

APS Perryville to Valencia 69kV Powerline Project

Open House

WELCOME!
Please Sign In



Project Overview and Need





Project Overview

- Double-circuit 69kV powerline from the planned West Park Substation, near Apache and Southern Roads, to the existing Watson-Valencia 69kV powerline located along Miller Road
- Single-circuit 69kV powerline from the planned West Park Substation to the existing Perryville 69kV powerline located along the Roosevelt Canal
- APS is in the early stages of the planning process
- APS is conducting agency and public involvement outreach prior to identifying preferred powerline routes






Perryville to Valencia 69kV Project

Project Location






Project Features

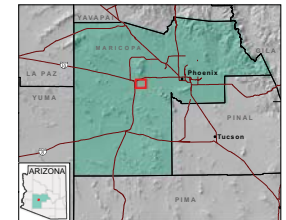
-  Project Study Area
-  Potential Substation Siting Area

Existing Transmission Facilities

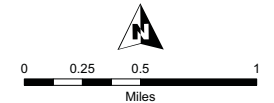
-  500kV Transmission Line
-  345kV Transmission Line
-  230kV Transmission Line
-  69kV Transmission Line
-  Existing Substation

Reference Features

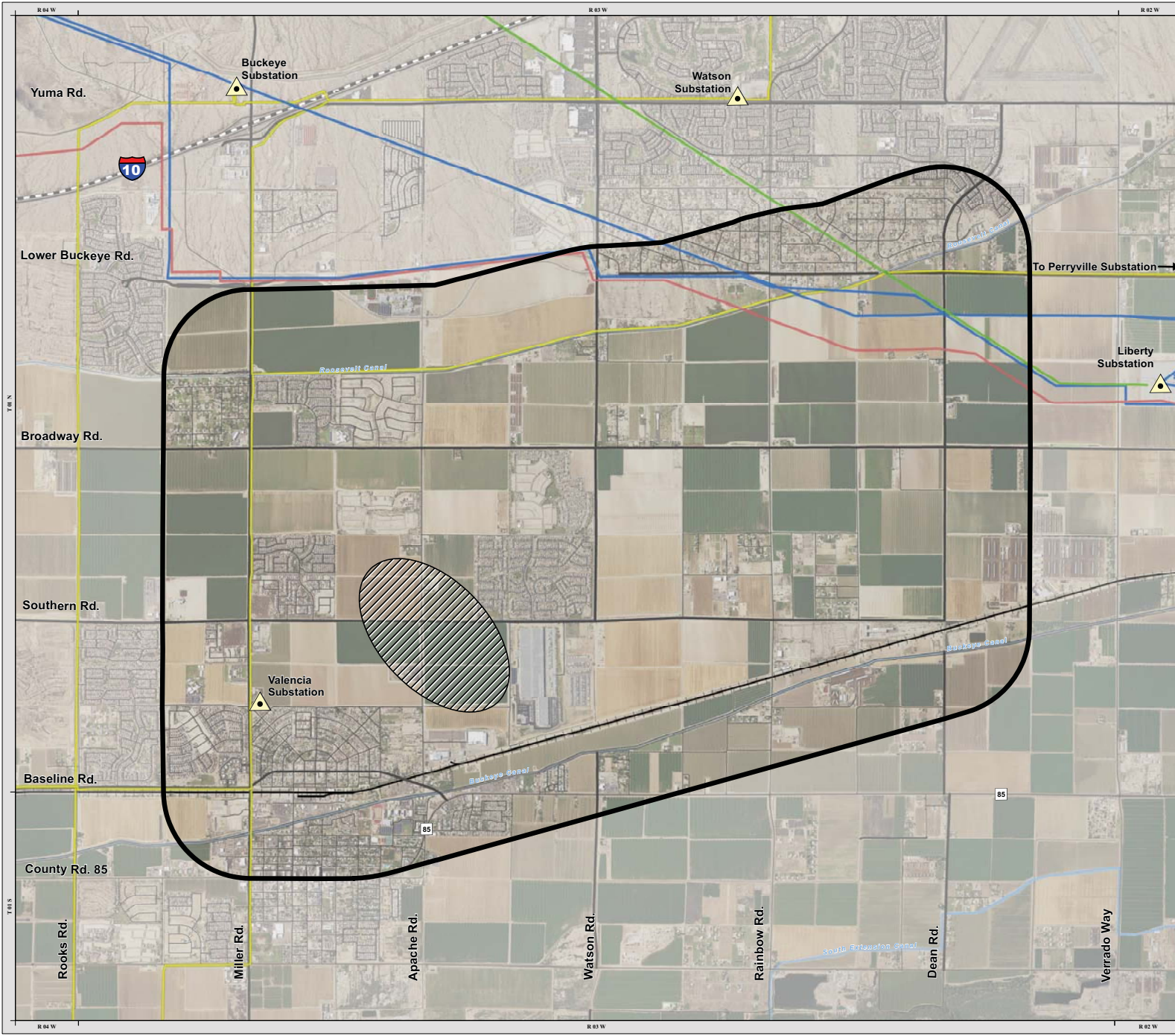
-  Interstate
-  Major Road
-  Street
-  Railroad
-  Canal



Sources: Arizona State Land Department 2007; EPG 2016; ESRI Street Map 2013; NAIP Aerial Imagery 2015



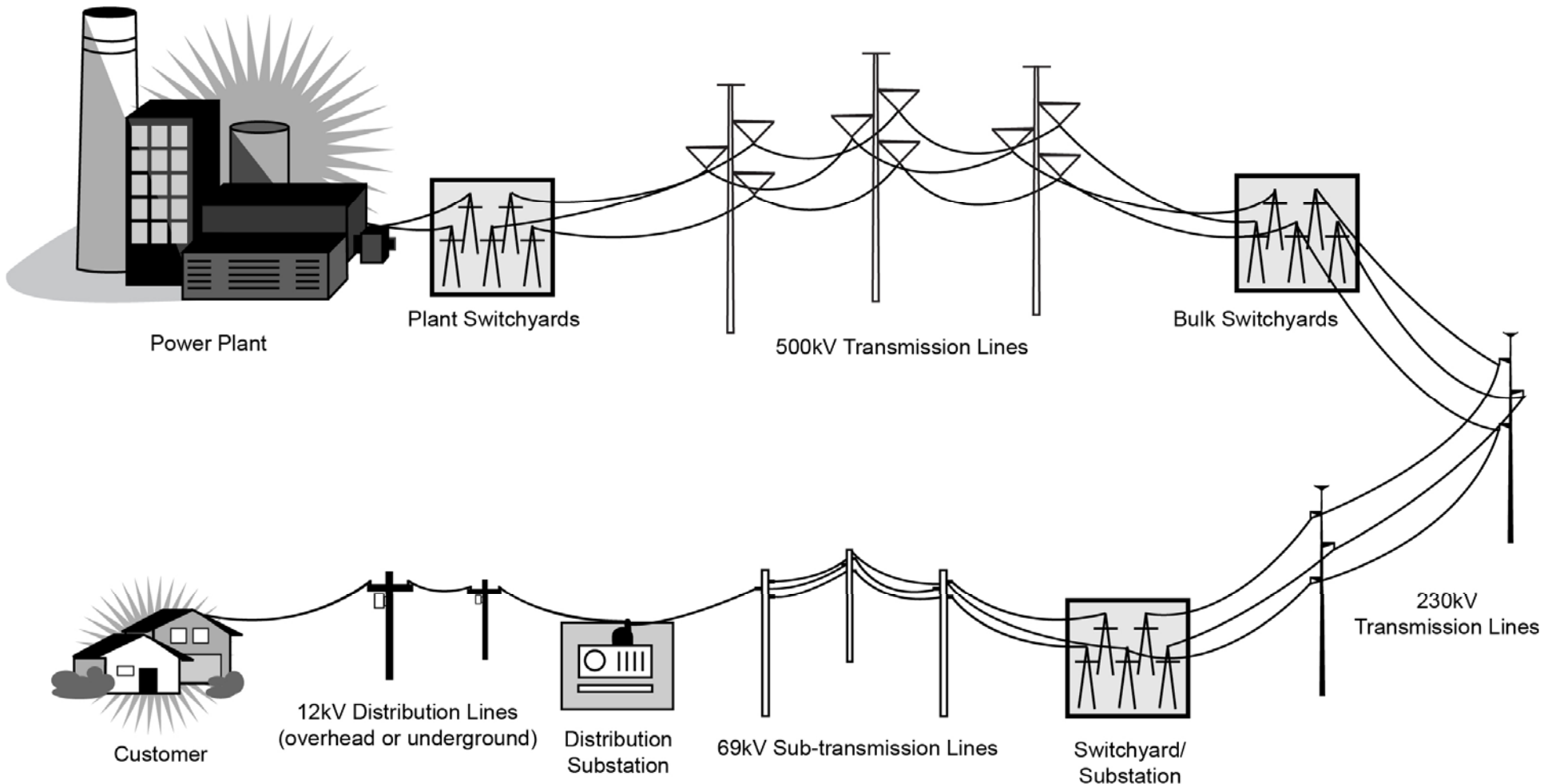
February 2017



Project Need

- Provide an additional, separate, 69kV power source, allowing the system to serve new development and for increased electricity use within existing developments
- Improve reliability in the area by helping to prevent potential outages that result from the loss of other 69kV powerlines that serve the area
- Provide operating flexibility by creating a new loop and source into the area

Electricity From the Power Plant to the Customer



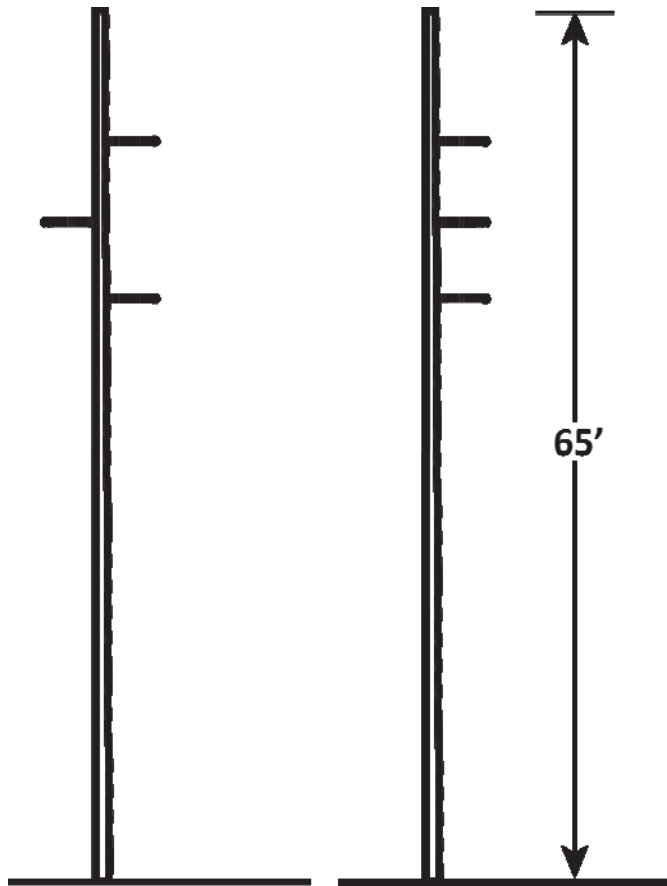
Project Description and Design Considerations



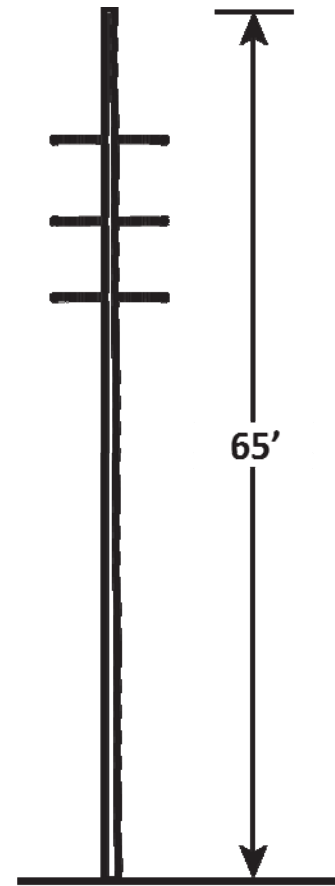
Project Description

- Double-circuit 69kV powerline, approximately 1 to 3 miles in length, from the planned West Park Substation, near Apache and Southern Roads, to the existing Watson-Valencia 69kV powerline located along Miller Road
- Single-circuit 69kV powerline, approximately 2 to 6 miles in length, from the planned West Park Substation to the existing Perryville 69kV powerline located along the Roosevelt Canal
- In-service date summer 2018
- A new line route will require right-of-way or easement up to 40 feet wide
- Will require construction of new steel monopoles approximately 65 feet tall (may include 12kV underbuild)

Typical Structures



Single-circuit 69kV Structures



Double-circuit 69kV Structure

Typical Structures



Planning Process





TASK 1

Project Start-up

- Finalize purpose and need statement
- Finalize project description
- Review and approve study area
- Participate in agency briefings

TASK 2

Preliminary Alternatives Analysis

- **Provide general engineering costs and construction input**
- Review and approve preliminary alternatives

TASK 3

Detailed Analysis and Route Comparison

- Prepare engineering, construction, operation, and maintenance data
- Identify preferred alternative(s)
- Participate in public open house
- Review and provide input on selected alternative(s)
- Review and approve siting narrative



- Define study area
- Prepare study area base map
- Collect and map secondary data for study area

Task 2.1 – Opportunities and Constraints Analysis

- **Develop preliminary alternatives siting criteria**
- **Identify environmental opportunities and constraints**

Task 2.2 – Preliminary Alternatives Development

- Identify preliminary alternatives

- Collect data for alternatives
- Conduct field surveys to support resource inventory
- Review route alternatives
- Participate in public open house
- Identify environmentally preferred alternative(s)
- Prepare draft siting narrative
- Finalize siting narrative

TASK 4 Public Involvement

- Conduct community leader briefings

- **Develop comment tracking database**
- **Track and respond to comments**
- **Prepare and distribute newsletter #1**
- **Prepare for and conduct public open house meeting #1**

- Conduct community leader briefings

- Prepare and distribute newsletter #2
- Prepare for and conduct public open house meeting #2
- Conduct community leader briefings
- Track and respond to comments

TIMELINE

JANUARY – FEBRUARY 2017

JANUARY – APRIL 2017

APRIL – JUNE 2017

* Current status of planning process

SCOPE OF WORK



Next Steps in Planning Process

- Collect, respond, and document public and agency comments
- Alternative route identification – April 2017
- Complete detailed inventory
- Impact assessment
- Next open house – May 2017
- Alternative route comparison
- Final route selection – June 2017















Environmental Studies Overview

- Land Use – existing/future land use and jurisdictional planning guidelines
- Visual – sensitive viewers (residences, parks, and travel routes)
- Cultural – minimal cultural or archaeological sensitivity, based on existing urban development
- Biology – minimal sensitive habitat, based on existing urban development



Perryville to Valencia 69kV Project

Existing Land Use






Existing Land Use

-  Residential, Low Density
-  Residential, Medium Density
-  Residential, High Density
-  Residential, Mobile Home/RV Park
-  Residential, Under Construction
-  Commercial
-  Industrial
-  Utilities/Canal
-  Public/Quasi-Public (Cemetery, Church, Government Building)
-  School/Educational Facilities
-  Open Space/Recreation
-  Parks/Preservation
-  Agriculture
-  Vacant/Undeveloped





Project Features

-  Project Study Area
-  Potential Substation Siting Area

Existing Transmission Facilities

-  500kV Transmission Line
-  345kV Transmission Line
-  230kV Transmission Line
-  69kV Transmission Line
-  Existing Substation

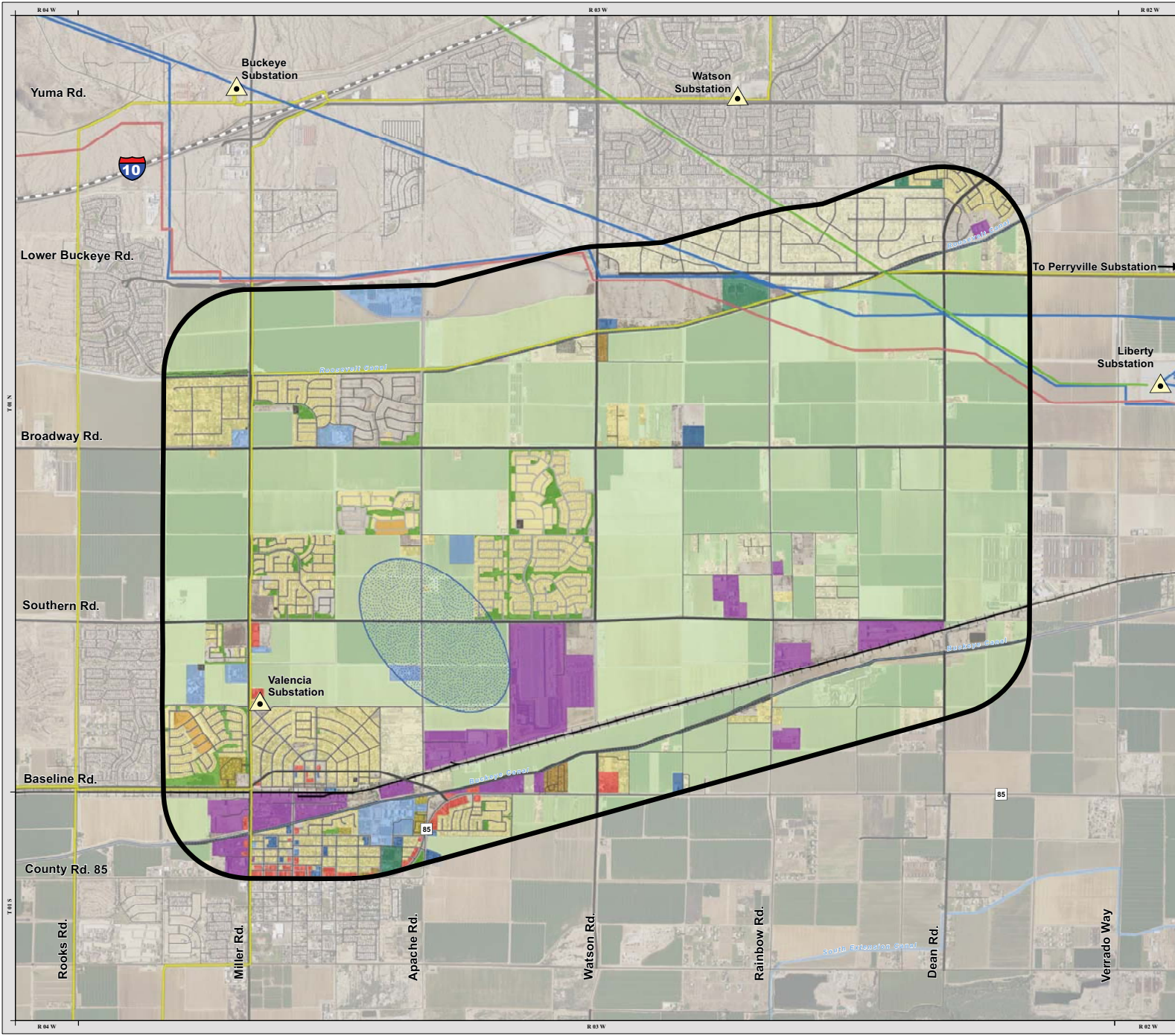
Reference Features

-  Interstate
-  Major Road
-  Street
-  Railroad
-  Canal



March 2017

Sources: Arizona State Land Department 2007; EPG 2017;
ESRI Street Map 2013; NAIP Aerial Imagery 2015; City of Buckeye 2017





Perryville to Valencia 69kV Project

Future Land Use



Future Land Use

-  Residential, Low Density
-  Residential, Medium Density
-  Residential, High Density
-  Residential, Mobile Home/RV Park
-  Residential, Under Construction
-  Commercial
-  Industrial
-  Utilities/Canal
-  Public/Quasi-Public (Cemetery, Church, Government Building)
-  School/Educational Facilities
-  Open Space/Recreation
-  Parks/Preservation
-  Agriculture





Development Status

-  Preliminary Plat
-  Final Plat






Project Features

-  Project Study Area
-  Potential Substation Siting Area

Existing Transmission Facilities

-  500kV Transmission Line
-  345kV Transmission Line
-  230kV Transmission Line
-  69kV Transmission Line
-  Existing Substation

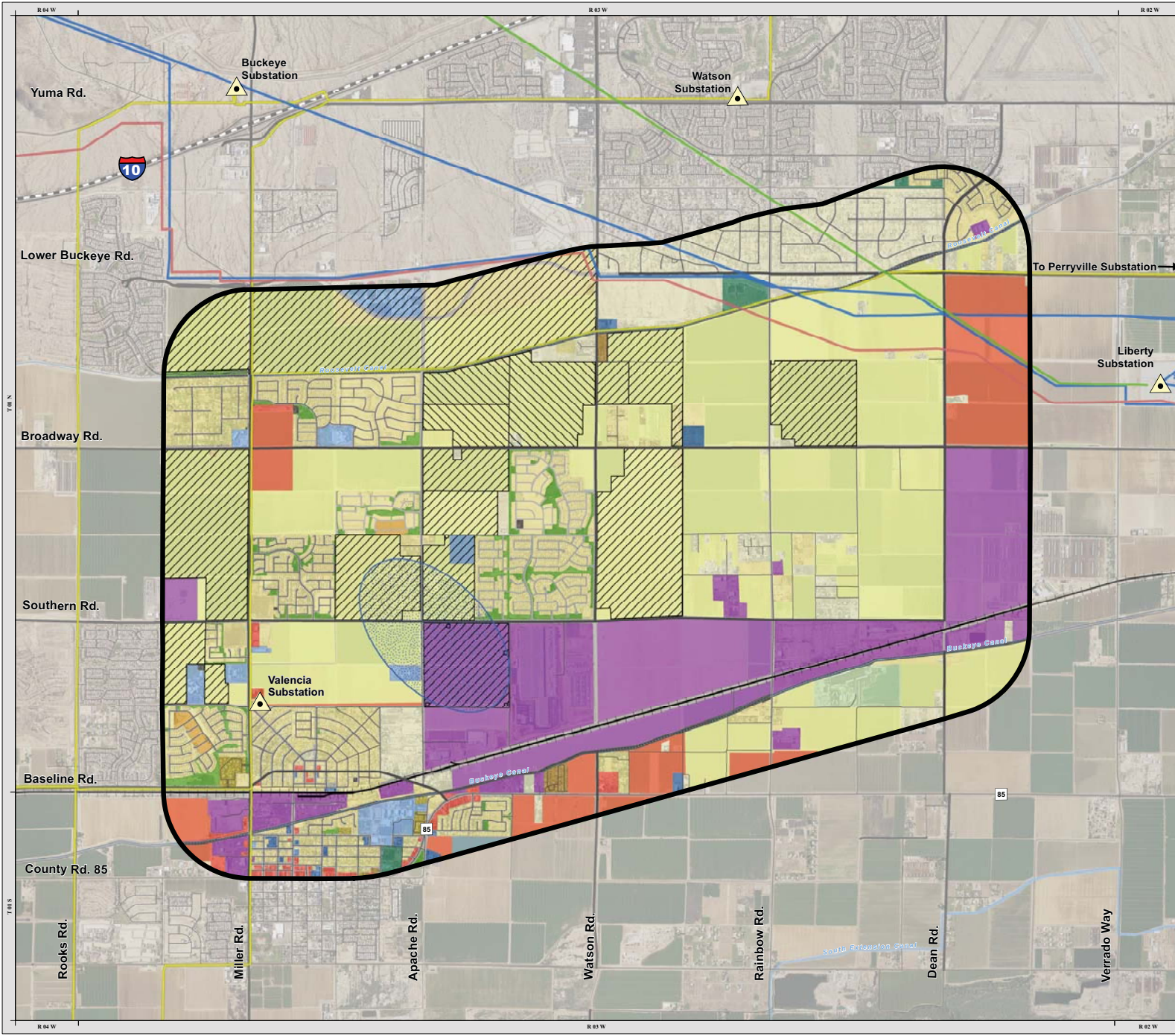
Reference Features

-  Interstate
-  Major Road
-  Street
-  Railroad
-  Canal



March 2017

Sources: Arizona State Land Department 2007; EPG 2017; ESRI Street Map 2013; NAIP Aerial Imagery 2015; City of Buckeye 2017



Opportunities and Constraints Analysis

- Identify opportunities and constraints through evaluation of environmental resources within the project study area
- Conduct an analysis of various environmental resource sensitivity to the construction, operation, and maintenance of a 69kV powerline

Factors Considered in Route Identification

- Maximize use of siting opportunities
 - Parallel existing linear features, including roads, distribution lines, powerlines, railroads, and canals
- Minimize impact to sensitive resource areas
 - Avoid densely developed areas to the extent practicable

Preliminary Facility Siting Criteria

Constraints	
Constraints	Sensitivity Level
Existing Land Use and Visual Resources	
Residential Low Density	High
Parks/Preservation	High
Schools/Educational Facilities	High
Commercial Retail/Commercial	Moderate
Open Space/Recreation	Moderate
Agriculture	Low
Industrial	Low
Transportation	Low
Utility Facilities (substations, canal, communications, etc.)	Low
Vacant/Undeveloped Land	Low
Public/Quasi-public	
– Church	High
– Cemetery	High
– Government Buildings	Moderate
Future Land Use and Visual Resources	
Residential – General Plan	Moderate
Commercial – General Plan	Moderate
Industrial – General Plan	Low
Residential – Preliminary Plat	Moderate
Residential – Final Plat	High
Biological Resources	
Xeroriparian Habitat	Moderate
Cultural Resources	
Protected Cultural Features	Moderate

Opportunities	
Opportunities	Opportunity Level
230kV and 69kV Overhead Transmission Line Corridors	High
12kV Overhead Distribution Lines adjacent to or within Roadway ROW	High
12kV Overhead Distribution Lines– in vacant, agricultural, or undeveloped land; and adjacent to canal and/or railroad	High -Moderate
Major Roadway ROW	High -Moderate
500-345kV Overhead Transmission Line Corridors	Moderate
Canal	Moderate
Railroad	Moderate

Perryville to Valencia 69kV Project

Opportunities and Constraints

Sensitivity Levels

- High
- Moderate
- Low

Opportunity Levels

- High
- High - Moderate
- Moderate

Project Features

- Project Study Area
- Potential Substation Siting Area

Existing Electrical Facilities

- 500kV Transmission Line
- 345kV Transmission Line
- 230kV Transmission Line
- 69kV Transmission Line
- 12kV Distribution Line
- Existing Substation

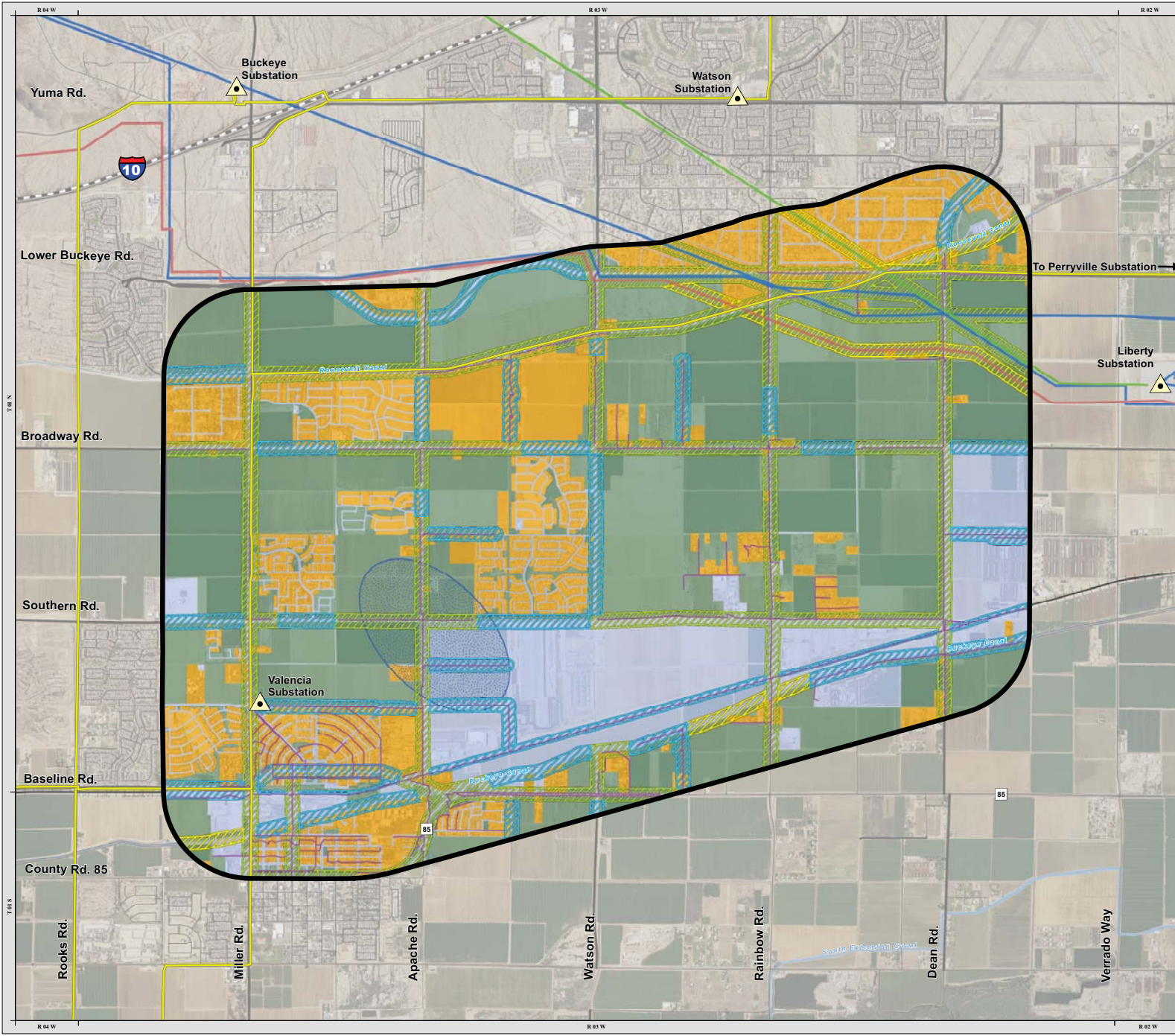
Reference Features

- Interstate
- Major Road
- Street
- Railroad
- Canal

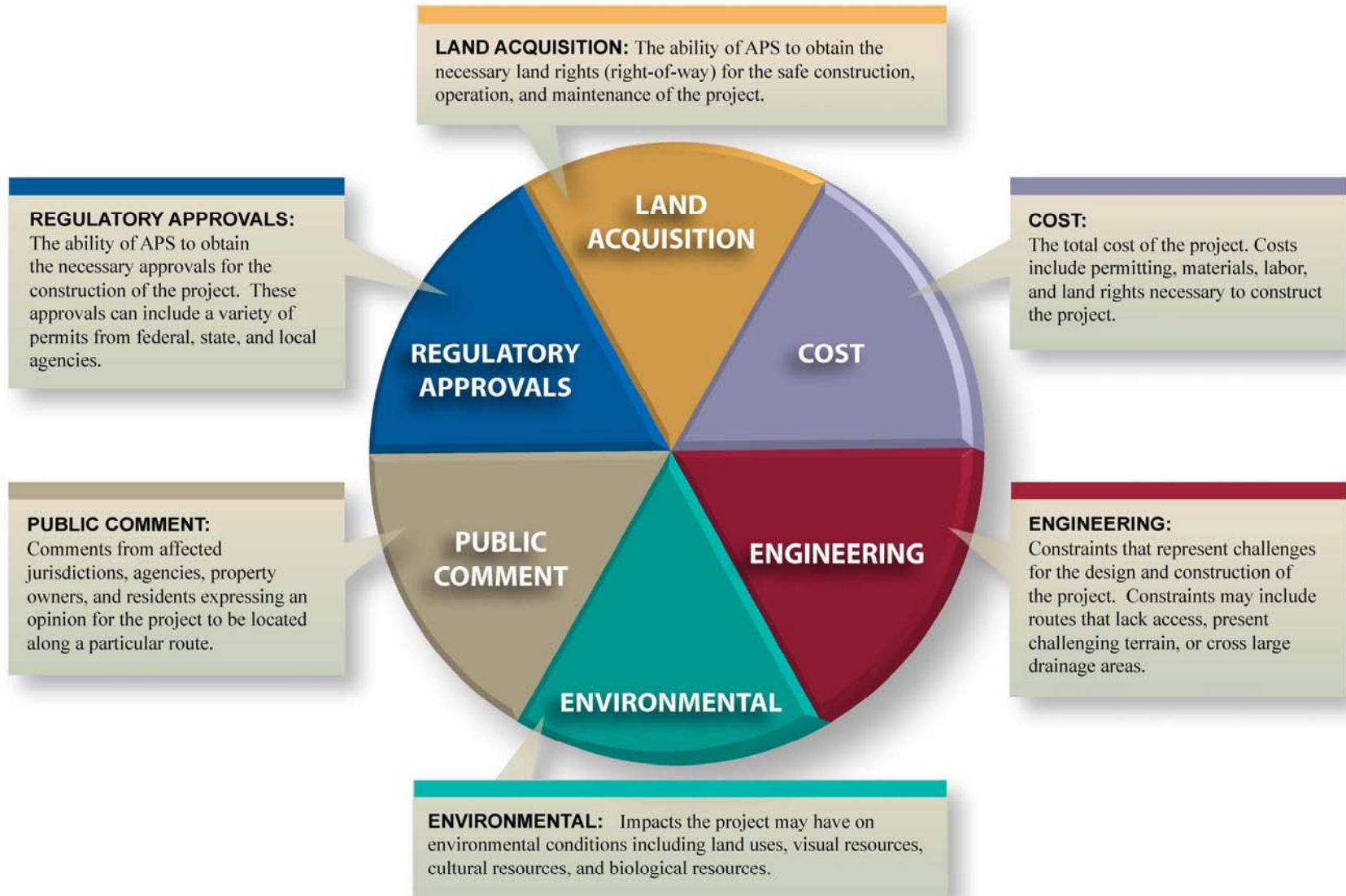


March 2017

Sources: Arizona State Land Department 2007; EPG 2017; ESRI Street Map 2013; NAIP Aerial Imagery 2015; City of Buckeye 2017



Transmission Line Siting Considerations



Public Comments and Next Steps



Public and Agency Outreach

- City of Buckeye (January and February with City Mayor, Council, and Staff)
- Maricopa County District 4 Supervisor (February)
- Project newsletters (March 2017, more to follow)

Outreach is ongoing throughout the process.

Opportunities for Public Information and Comment

- Fill out and return a comment form tonight
- Future project newsletters will have updated information and opportunities for comment
- Electronic comment forms and project updates available at: **www.aps.com/siting** (see Perryville to Valencia 69kV Project under "Current Siting Projects")
- APS Project Manager, Kevin Duncan, can be reached at: **1-888-352-4365** or **perryvillevalencia@apsc.com**
- Media briefings (APS)
- Next public open house expected May 2017