

Switzer Canyon/Turquoise Intersection Safety Improvements

COMMUNITY DEVELOPMENT

DIVISION

MAY 27, 2014

Aerial



Original JPA/IGA

- 2011, Allocated \$230,000 for the preliminary engineering (Project Assessment) and Design of the Switzer Canyon/Turquoise and Lone Tree/ Zuni intersections.

Project Assessment

Systematic versus Spot Specific:

Spot Specific: Spot specific projects require an engineering analysis, prioritization process, supporting crash data, benefit-cost tabulation of at least 1.0 and proven safety countermeasures that address the identified safety needs.

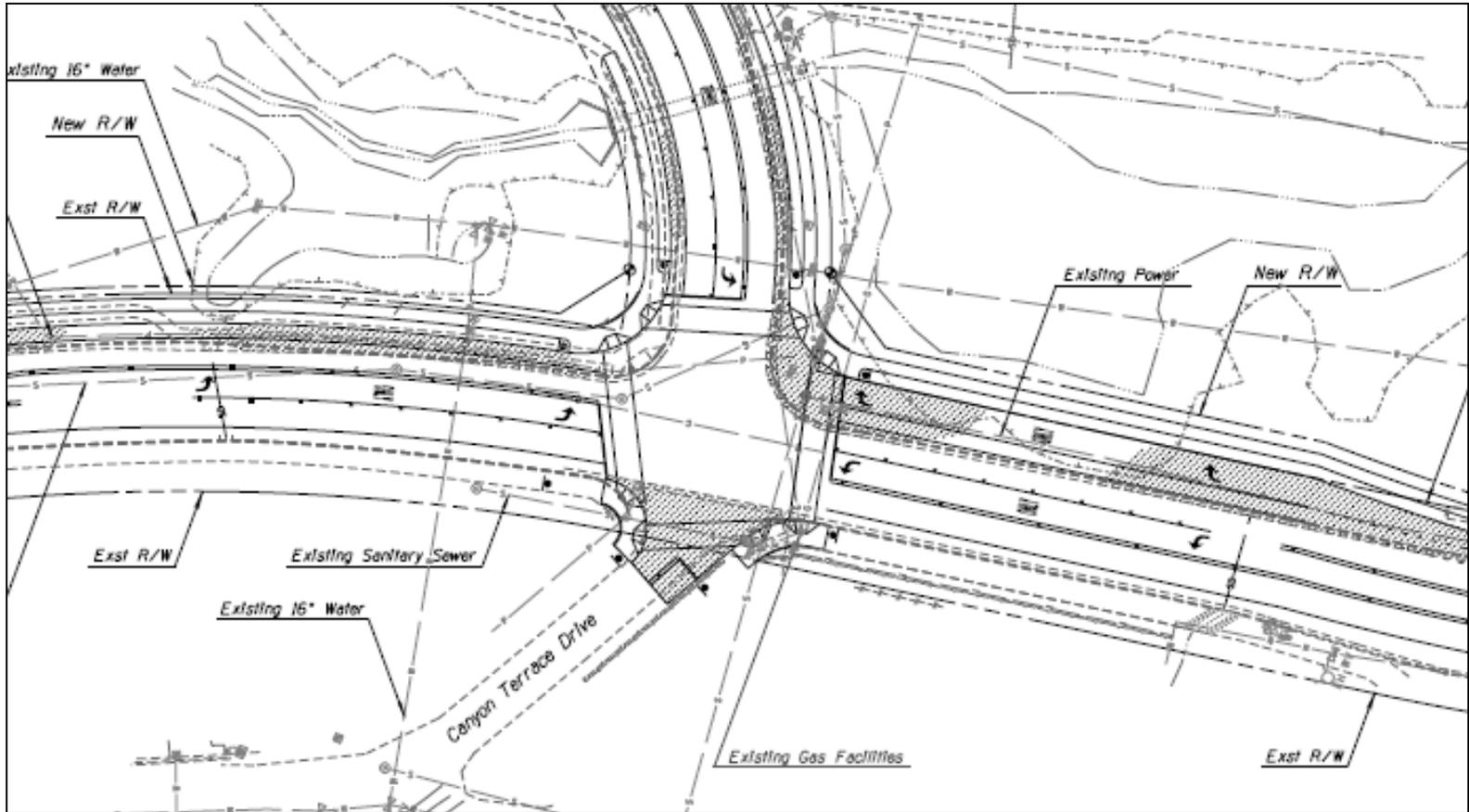
Compared 3 Alternatives:

- Stop Signs with intersections improvements
- Traffic Signal with intersections improvements
- Roundabout

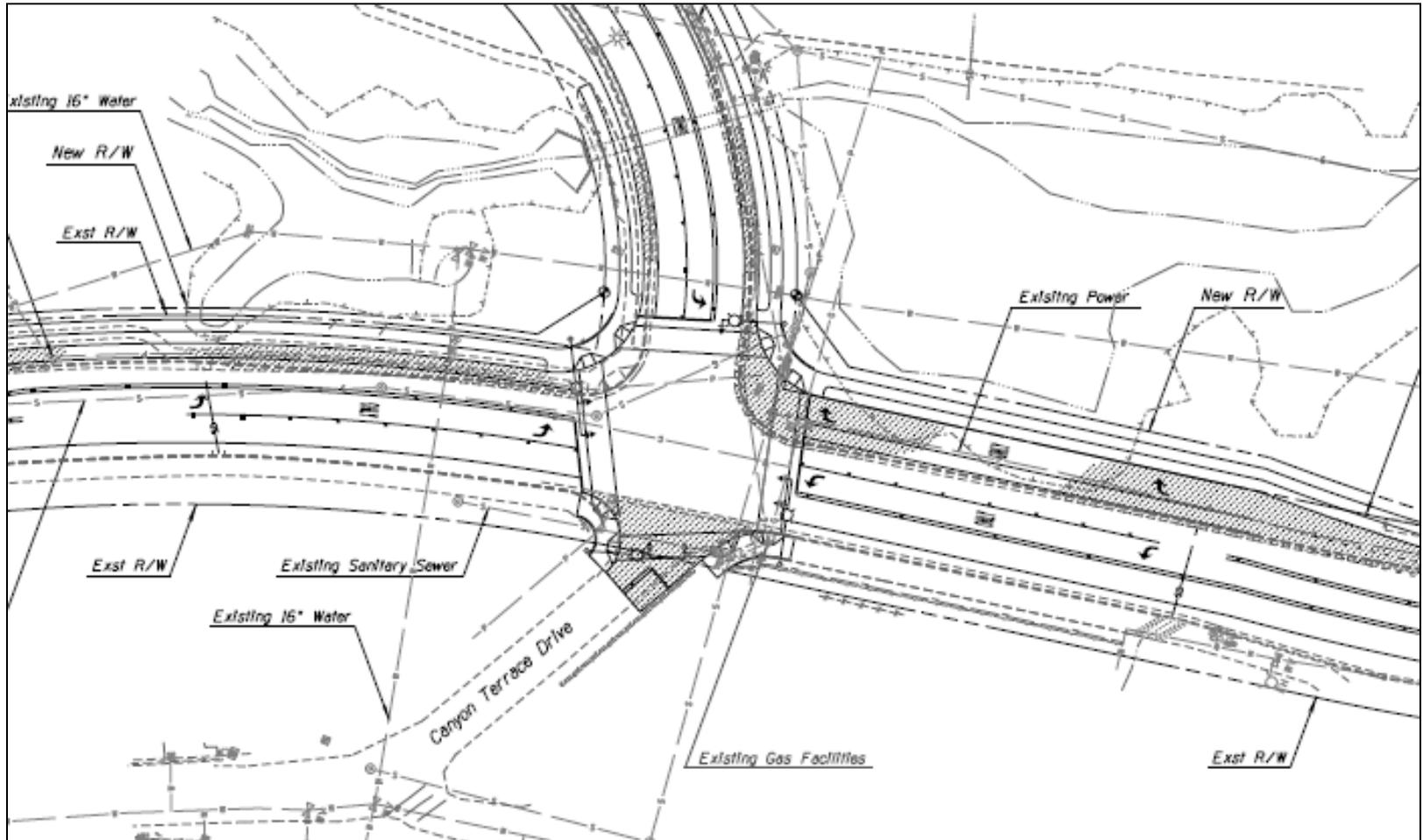
Existing Right-of-Way



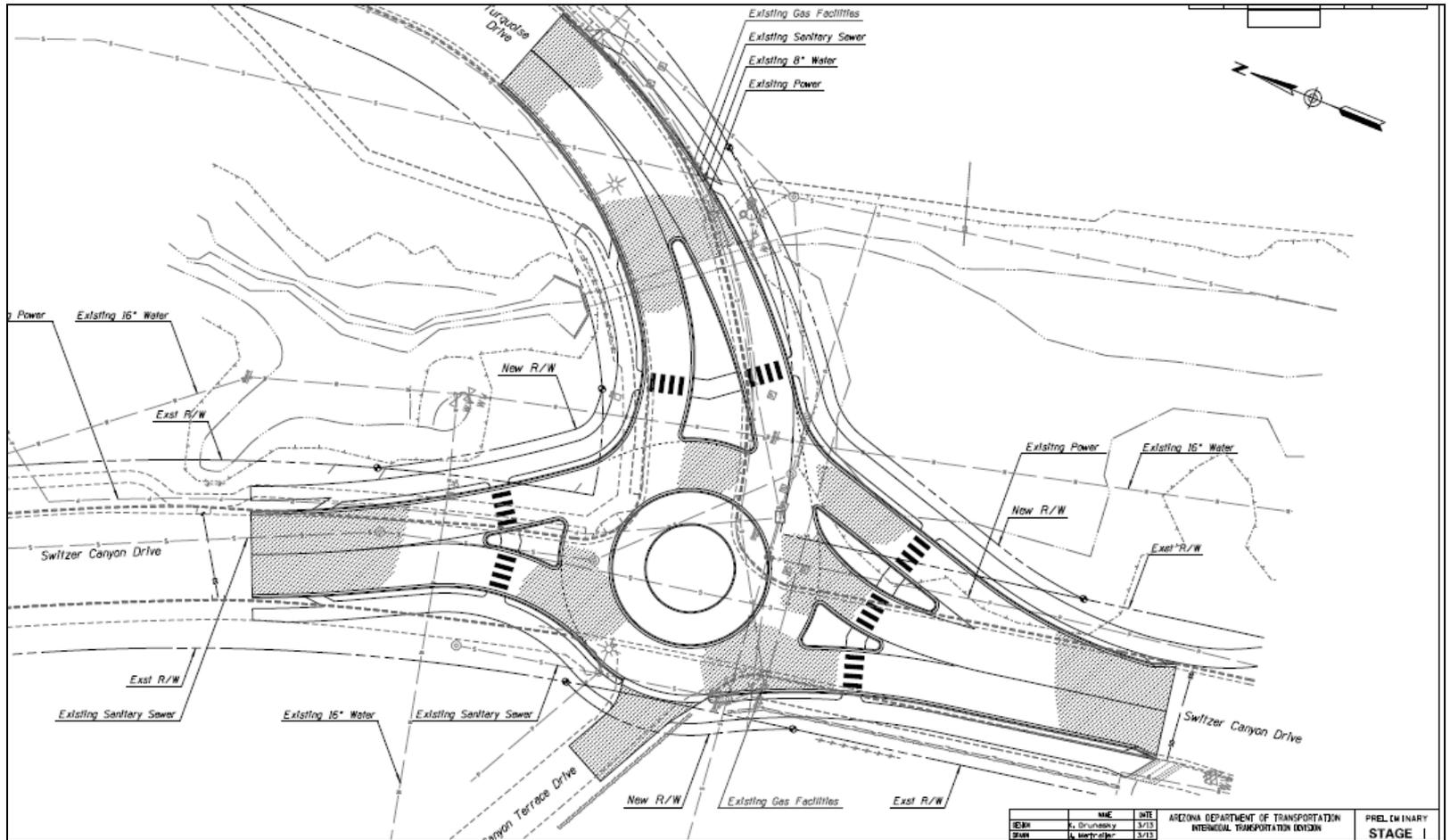
Stop Sign



Signal



Roundabout



Roundabout

- Preferred Alternative
- Improved Traffic Flow
- Highest B/C Ratio
- Community Acceptance
- Other benefits:
 - Low speed environment
 - Reduction in fuel use and emissions
 - No signal equipment to install and repair
 - Quieter Neighborhoods

Current & Estimated Cost

Concept Report - \$119,927 - (Incurred to Date)

Final Design Proposal – \$235,021

Estimated Construction Cost – \$1,518,662

Project Management (Estimates)

- ADOT PM – \$50,000
- ADOT Construction Fee – \$303,732
- ADOT Environmental - \$75,000
- City PM – 80,000

Total Estimated Project Cost – \$2,382,340

Grant Funds - \$1,600,000

City Funds - \$782,340

Funding Source – Reoccurring \$450,000 Signal Improvements in the Community Development Division, Transportation CIP, FY16.

Conclusion

- Design of the Roundabout is the next step
- ADOT will administer the design and construction but the City is responsible for any cost not covered by HSIP grant funds
- FMPO TIP (grant funds) has the \$1,600,000 funding in FY17
- City will need to fund approximately \$782,340 above the HSIP grant funds.