternative 1: North-South corridor from Arizona Magma Railroad near Judd Road to connection with SR 79	• A connection to SR 79 must consider the Magma Flood Retarding Structure. A corridor located downstream of the Structure receives protection from alluvial flooding. A connection to SR 79 potentially reduces project costs as a connection to SR 79 does not necessitate a new crossing over the Gila River. • A connection to SR 79 maximizes utilization of existing right-of-way on SR 79.	• A corridor located upstream of the Flood Retarding Structure must be located outside of the inundation area. • A corridor definition connection to SR 79 would require several wash crossings. Washes should be crossed perpendicularly so as to minimize length of crossing structures. • A corridor definition connection to SR 79 may require a significant amount of new right-of-way through Florence. This may impact several existing residences and businesses. • The potential impacts to Arizona Department of Corrections facilities, and provision of access, would need to be considered.
Alternative 2: North-South corridor from Arizona Magma Railroad near Judd Road to connection with SR 287on Valley Farms Road alignment	• A connection to SR 287 could provide an additional crossing of the Gila River. Valley Farms, Felix, and Attaway Roads are assumed to be future multi-lane roadways with bridges over the river. If these are not constructed as river crossings, a new river crossing is important to area circulation. • A connection to SR 287 near Valley Farms Road is more closely aligned with routes envisioned by City of Coolidge to become major transportation facilities that would provide access to the Coolidge airport, regional shopping centers, and to SR 87 and Interstate 10.	• The corridor design would need to consider the 500 kV line. Potential impacts to access as a result of the 500 kV line are undetermined.

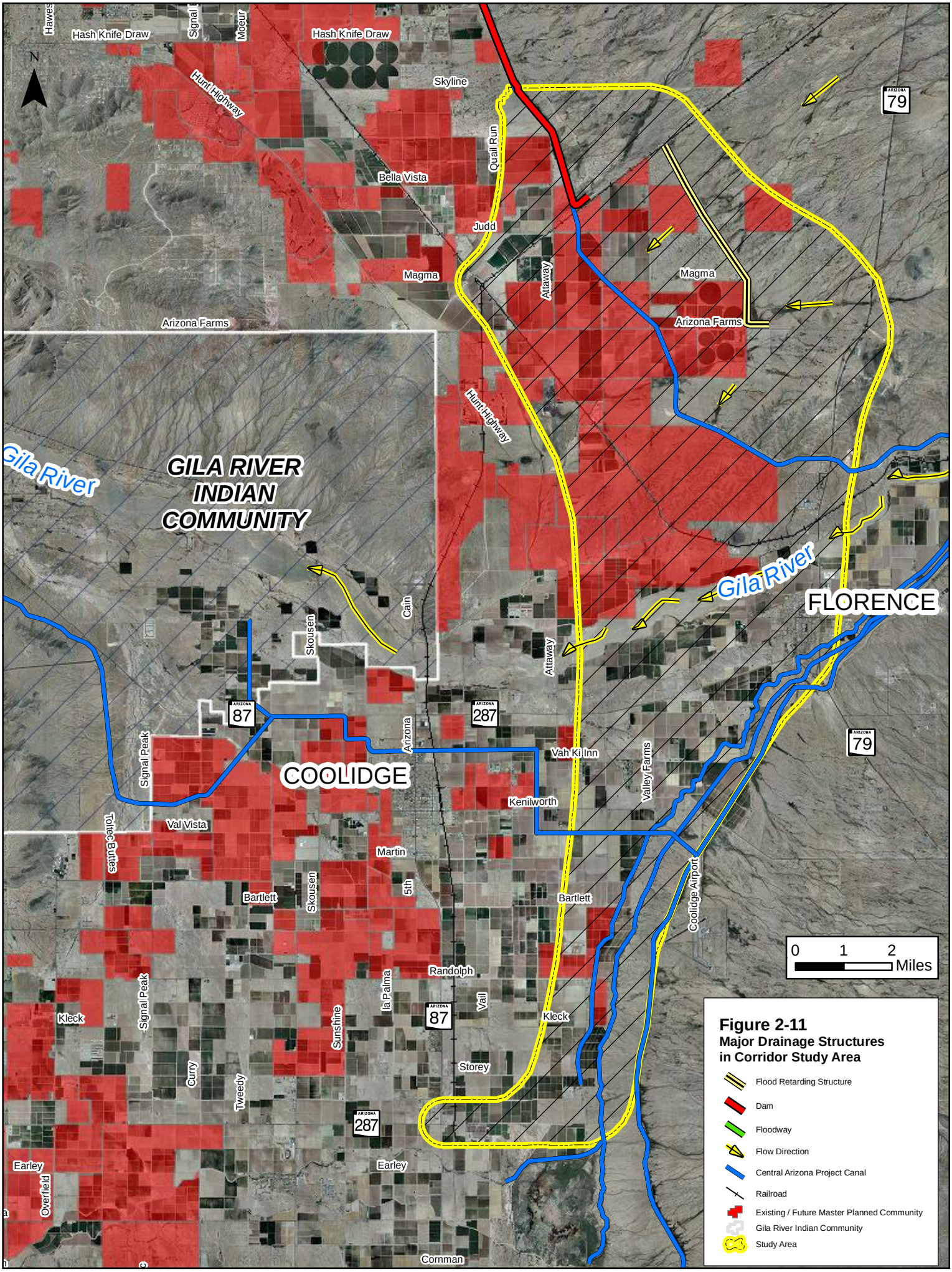
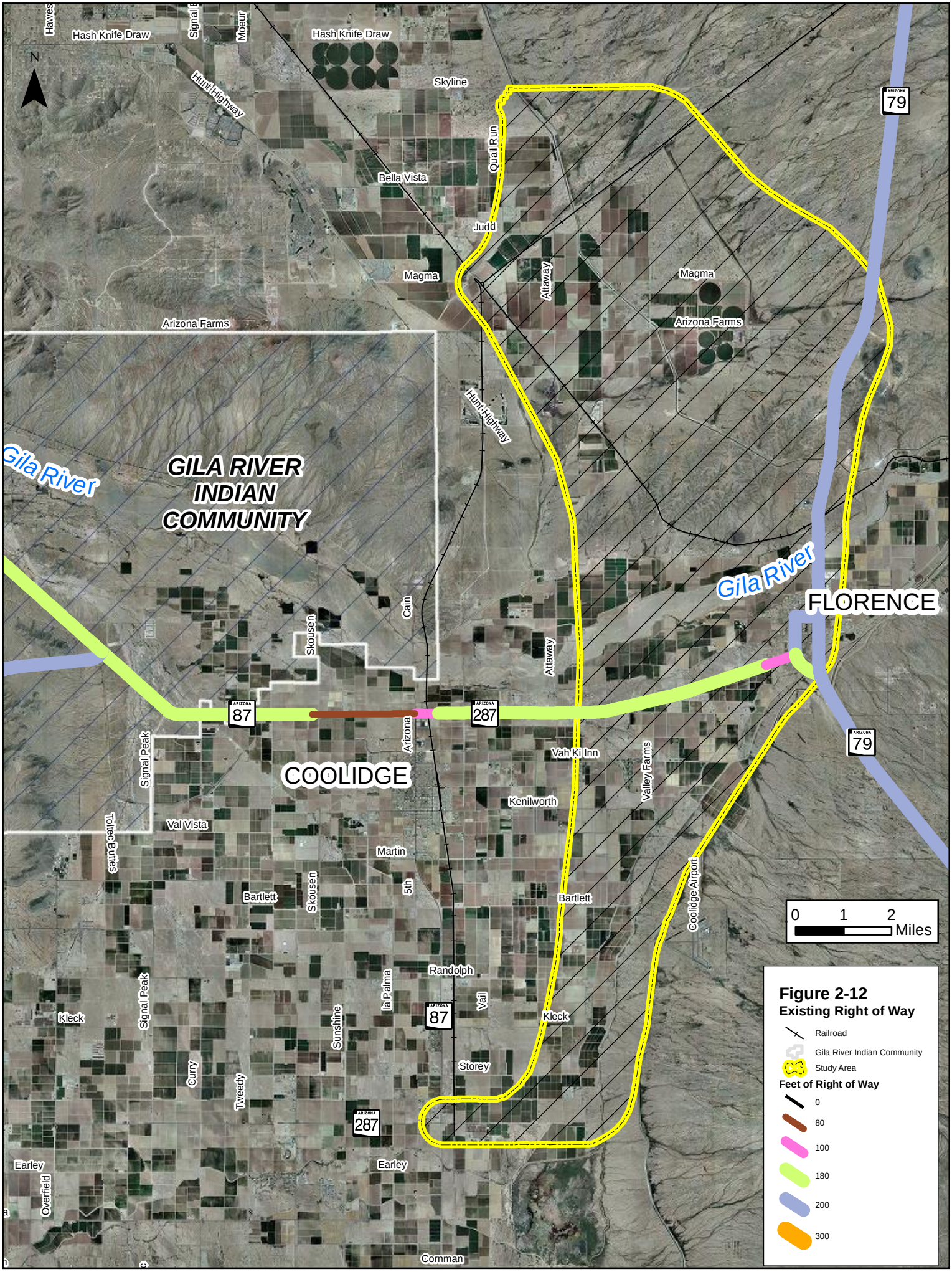


Figure 2-11
Major Drainage Structures in Corridor Study Area

- Flood Retarding Structure
- Dam
- Floodway
- Flow Direction
- Central Arizona Project Canal
- Railroad
- Existing / Future Master Planned Community
- Gila River Indian Community
- Study Area


N
Hash Knife Draw
Hash Knife Draw
Moeur
Hunt Highway
Skyline
Quail Run
Bella Vista
Judd
Magma
Attaway
Magma
Arizona Farms
Arizona Farms
Hunt Highway
Gila River
GILA RIVER INDIAN COMMUNITY
Gila River
FLORENCE
Cain
Skousen
Attaway
ARIZONA 87
ARIZONA 287
ARIZONA 79
ARIZONA 79
Arizona
Signal Peak
COOLIDGE
Vah Ki Inn
Valley Farms
Kenilworth
Val Vista
Toltec Buttes
Martin
Bartlett
Skousen
5th
Bartlett
Coolidge Airport
0 1 2 Miles
Randolph
Signal Peak
Kleck
Ia Palma
Vail
ARIZONA 87
Kleck
Sunshine
Storey
Curry
Tweedy
ARIZONA 287
Earley
Earley
Overfield
Cornman
Figure 2-12
Existing Right of Way
Railroad
Gila River Indian Community
Study Area
Feet of Right of Way
0
80
100
180
200
300

2.6 Social and Environmental Considerations

An environmental overview was conducted for the *Pinal County Corridors Definition Study*. The Environmental Overview is included in *Working Paper No. 2* and can be downloaded at http://tpd.azdot.gov///planning/cds_pinal.php.

The overview included a summary of the existing natural environment within the study area in terms of wildlife, sensitive species, plants, water resources, visual character, air quality, noise, and hazardous material concerns. The inventory of the natural environment of the study area consisted of gathering data and information from various local, state, and federal agencies, including the Arizona Game and Fish Department (AGFD) and the U.S. Fish and Wildlife Service (USFWS). The characteristics of the natural environment were also identified based on a visual survey of the study area. The environmental overview also included an archaeological assessment and cultural resources overview.

In summary, the density and diversity of the cultural resources in the study area is high. As such, both alternative for the North-South corridor definition will require additional testing and data recovery of cultural resources. Although only a small portion of the entire study area has been systematically surveyed, patterns of site distribution can be observed based on the existing data. The Queen Creek floodplain and the Gila River are the areas of highest cultural site density. It is estimated that at least 50 percent of any newly recorded archaeological sites will require testing and/or data recovery investigations to mitigate the potential impacts related to the construction of the new transportation corridors.

3. NORTH-SOUTH CORRIDOR DEFINITION IN THE FLORENCE AND COOLIDGE AREA

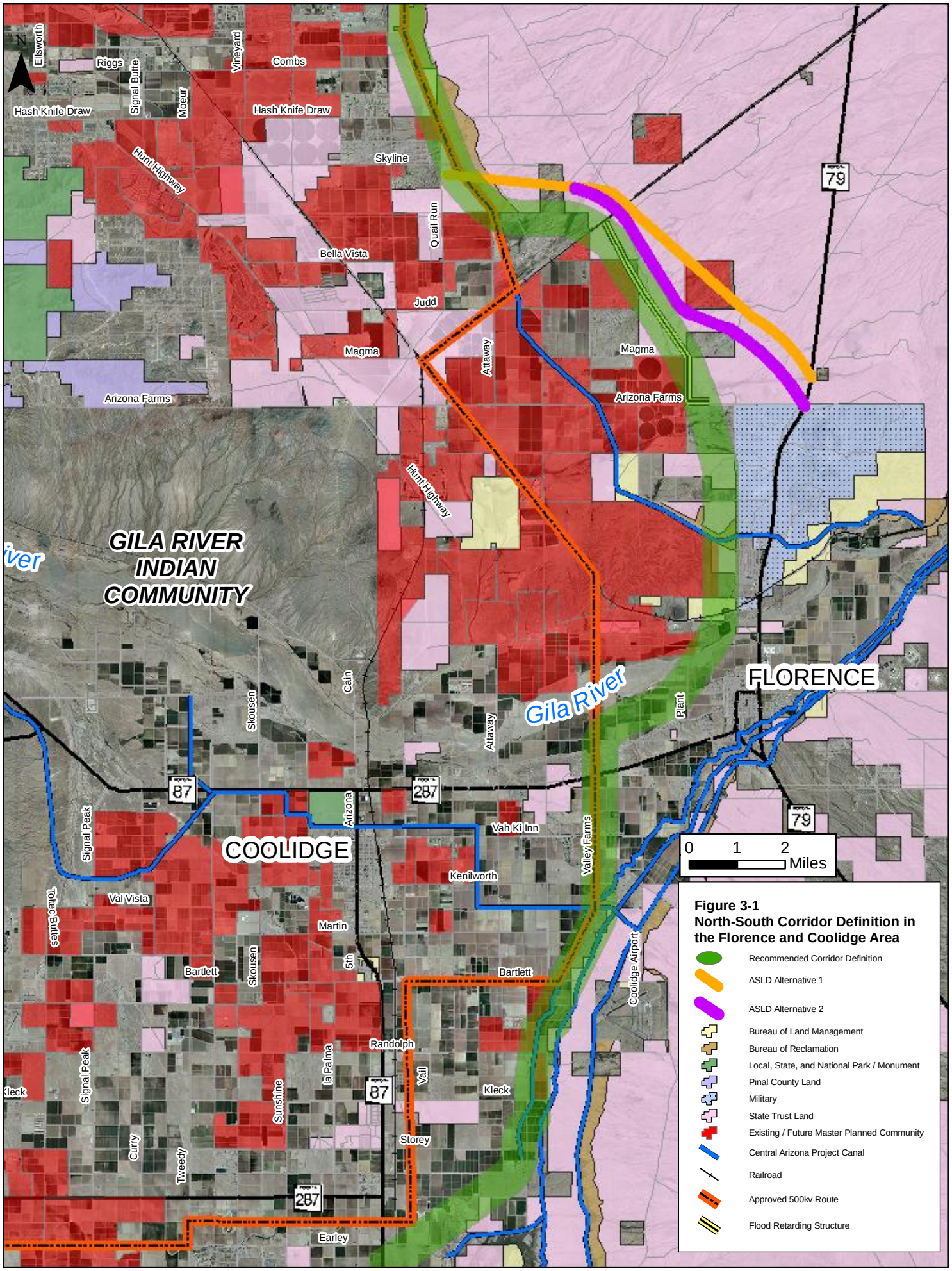
This chapter presents a recommendation for a corridor definition for the North-South corridor in the Florence and Coolidge area. The recommended corridor definition is consistent with the analysis of existing and future conditions data, and considers jurisdictional, stakeholder, and public input.

The recommended North-South corridor definition in the Florence and Coolidge area is depicted in **Figure 3-1.** The recommended corridor definition departs from the Central Arizona Project (CAP) Canal and the future Salt River Project (SRP) 500 kV line corridor south of Skyline Road and heads in an easterly direction towards the Magma Flood Retarding Structure (FRS). Impacts to existing or planned developments are minimal. Upon its arrival to the Magma FRS, the North-South corridor definition generally follows the Magma FRS south-southeast and will be accessible for future east-west arterials including Bella Vista, Judd, Magma, and Arizona Farms. After departing from the Magma FRS the corridor turns in a southerly direction and passes along the western edge of the Florence Military Reservation, crosses the CAP, passes west of Florence Gardens Mobile Home Park, and crosses the Magma Railroad. The corridor definition then bends west along the north side of the Gila River to approximately the vicinity of Plant Road or a location to be determined in future studies, and crosses the Gila River. After crossing the Gila River, the corridor definition turns west-southwest and returns to the SRP 500 kV line corridor south of the Gila River and crosses SR 287. The corridor definition follows the SRP 500 kV corridor until approximately Bartlett Road. At Bartlett Road, the corridor follows the Florence Canal to its termination in the vicinity of Storey Road. The corridor then turns to the west-southwest, passes north of the Picacho Reservoir, to connect to SR 87 south of SR 287.

The recommended North-South corridor definition provides the following features:

- Minimizes direct impact to master-planned communities, but is located near future population centers and areas of concentrated development so as to maximize congestion relief benefits to local arterial streets;
- Provides an additional crossing of the Gila River;
- Is accessible for east-west arterials including Bella Vista, Judd, Magma, and Arizona Farms Road in the Florence area, and for SR 287, Kenilworth, Bartlett, and Kleck in the Coolidge area.
- The majority of the corridor definition length is collocated with the SRP 500 kV line to the extent feasible to create a combined/shared utility corridor;
- § Provides access to regional facilities such as the Coolidge Municipal Airport, and the future regional shopping center to be located near Attaway Road and Bartlett Road.

As discussed in Section 2.4.1, the Arizona State Land Department identified two alternative alignments for the North-South corridor definition. The recommended corridor definition presented above does not exclude these two potential alignment alternatives for the North-South corridor. The two ASLD preferred alignments should be considered during the future alignment and environmental studies that will be conducted for the North-South corridor. As such, the two alternatives are included in **Figure 3-1** as potential definition alternatives.


N
Ellsworth
Riggs
Signal Butte
Moeur
Vineyard
Combs
Hash Knife Draw
Hash Knife Draw
Hunt Highway
Skyline
Quail Run
Bella Vista
Judd
Magma
Attaway
Magma
Arizona Farms
Arizona Farms
Hunt Highway
GILA RIVER INDIAN COMMUNITY
Gila River
FLORENCE
Cain
Skousen
Attaway
Plant
87
287
79
Arizona
Signal Peak
COOLIDGE
Vah Ki Inn
Valley Farms
Kenilworth
Val Vista
Toltec Buttes
Martin
Bartlett
Skousen
5th
Bartlett
Coolidge Airport
Randolph
Signal Peak
la Palma
Vail
Kleck
Kleck
Sunshine
Curry
Tweedy
Storey
287
Earley
0 1 2 Miles
Figure 3-1
North-South Corridor Definition in the Florence and Coolidge Area
Recommended Corridor Definition
ASLD Alternative 1
ASLD Alternative 2
Bureau of Land Management
Bureau of Reclamation
Local, State, and National Park / Monument
Pinal County Land
Military
State Trust Land
Existing / Future Master Planned Community
Central Arizona Project Canal
Railroad
Approved 500kv Route
Flood Retarding Structure