



**CITY OF PHOENIX  
STREET TRANSPORTATION DEPARTMENT**

**T2050 MOBILITY ASSESSMENT  
WESTSIDE NEIGHBORHOODS  
STUDY AREA #6**

**PROPOSED CONDITIONS REPORT  
COP PROJECT No.: ST87210019-1**

August 2019



*Prepared By:*  
**Gavan & Barker, Inc.**  
3030 North Central Avenue, Suite 1530  
Phoenix, Arizona 85012  
Phone: (602) 200-0031  
Fax: (602) 200-0032  
[www.gavanbarker.com](http://www.gavanbarker.com)

Job No. 1803



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# Proposed Conditions Report

## Executive Summary

The T2050 Mobility Improvements Program was established to improve mobility safety and connectivity for all roadway users. It is funded by the Phoenix Transportation 2050 (T2050) voter-approved sales tax for transportation improvements. The Mobility Improvement Program was allocated 15% of the T2050 funds to install new sidewalks, bikeways and other multimodal improvements to the city streets.

With direction from the Citizen's Transportation Commission, the Street Transportation Department analyzed geographic data to identify those areas that are most deficient in sidewalk, bicycle and transit infrastructure. Their analysis identified eleven areas of focus to improve pedestrian and bicycle safety. This study, Westside Neighborhoods (Study Area 6), is one of those eleven areas.

## Study Area Needs

An analysis of the current conditions within the study area was conducted in 2018 which was documented in a report entitled *T2050 Mobility Assessment, Westside Neighborhoods, Study Area #6, Current Conditions Report*. The report included an assessment of the existing infrastructure as well as data on pedestrian and bicycle safety, key corridors, traffic volumes, and key destinations. The study identified significant gaps and deficiencies in the existing infrastructure including 8.9 miles of missing sidewalks, twelve deficient bus stops, insufficient street light coverage on all of the streets and a need for bikeway improvements.

## Proposed Improvement Projects

To address the deficiencies in the study area and improve the comfort and safety for pedestrians and bicyclists, twenty-five mobility improvement projects were identified. These projects include new sidewalks and bikeways as well as the installation of new street lights, pedestrian hybrid beacons (aka HAWK Beacons), shade trees, traffic signal and crosswalk upgrades, bus stops and ADA accessibility improvements.

The arterial streets, which include 43<sup>rd</sup> Ave, Thomas Rd and 35<sup>th</sup> Ave, all have needs including ADA accessibility improvements, shade, traffic signal and crosswalk upgrades, bus stop improvements and street lights. In addition, the need for pedestrian hybrid beacons was identified for two locations on 43<sup>rd</sup> Ave and one on 51<sup>st</sup> Ave. Even though the one on 51<sup>st</sup> Ave is located outside the study area boundary, it was included as a proposed project because it serves residents who live in the study area; east of 51<sup>st</sup> Ave.

The study area's collector streets also have considerable need for mobility improvements. These streets include Encanto Blvd, 48<sup>th</sup> Ln, 47<sup>th</sup> Ave, 39<sup>th</sup> Ave and Osborn Rd. Most of the proposed projects for the collector streets focus on ADA accessibility improvements and new street lights, but new shade trees are also proposed on the streets that have adequate space within the right-of-way; including portions of Encanto Blvd, 39<sup>th</sup> Ave and Osborn Rd. 47<sup>th</sup> Ave is much wider than it needs to be between Thomas Rd and Earll Dr. To take advantage of this extra width, the proposed improvements include narrowing the roadway to provide a landscape strip between the curb and the sidewalk which will provide shaded sidewalks on both sides of the street and help reduce vehicle speeds by narrowing the traffic lanes.

Five mobility improvement projects were identified for local streets in areas that are missing sidewalks, including four residential neighborhoods and the Park Thomas business park. All five of these projects also include installation of new street lights.

The proposed mobility improvements also include new bikeways as well as improvements to the existing bikeways. The new bikeways include extending the bike lanes on Osborn Rd to 35<sup>th</sup> Ave and extending the 39<sup>th</sup> Ave bike lanes to the Grand Canal. The 39<sup>th</sup> Ave bike lane extension includes a new pedestrian/bike bridge over the Canal to connect with the future pathway on its north side. Improvements to existing bikeways include a new, relatively short segment of shared-use pathway along the north side of Thomas Rd to provide a safe connection between the bike routes on 48<sup>th</sup> Ln and 47<sup>th</sup> Ave. They also include improvements to the Encanto Blvd bike lanes by extending them to the intersections of 43<sup>rd</sup> Ave and 35<sup>th</sup> Ave and installing bike lane loop detection at the traffic signals. There is also a proposed bikeway improvement project on 39<sup>th</sup> Ave to replace the existing bike lanes, between Encanto Blvd and Thomas Rd, with new buffered bike lanes; taking advantage of the excess roadway width to provide landscaped bike lane buffers and narrower traffic lanes which will help reduce vehicle speeds adjacent to the PT Coe Elementary School.

## Project Prioritization

Using criteria provided by the Street Transportation Department, each project was scored based bicycle and pedestrian safety, roadway user stress level, connectivity to bus stops and key destinations, public input, constructability and cost. The following table (**Table 1**) lists the proposed projects by project rank. The project with the highest score was ranked number 1. The table also includes a brief description of each project including the budgetary cost estimate.

Project Rank	Project I.D.	Street	Location	Description	Budget
1	I	47th Avenue	Thomas Rd - Earl Dr	Roadway Diet, ADA Improvements, Street Lights & Shade Trees	\$947,000
2	V	39th Avenue	Osborn Rd - Grand Canal	Bike Lanes, Shared-Use Pathway & Pedestrian/Bike Bridge	\$833,000
3*	K	39th Avenue	Thomas Rd - Osborn Road	ADA Improvements & Street Lights	\$402,000
3*	T	39th Ave - 36th Ave	Cambridge Rd - Thomas Rd	Sidewalks, ADA Improvements & Street Lights	\$1,307,000
4*	H	48th Lane	Encanto Blvd - Thomas Rd	ADA Improvements, Street Lights & Drainage Improvements	\$602,000
4*	J	39th Avenue	Encanto Blvd - Thomas Rd	ADA Improvements, Street Lights & Shade Trees	\$495,000
4*	O	Osborn Road	43rd Ave - 35th Ave	ADA Improvements & Street Lights	\$640,000
4*	S	47th Dr - 46th Dr	Earl Dr - Osborn Rd	Sidewalks, ADA Improvements & Street Lights	\$513,000
5*	N	Osborn Road	51st Ave - 43rd Ave	ADA Improvements, Curb & Gutter, Sidewalk, Street Lights & Shade Trees	\$1,268,000
5*	X	39th Avenue	Encanto Blvd - Thomas Rd	Buffered Bike Lanes, Shade Trees & Landscaping	\$651,000
6*	P	39th Ave - 37th Ave	Encanto Blvd - Wilshire Dr	Sidewalks, ADA Improvements & Street Lights	\$1,051,000
6*	Q	37th Ave - 35th Ave	Encanto Blvd - Wilshire Dr	Sidewalks, ADA Improvements & Street Lights	\$1,063,000
7	M	Encanto Boulevard	43rd Ave - 35th Ave	ADA Improvements, Street Lights & Drainage Improvements	\$928,000
8*	A	Thomas Road	51st Ave - 43rd Ave	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades & Landscaping	\$1,087,000
8*	L	Encanto Boulevard	49th Ave - 43rd Ave	ADA Improvements, Street Lights, Drainage Improvements & Shade Trees	\$719,000
8*	R	39th Ave - 37th Ave	Thomas Rd - Cheery Lynn Rd	Sidewalks, ADA Improvements & Street Lights	\$1,580,000
9*	B	Thoams Road	43rd Ave - 35th Ave	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades & Landscaping	\$1,372,000
9*	C	43rd Avenue	Encanto Blvd - Osborn Rd	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades & Shade Trees	\$1,554,000
10*	E	51st Avenue	At Earl Dr	New Pedestrian Hybrid Beacon & Sidewalk Ramp Improvements	\$297,000
10*	G	43rd Avenue	At Earl Dr	New Pedestrian Hybrid Beacon & Sidewalk Ramp Improvements	\$308,000
11*	D	35th Avenue	Encanto Blvd - Osborn Rd	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades	\$748,000
11*	F	43rd Avenue	At Virginia Ave	New Pedestrian Hybrid Beacon & Sidewalk Ramp Improvements	\$319,000
12*	W	Osborn Road	39th Ave - 35th Ave	Buffered Bike Lanes	\$216,000
12*	Y	Encanto Boulevard	51st Ave - 35th Ave	Bike Lane Improvements, Shared-Use Lanes & Loop Detection	\$157,000
13	U	Thomas Road	48th Ln - 47th Ave	Shared-Use Pathway & ADA Improvements	\$173,000

\*projects with duplicate scores

Table 1 – Proposed Improvements by Project Rank

## Mobility Area

The Westside Neighborhoods (Mobility Study area 6) is approximately 1.9 square miles in size; situated between Encanto Boulevard and Osborn Road from 49<sup>th</sup> Avenue to 35<sup>th</sup> Avenue (see **Figure 1**).

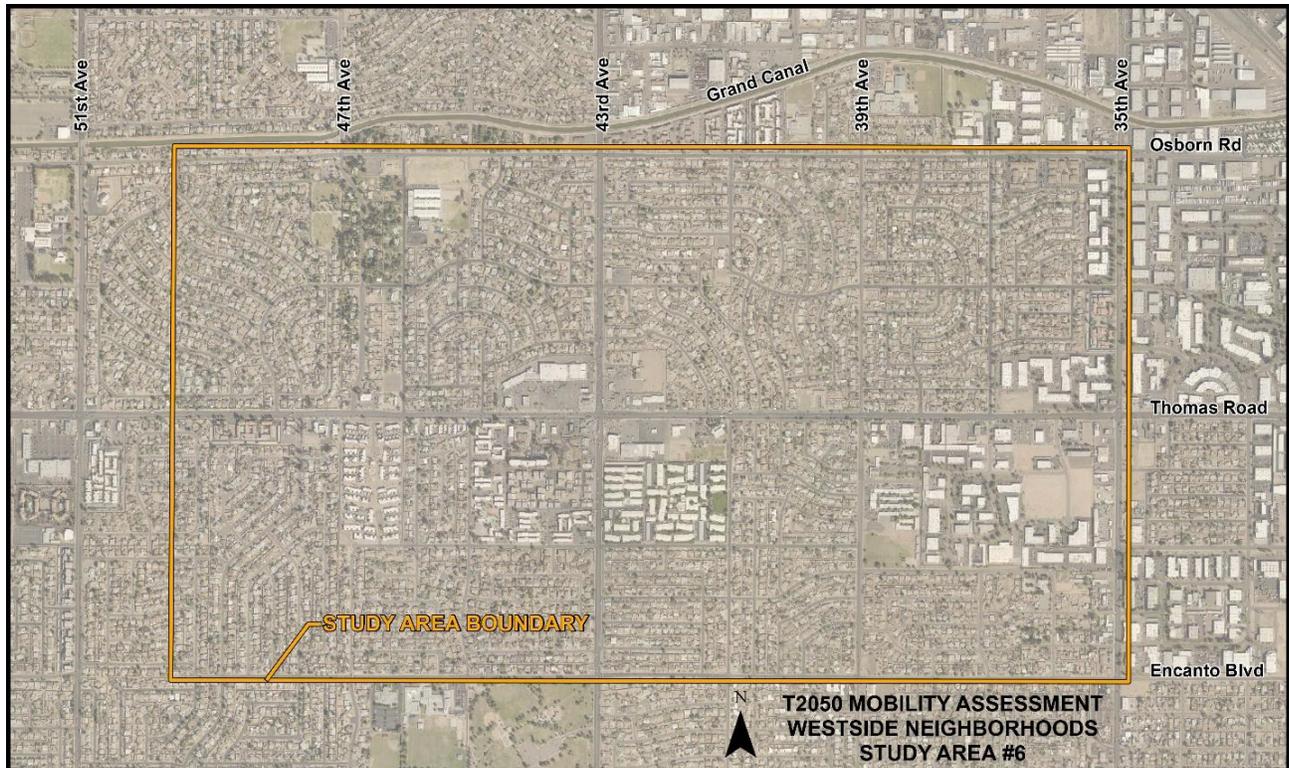


Figure 1 – Study Area Map

## Current Conditions

The existing conditions within the study area are documented in a report entitled *T2050 Mobility Assessment, Westside Neighborhoods, Study Area #6, Current Conditions Report, City of Phoenix Project No. ST87210019-1*, dated August 2018. The following is a summary of the data contained in the report.

**Key Destinations** – The Current Conditions Report identified thirty-one key destinations within the study area which include eight schools, three parks, seven places of worship and numerous businesses located primarily along Thomas Road and 35<sup>th</sup> Avenue.

**Sidewalks** – There are approximately 8.9 miles of missing sidewalks in the study area including four entire neighborhoods as well as the Park Thomas business center. There are also over 100 missing sidewalk ramps and over 1,100 non-standard ramps and driveways that don't meet current ADA design guidelines.

**Bikeways** – There are existing bike lanes and/or bike routes on 48<sup>th</sup> Lane, 47<sup>th</sup> Avenue, 39<sup>th</sup> Avenue, Encanto Boulevard and Osborn Road. The City had previously identified a gap in the bikeway system on Osborn Road between 39<sup>th</sup> Avenue and 35<sup>th</sup> Avenue and the City's Comprehensive Bicycle Master Plan identified improvements to the Encanto Boulevard bike lanes. Joe Perez (City Bicycle Coordinator) also identified a need for a shared-use pathway on the north side of Thomas Road to connect the bike routes on 48<sup>th</sup> lane and 47<sup>th</sup> Avenue. He also suggested extending the 39<sup>th</sup> Avenue bike lanes north of Osborn Road to connect with the pathway system on the Grand Canal.

**Transit Facilities** – There are existing bus routes on all the arterial streets in the study area including 43<sup>rd</sup> Avenue, 35<sup>th</sup> Avenue and Thomas Road. The Current Conditions Report identified twelve non-standard bus stops that do not have shelters and/or don't have a pad that meets ADA design guidelines. Many of these non-standard bus stops are simply bus stop signs placed at the back of sidewalk.

Future transit facilities include the proposed Bus Rapid Transit (BRT) route planned for Thomas Road as well as a possible second BRT route that may be added along 35<sup>th</sup> Avenue.

**Key Corridors** – The key corridors are the arterial and collector streets including 48<sup>th</sup> Lane/47<sup>th</sup> Avenue, 43<sup>rd</sup> Avenue, 35<sup>th</sup> Avenue, Thomas Road, Encanto Boulevard and Osborn Road.

**Street Lights** – While all the streets in the study area have existing street lights, most don't have enough to meet the City's standard spacing requirements. Therefore, all the pedestrian improvement projects recommended for the study area include the addition of new street lights to meet City standards.

**Land Development Plans** – There are no planned land development projects in the study area that would have a significant impact on mobility.

**Drainage** – The Current Conditions Report did not identify any drainage problems in the study area that would impact mobility. However, in developing recommendations for pedestrian improvement projects, several drainage issues were discovered for which drainage improvements were incorporated into the recommendations. These improvements include new valley gutters to prevent runoff from puddling on the sidewalk ramps and new sidewalk scuppers to prevent runoff from flowing over the sidewalk.

**Environmental Constraints** – There are several archaeological sites within the study area, including six pre-historic canals, the Grand Canal and three individual sites. Therefore, it

should be anticipated that environmental reviews will be required for many of the proposed mobility improvement projects; possibly requiring archaeological monitoring during construction.

*Crash History* – Pedestrian and bicycle crash reports for the 5-year period from 2012-2016 indicate that there were 78 incidents within the study area including 7 fatal pedestrian crashes. Most of these accidents occurred along the arterial streets; particularly Thomas Road which experienced 38 incidents including 5 fatal accidents. There was also a fatal pedestrian crash on 43<sup>rd</sup> Avenue north of Thomas Road and one on 35<sup>th</sup> Avenue at Osborn Road.

*Traffic Volumes* - The traffic volumes correlate well with the crash history data. Most of the traffic in the study area is carried on the arterial streets which is also where most of the pedestrian/bicycle accidents occur. 43<sup>rd</sup> Avenue is the busiest roadway with about 39,000 vehicles per day followed by Thomas Road and 35<sup>th</sup> Avenue which each have about 33,000. The busiest collector street is Osborn Road which carries 6,000 to 8000 vehicles per day whereas Encanto Boulevard and 39<sup>th</sup> Avenue only carry about 4,000 to 5,000. 48<sup>th</sup> Lane and 47<sup>th</sup> Avenue are least busy collectors; 48<sup>th</sup> Lane carries about 1,500 vehicles per day and 47<sup>th</sup> Avenue has about 2,500.

## Summary of Proposed Improvements

The proposed mobility projects are listed in **Table 2** (Summary of Proposed Projects). They include pedestrian improvements on the arterial streets, collector streets as well as several of the local streets. They also include improvements to the existing bikeways as well as new bike lanes on both Osborn Road and 39<sup>th</sup> Avenue. The projects will be ranked after review by the Technical Advisory Committee and after they are presented to the public.

Project ID	Project Rank	Street	Location	Description	Budget
<b>Arterial Street Pedestrian Improvements</b>					
A	8*	Thomas Road	51st Ave - 43rd Ave	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades & Landscaping	\$1,087,000
B	9*	Thoams Road	43rd Ave - 35th Ave	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades & Landscaping	\$1,372,000
C	9*	43rd Avenue	Encanto Blvd - Osborn Rd	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades & Shade Trees	\$1,554,000
D	11*	35th Avenue	Encanto Blvd - Osborn Rd	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades	\$748,000
E	10*	51st Avenue	At Earll Dr	New Pedestrian Hybrid Beacon & Sidewalk Ramp Improvements	\$297,000
F	11*	43rd Avenue	At Virginia Ave	New Pedestrian Hybrid Beacon & Sidewalk Ramp Improvements	\$319,000
G	10*	43rd Avenue	At Earll Dr	New Pedestrian Hybrid Beacon & Sidewalk Ramp Improvements	\$308,000
<b>Collector Street Pedestrian Improvements</b>					
H	4*	48th Lane	Encanto Blvd - Thomas Rd	ADA Improvements, Street Lights & Drainage Improvements	\$602,000
I	1	47th Avenue	Thomas Rd - Earll Dr	Roadway Diet, ADA Improvements, Street Lights & Shade Trees	\$947,000
J	4*	39th Avenue	Encanto Blvd - Thomas Rd	ADA Improvements, Street Lights & Shade Trees	\$495,000
K	3*	39th Avenue	Thomas Rd - Osborn Road	ADA Improvements & Street Lights	\$402,000
L	8*	Encanto Boulevard	49th Ave - 43rd Ave	ADA Improvements, Street Lights, Drainage Improvements & Shade Trees	\$719,000
M	7	Encanto Boulevard	43rd Ave - 35th Ave	ADA Improvements, Street Lights & Drainage Improvements	\$928,000
N	5*	Osborn Road	51st Ave - 43rd Ave	ADA Improvements, Curb & Gutter, Sidewalk, Street Lights & Shade Trees	\$1,268,000
O	4*	Osborn Road	43rd Ave - 35th Ave	ADA Improvements & Street Lights	\$640,000
<b>Local Street/Neighborhood Pedestrian Improvements</b>					
P	6*	39th Ave - 37th Ave	Encanto Blvd - Wilshire Dr	Sidewalks, ADA Improvements & Street Lights	\$1,051,000
Q	6*	37th Ave - 35th Ave	Encanto Blvd - Wilshire Dr	Sidewalks, ADA Improvements & Street Lights	\$1,063,000
R	8*	39th Ave - 37th Ave	Thomas Rd - Cheery Lynn Rd	Sidewalks, ADA Improvements & Street Lights	\$1,580,000
S	4*	47th Dr - 46th Dr	Earll Dr - Osborn Rd	Sidewalks, ADA Improvements & Street Lights	\$513,000
T	3*	39th Ave - 36th Ave	Cambridge Rd - Thomas Rd	Sidewalks, ADA Improvements & Street Lights	\$1,307,000
<b>Bikeways</b>					
U	13	Thomas Road	48th Ln - 47th Ave	Shared-Use Pathway & ADA Improvements	\$173,000
V	2	39th Avenue	Osborn Rd - Grand Canal	Bike Lanes, Shared-Use Pathway & Pedestrian/Bike Bridge	\$833,000
W	12*	Osborn Road	39th Ave - 35th Ave	Buffered Bike Lanes	\$216,000
X	5*	39th Avenue	Encanto Blvd - Thomas Rd	Buffered Bike Lanes, Shade Trees & Landscaping	\$651,000
Y	12*	Encanto Boulevard	51st Ave - 35th Ave	Bike Lane Improvements, Shared-Use Lanes & Loop Detection	\$157,000

\*projects with duplicate scores

Table 2 – Summary of Proposed Projects

## Proposed Improvement Projects

Each of the twenty-five proposed mobility improvement projects are described below with a written description, an exhibit depicting the improvements and an itemized budgetary cost estimate.

### **A) THOMAS RD PED. IMPROVEMENTS (51<sup>ST</sup> AVE – 43<sup>RD</sup> AVE)**

ADA IMPRV., STREET LIGHTS, TRAFFIC SIGNAL/CROSSWALK UPGRADES & LANDSCAPING

Project Location: Thomas Road, 51<sup>st</sup> Avenue to 43<sup>rd</sup> Avenue

#### Project Description:

- Retrofit 16 existing, non-standard driveways with a level walking surface behind the driveway.
- Remove an existing driveway that is not being used and replace it with curb, gutter and sidewalk.
- Install 9 new sidewalk ramps to replace existing, non-compliant ramps.
- Rebuild 7 existing, non-standard driveways.
- Realign approximately 150 LF of sidewalk on the north side of Thomas Road, west of 47<sup>th</sup> Avenue, to provide an accessible route behind an existing driveway.
- Install 19 new street lights.
- Install pedestrian push buttons at the 48<sup>th</sup> Lane and 43<sup>rd</sup> Avenue intersections; including 2 new pedestrian push button poles at 48<sup>th</sup> Lane.
- Install high-visibility crosswalks at the signalized intersections with 48<sup>th</sup> Lane and 43<sup>rd</sup> Avenue. Also install a high-visibility crosswalk at 46<sup>th</sup> Drive.
- Install a new bus shelter pad on the south side of the street at 46<sup>th</sup> Avenue.
- Install new shrubs, irrigation and ground cover in the existing landscape strips between the roadway curb and the sidewalk. Also, plant shade trees in a few locations where there is enough space, but the planting of new trees is limited by the presence of water and sewer lines on both sides of the roadway that are located under the existing landscape areas.

Project Benefits: The proposed improvements will provide accessible walkways on both sides of Thomas Road that are better lit with improved landscaping. They will also provide safer crosswalks with pedestrian push buttons and high visibility crosswalks.

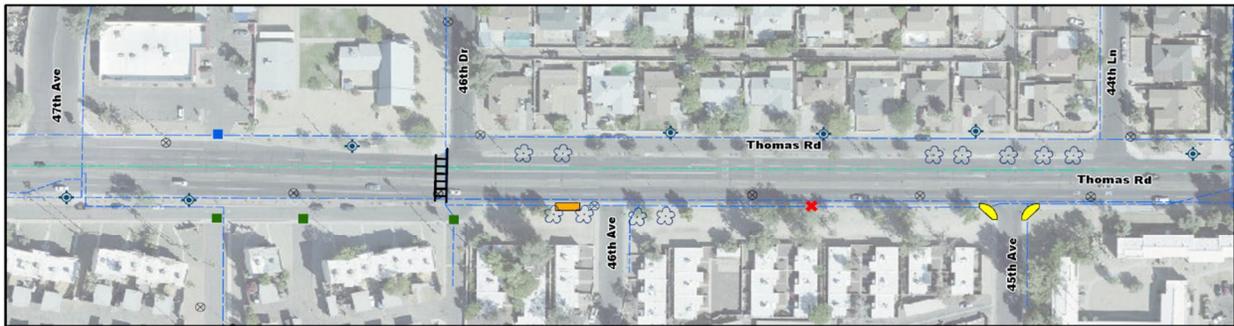
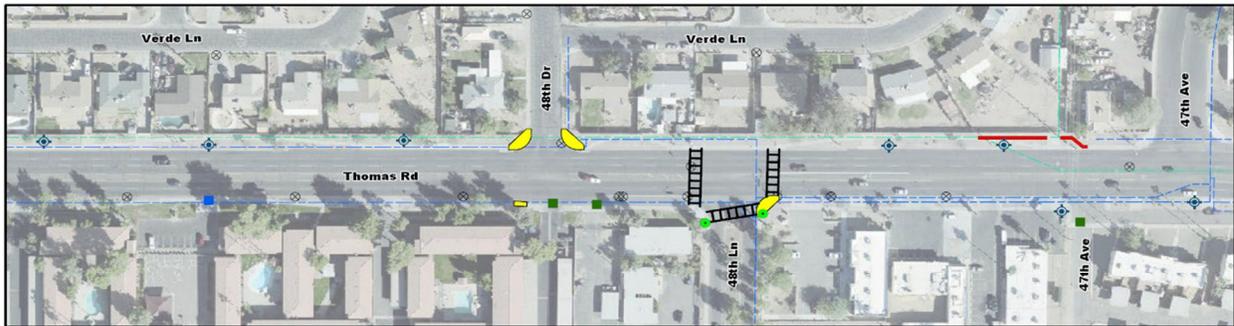
Key Destinations: Access to the Thomas Road businesses and the Thomas Road, 51<sup>st</sup> Avenue and 43<sup>rd</sup> Avenue bus stops.

Project Constraints: There are overhead power lines, water lines and sewer lines that restrict the planting of new shade trees and temporary construction easements will be required at most of the retrofit driveways. Shade trees cannot be planted any closer than 10 feet from existing water and sewer lines; unless they include a root-barrier which will allow them to be planted as close as 6 feet. In addition, large shade trees are not allowed under overhead power lines.

- *12-inch sewer line and 8-inch water line on north side of Thomas, 51<sup>st</sup> to 47<sup>th</sup>* – There is a 12-inch sewer line and an 8-inch water line located under the landscape area on the north side of Thomas Road from 51<sup>st</sup> Avenue to 47<sup>th</sup> Avenue that precludes the planting of new shade trees in most areas of the existing landscape strip, but it is recommended to improve the existing landscape area with new shrubs and decomposed granite ground cover as well as some new trees, where the utility lines will allow.
- *8-inch water line on north side of Thomas, 47<sup>th</sup> Ave to 44<sup>th</sup> Ln* – There is an existing 8-inch waterline located under the landscape area on the north side of Thomas Road from 47<sup>th</sup> Avenue to 44<sup>th</sup> Avenue that precludes the planting of new shade trees in the most areas of the existing landscape strip, but it is recommended to improve the existing landscape area with new shrubs and decomposed granite ground cover as well as a few new trees, where the utility lines will allow.
- *16-inch Waterline on south side of Thomas, 51<sup>st</sup> Ave to 43<sup>rd</sup> Ave* – There is an existing 16-inch waterline located under the landscape area on the south side of Thomas Road from 51<sup>st</sup> Avenue to 43<sup>rd</sup> Avenue that precludes the planting of new shade trees in the most areas of the existing landscape strip, but it is recommended to improve the existing landscape area with new shrubs and decomposed granite ground cover as well as a few new trees, where the utility lines will allow.
- *Overhead power lines, 46<sup>th</sup> Dr. to 44<sup>th</sup> Ln* – There are overhead power line located in the landscape strip that will restrict the size of shade trees that can be planted.
- *Right-of-Way at Driveways* – Approximately 12 of the new and/or retrofitted driveways will require temporary construction easements to construct. It appears there is adequate right-of-way for the driveways, but the easements will be required to repave on the private property to match at the back of the new driveways.

Budgetary Cost Estimate:

Construction Cost	\$665,000
Design, Construction Administration & Other Fees	\$422,000
Right-of-Way Acquisition	\$0
<b>TOTAL</b>	<b>\$1,087,000</b>



**LEGEND**

- |                             |                                  |                        |
|-----------------------------|----------------------------------|------------------------|
| ◆ New Streetlight           | — New Sidewalk                   | ⊗ Existing Streetlight |
| ✗ Remove Driveway           | ● New Ped. Push Button Pole      | --- Exist. Sewer Line  |
| ■ New ADA Retrofit Driveway | ▤ New High Visibility Crosswalk  | --- Exist. Water Line  |
| ■ Rebuild Driveway          | ☼ New Shade Tree and Landscaping |                        |
| ■ New Sidewalk Ramp         |                                  |                        |
| ■ New Bus Pad               |                                  |                        |

**Exhibit 1: Thomas Rd Ped. Improvements (51<sup>st</sup> Ave – 43<sup>rd</sup> Ave)**

**Budgetary Cost Estimate: Thomas Rd (51st Ave – 43rd Ave)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK	SF	745	\$6.50	\$4,842.50
2	SIDEWALK RAMPS	EACH	9	\$3,000.00	\$27,000.00
3	BUS SHELTER PAD	EACH	1	\$6,000.00	\$6,000.00
4	REBUILD DRIVEWAYS	EACH	8	\$4,500.00	\$36,000.00
5	ADA RETROFIT DRIVEWAYS	EACH	16	\$2,000.00	\$32,000.00
6	SHADE TREES	EACH	32	\$400.00	\$12,800.00
7	STREET LIGHT	EACH	19	\$5,000.00	\$95,000.00
8	PEDESTRIAN PUSH BUTTON POLE	EACH	2	\$5,000.00	\$10,000.00
9	PEDESTRIAN PUSH BUTTONS	EACH	14	\$400.00	\$5,600.00
10	HIGH VISIBILITY CROSSWALKS (LADDER)	EACH	8	\$2,000.00	\$16,000.00
11	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$30,000.00	\$30,000.00
12	LANDSCAPING (D.G., SHRUBS & IRRIGATION)	SF	40000	\$6.00	\$240,000.00

**Subtotal Construction \$515,242.50**

Traffic Control/Police Officer (4%) \$20,609.70

Allowance for Extra Work (5%) \$25,762.13

Contingency (20%) \$103,048.50

**Total Construction \$664,662.83**

Design Phase (27%) \$179,458.96

Streetlighting Fee (2%) \$13,293.26

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$199,398.85

**GRAND TOTAL \$1,086,813.89**

**B) THOMAS RD PED. IMPROVEMENTS (43<sup>RD</sup> AVE – 35<sup>TH</sup> AVE)**

ADA IMPRV., STREET LIGHTS, TRAFFIC SIGNAL/CROSSWALK UPGRADES &amp; LANDSCAPING

Project Location: Thomas Road, 43<sup>rd</sup> Avenue to 35<sup>th</sup> Avenue

Project Description:

- Move north curb into the street about 2.5 feet between 39<sup>th</sup> and 37<sup>th</sup> Avenue and construct new sidewalk and new standard driveways for the existing homes that front onto Thomas Road. The new curb will line up with the existing curb east of 37<sup>th</sup> Avenue.
- Retrofit 23 existing, non-standard driveways with a level walking surface at the back of the driveway.
- Rebuild 2 existing, non-standard driveways.
- Replace 8 existing non-standard driveways with roll curb and level sidewalk.
- Install 23 new sidewalk ramps to replace existing, non-standard ramps.
- Add detectable warning surfaces to 6 existing sidewalk ramps.
- Install a new bus shelter pad on the north side of the street at 37<sup>th</sup> Avenue.
- Install a new special bus shelter in the north frontage road median west of 39<sup>th</sup> Avenue to replace the existing non-standard bus stop on the east side of 39<sup>th</sup> Avenue.
- Install 13 new street lights.
- Install pedestrian push buttons at the 39<sup>th</sup> and 35<sup>th</sup> Avenue intersections; including 2 new pedestrian push button poles at 39<sup>th</sup> Avenue.
- Install high-visibility crosswalks at the signalized intersections with 39<sup>th</sup> Avenue and 35<sup>th</sup> Avenue.
- Plant 35 small trees in the north frontage road median between 42<sup>nd</sup> Avenue and 39<sup>th</sup> Avenue where there are overhead power lines that limit the size of the trees. These trees will also require root barriers because there is an existing 12-inch sewer located near the curb line. Planting of new trees is precluded almost everywhere else because of the presence of water and sewer lines on both sides of the roadway that are located under the existing landscape areas although it is also proposed to plant 4 new shade trees at the proposed westbound bus stop shelter at 37<sup>th</sup> Avenue where the trees will require root barriers due to the presence of an 8-inch water line located behind the curb.
- Install new shrubs, irrigation and ground cover in the existing landscape strips between the roadway curb and the sidewalk.

Project Benefits: The proposed improvements will provide accessible walkways on both sides of Thomas Road that are better lit with improved landscaping. They will also provide safer crosswalks with pedestrian push buttons and high visibility crosswalks.

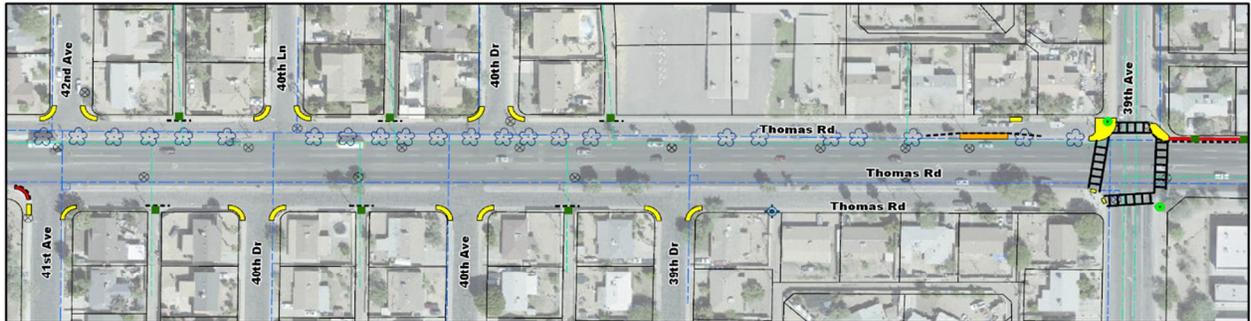
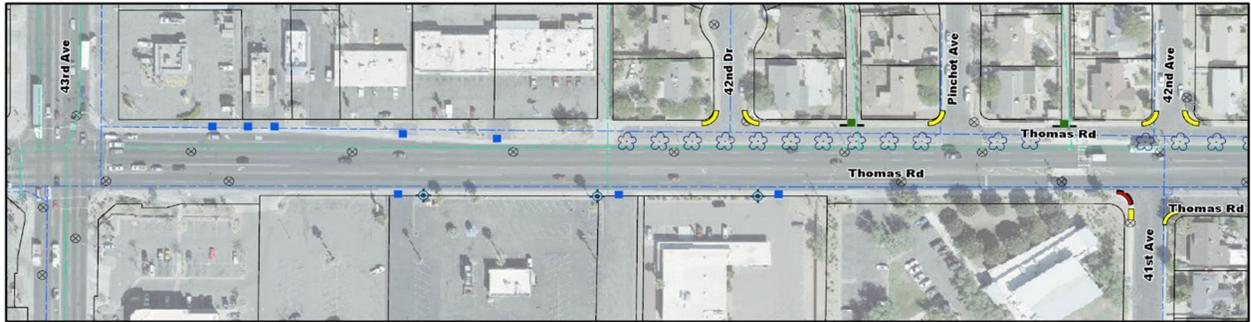
Key Destinations: Access to the Thomas Road businesses and the Thomas Road, 43<sup>rd</sup> Avenue and 35<sup>th</sup> Avenue bus stops.

Project Constraints: There are overhead power lines, water lines and sewer lines that restrict the planting of new shade trees. Shade trees cannot be planted any closer than 10 feet from existing water and sewer lines; unless they include a root-barrier which will allow them to be planted as close as 6 feet. In addition, large shade trees are not allowed under overhead power lines.

- *12-inch sewer line north side of Thomas, 43<sup>rd</sup> Ave to 39<sup>th</sup> Ave* – There is a 12-inch sewer line located along the north curb of Thomas Road from 43<sup>rd</sup> Avenue to 39<sup>th</sup> Avenue that will require the new shade trees in the frontage road median to have root barriers
- *8-inch water line on north side of Thomas, 43<sup>rd</sup> Ave to 35<sup>th</sup> Ave* – There is an existing 8-inch waterline located under the landscape area on the north side of Thomas Road from 43<sup>rd</sup> Avenue to 35<sup>th</sup> Avenue that precludes the planting of new shade trees in the most areas of the existing landscape strip, but it is recommended to improve the existing landscape area with new shrubs and decomposed granite ground cover as well as a few new trees, where the utility lines will allow.
- *20-inch Waterline on south side of Thomas, 43<sup>rd</sup> Ave to 35<sup>th</sup> Ave* – There is an existing 20-inch waterline located under the frontage road median on the south side of Thomas Road from 41<sup>st</sup> Avenue to 39<sup>th</sup> Avenue that precludes the planting of new shade trees in the existing landscape strip, but it is recommended to improve the existing landscape area with new shrubs and decomposed granite.
- *Overhead power lines on north side of Thomas, 42<sup>nd</sup> Ave to 35<sup>th</sup> Ave* – There are overhead power line located in the frontage road landscape strip on the north side of Thomas that will restrict the size of shade trees that can be planted.

Budgetary Cost Estimate:

Construction Cost	\$844,000
Design, Construction Administration & Other Fees	\$528,000
Right-of-Way Acquisition	\$0
<b>TOTAL</b>	<b>\$1,372,000</b>



**LEGEND**

- |                             |                                  |                                |
|-----------------------------|----------------------------------|--------------------------------|
| ◆ New Streetlight           | — New Sidewalk                   | ■ Rebuild Driveway W/Roll Curb |
| ✗ Remove Driveway           | ● New Ped. Push Button Pole      | ⊗ Existing Streetlight         |
| ■ New ADA Retrofit Driveway | — New High Visibility Crosswalk  | --- Exist. Sewer Line          |
| ■ Rebuild Driveway          | ☼ New Shade Tree and Landscaping | --- Exist. Water Line          |
| ■ New Sidewalk Ramp         | ■ New Truncated Domes            |                                |
| ■ New Bus Pad               | ..... New Curb and Gutter        |                                |

**Exhibit 2: Thomas Rd Ped. Improvements (43<sup>rd</sup> Ave – 35<sup>th</sup> Ave)**

**Budgetary Cost Estimate: Thomas Rd (43rd Ave – 35th Ave)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK	SF	5765	\$6.50	\$37,472.50
2	SIDEWALK RAMPS	EACH	23	\$3,000.00	\$69,000.00
3	BUS SHELTER PAD	EACH	2	\$6,000.00	\$12,000.00
4	TRUNCATED DOMES	EACH	6	\$600.00	\$3,600.00
5	REBUILD DRIVEWAYS	EACH	17	\$4,500.00	\$76,500.00
6	ADA RETROFIT DRIVEWAYS	EACH	23	\$2,000.00	\$46,000.00
7	REPLACE DRIVEWAY W/CURB, GUTTER & SIDEWALK	EACH	8	\$2,500.00	\$20,000.00
8	CURB AND GUTTER	LF	1465	\$40.00	\$58,600.00
9	SHADE TREES	EACH	39	\$400.00	\$15,600.00
10	STREET LIGHT	EACH	13	\$5,000.00	\$65,000.00
11	PEDESTRIAN PUSH BUTTON POLE	EACH	2	\$5,000.00	\$10,000.00
12	PEDESTRIAN PUSH BUTTONS	EACH	16	\$400.00	\$6,400.00
13	HIGH VISIBILITY CROSSWALKS (LADDER)	EACH	8	\$2,000.00	\$16,000.00
14	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$60,000.00	\$60,000.00
15	NEW AC PAVEMENT	SY	700	\$80.00	\$56,000.00
16	LANDSCAPING (D.G., SHRUBS & IRRIGATION)	SF	17000	\$6.00	\$102,000.00

**Subtotal Construction \$654,172.50**

Traffic Control/Police Officer (4%) \$26,166.90

Allowance for Extra Work (5%) \$32,708.63

Contingency (20%) \$130,834.50

**Total Construction \$843,882.53**

Design Phase (27%) \$227,848.28

Streetlighting Fee (2%) \$16,877.65

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$253,164.76

**GRAND TOTAL \$1,371,773.21**

**C) 43RD AVE PED. IMPROVEMENTS (ENCANTO BLVD – OSBORN RD)**

ADA IMPRV., STREET LIGHTS, TRAFFIC SIGNAL/CROSSWALK UPGRADES &amp; SHADE TREES

Project Location: 43<sup>rd</sup> Avenue, Encanto Boulevard to Osborn Road

Project Description:

- Relocate privacy walls north of Encanto Blvd., both sides of 43<sup>rd</sup> Avenue, which will provide space to set the sidewalk back from the curb, plant trees and provide landscaping. On the east side install a new bus shelter pad.
- Take advantage of extra right-of-way north of Thomas Road by relocating the sidewalks behind the curb on both sides of 43<sup>rd</sup> Avenue; providing space between the roadway and sidewalk for shade trees and landscaping.
- Install 20 new street lights on the west side of 43<sup>rd</sup> Avenue.
- Retrofit 5 existing, non-standard driveways with a level walking surface at the back of the driveway.
- Add detectable warning surfaces to 4 existing sidewalk ramps.
- Remove 2 existing, non-standard sidewalk ramps and replace with level sidewalk.
- Rebuild 18 existing, non-standard driveways.
- Replace 7 existing non-standard driveways with roll curb and level sidewalk.
- Install 27 new sidewalk ramps to replace existing, non-standard ramps.
- Install three new northbound bus shelter pads at Encanto Boulevard, Earll Drive and Thomas Road; also build a new bus bay at Thomas where sufficient right-of-way already exists.
- Install pedestrian push buttons at the signalized intersections with Encanto Boulevard, Thomas Road and Osborn Road; including 3 new pedestrian push button poles; one at Encanto Boulevard and two at Osborn Road.
- Install high-visibility crosswalks at the signalized intersections.
- Plant trees in the frontage road medians on both sides of 43<sup>rd</sup> Avenue.
- Install shade trees and landscaping in the existing open areas, south of Osborn Road, on both sides of 43<sup>rd</sup> Avenue.

Project Benefits: The proposed improvements will provide accessible walkways on both sides of 43<sup>rd</sup> Avenue that are better lit, with more shade trees and improved landscaping. They will also provide safer crosswalks with pedestrian push buttons and high visibility crosswalks at the signalized intersections.

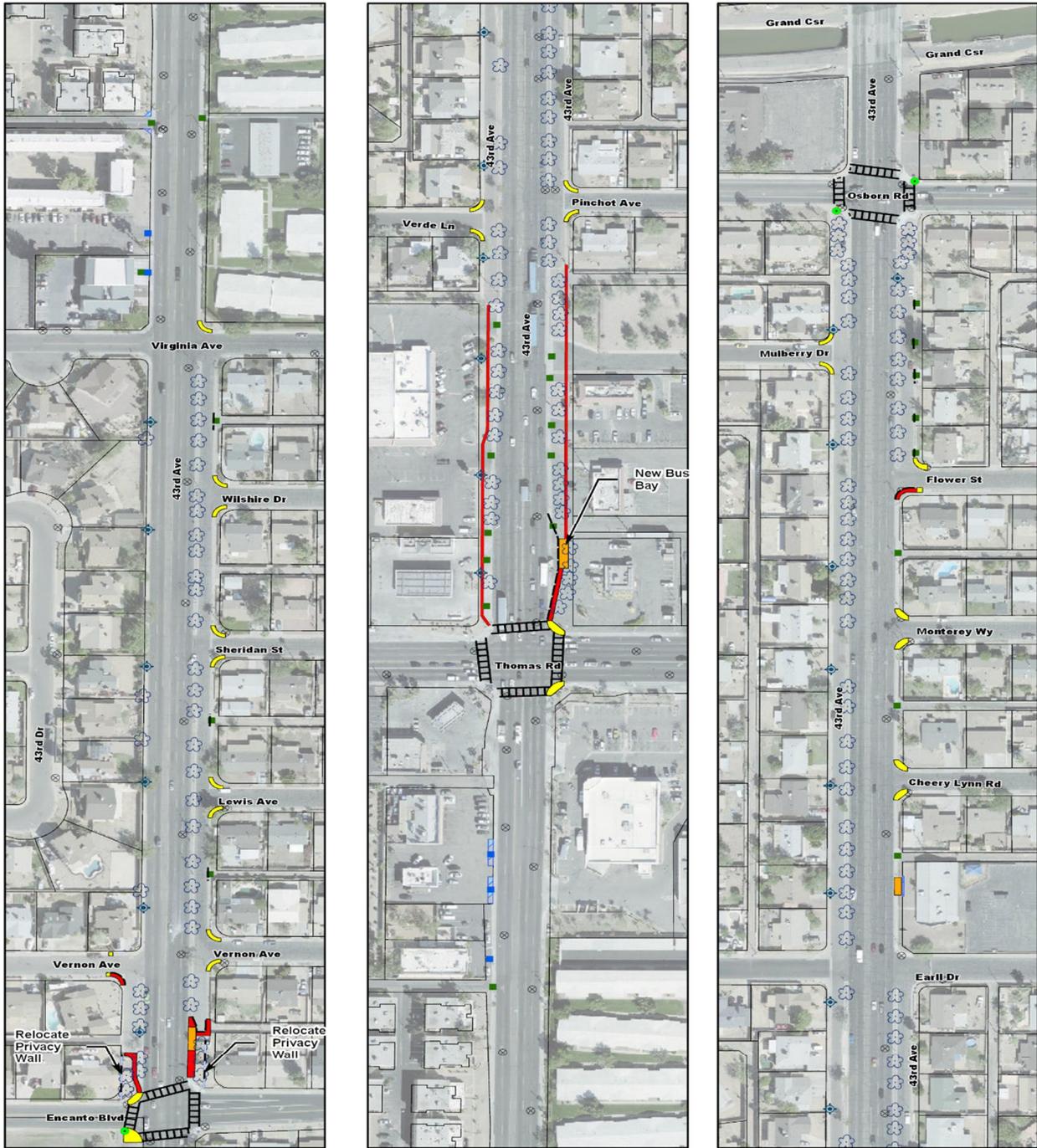
Key Destinations: Key destinations include the Thomas Road businesses and the bus stops on both Thomas Road and 43<sup>rd</sup> Avenue. The improvements will also provide improved access to the Grand Canal pathway and the Osborn Road bike lanes.

Project Constraints:

- *Right-of-way north of Encanto Boulevard* – The existing privacy walls north of Encanto Boulevard encroach about 20 feet into the existing right-of-way. It is recommended to move these walls back to provide more space for sidewalks and shade trees, but the homeowners will lose a significant amount of their backyard area.
- *Overhead power lines on east side 43<sup>rd</sup> Ave.* – There are overhead power lines located in the frontage road landscape strip on the east side of 43<sup>rd</sup> Avenue that will restrict the size of shade trees that can be planted.

Budgetary Cost Estimate:

Construction Cost	\$953,000
Design, Construction Administration & Other Fees	\$593,000
Right-of-Way Acquisition	<u>\$8,000</u>
<b>TOTAL</b>	<b>\$1,554,000</b>



**LEGEND**

- |                             |                                  |
|-----------------------------|----------------------------------|
| ◆ New Streetlight           | ● New Ped. Push Button Pole      |
| ✖ Remove Driveway           | ▤ New High Visibility Crosswalk  |
| ■ New ADA Retrofit Driveway | ☁ New Shade Tree and Landscaping |
| ■ Rebuild Driveway          | ⋯ New Curb                       |
| ■ New Sidewalk Ramp         | ⋯ Rebuild Driveway W/Roll Curb   |
| ■ New Bus Pad               | ▨ New R/W                        |
| — New Sidewalk              | ⊗ Existing Streetlight           |

**Exhibit 3: 43<sup>rd</sup> Ave Ped. Improvements (Encanto Blvd – Osborn Rd)**

**Budgetary Cost Estimate: 43rd Ave (Encanto Blvd – Osborn Rd)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK	SF	7425	\$6.50	\$48,262.50
2	SIDEWALK RAMPS	EACH	27	\$3,000.00	\$81,000.00
3	BUS SHELTER PAD	EACH	3	\$6,000.00	\$18,000.00
4	TRUNCATED DOMES	EACH	4	\$600.00	\$2,400.00
5	REBUILD DRIVEWAYS	EACH	18	\$4,500.00	\$81,000.00
6	ADA RETROFIT DRIVEWAYS	EACH	5	\$2,000.00	\$10,000.00
7	REPLACE DRIVEWAY W/CURB, GUTTER & SIDEWALK	EACH	7	\$2,500.00	\$17,500.00
8	CURB AND GUTTER	LF	230	\$40.00	\$9,200.00
9	SHADE TREES	EACH	130	\$400.00	\$52,000.00
10	STREET LIGHT	EACH	20	\$5,000.00	\$100,000.00
11	PEDESTRIAN PUSH BUTTON POLE	EACH	3	\$5,000.00	\$15,000.00
12	PEDESTRIAN PUSH BUTTONS	EACH	24	\$400.00	\$9,600.00
13	HIGH VISIBILITY CROSSWALKS (LADDER)	EACH	12	\$2,000.00	\$24,000.00
14	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$80,000.00	\$80,000.00
15	LANDSCAPING (D.G., SHRUBS & IRRIGATION)	SF	29000	\$6.00	\$174,000.00
16	NEW CONCRETE BUS BAY PAVEMENT	LS	1	\$17,000.00	\$17,000.00

**Subtotal Construction \$738,962.50**

Traffic Control/Police Officer (4%) \$29,558.50

Allowance for Extra Work (5%) \$36,948.13

Contingency (20%) \$147,792.50

**Total Construction \$953,261.63**

Design Phase (27%) \$257,380.64

Streetlighting Fee (2%) \$19,065.23

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Right-of-Way Acquisition 800 S.F. @ \$10.00 \$8,000.00

Construction Administration (30%) \$285,978.49

**GRAND TOTAL \$1,553,685.98**

**D) 35TH AVE PED. IMPROVEMENTS (ENCANTO BLVD – OSBORN RD)**  
ADA IMPROVEMENTS, STREET LIGHTS & TRAFFIC SIGNAL/CROSSWALK UPGRADES

Project Location: 35<sup>th</sup> Avenue, Encanto Boulevard to Osborn Road

Project Description:

- Retrofit 50 existing, non-standard driveways with a level walking surface at the back of the driveway.
- Rebuild 2 existing, non-standard driveways.
- Remove 4 driveways that are longer in use and replace them with vertical curb, gutter and sidewalk.
- Install 3 new sidewalk ramps to replace existing, non-standard ramps.
- Install two new bus shelter pads; northbound and southbound at Earll Drive.
- Add detectable warning surfaces to 4 existing sidewalk ramps at Encanto Boulevard.
- Install 9 new street light luminaires on the existing power poles along the west side of 35<sup>th</sup> Avenue between Encanto Boulevard and Roanoke Avenue.
- Install 14 new street lights along the west side of 35<sup>th</sup> Avenue between Roanoke Avenue and Osborn Road.
- Install pedestrian push buttons at the signalized intersections with Encanto Boulevard, Virginia Avenue, Thomas Road, Earll Drive and Osborn Road; including 6 new pedestrian push button poles; one at Encanto Boulevard, one at Virginia Avenue, two at Earll Drive and two at Osborn Road.
- Install high-visibility crosswalks at the signalized intersections.
- Remove the south crosswalk at Virginia Avenue. There is no sidewalk ramp on the west side of the street and installing one would require removing an existing storm drain catch basin and rebuilding an existing driveway entrance.

Project Benefits: The proposed improvements will provide accessible walkways on both sides of 35<sup>th</sup> Avenue with better lighting. They will also provide safer crosswalks with pedestrian push buttons and high visibility crosswalks at the signalized intersections.

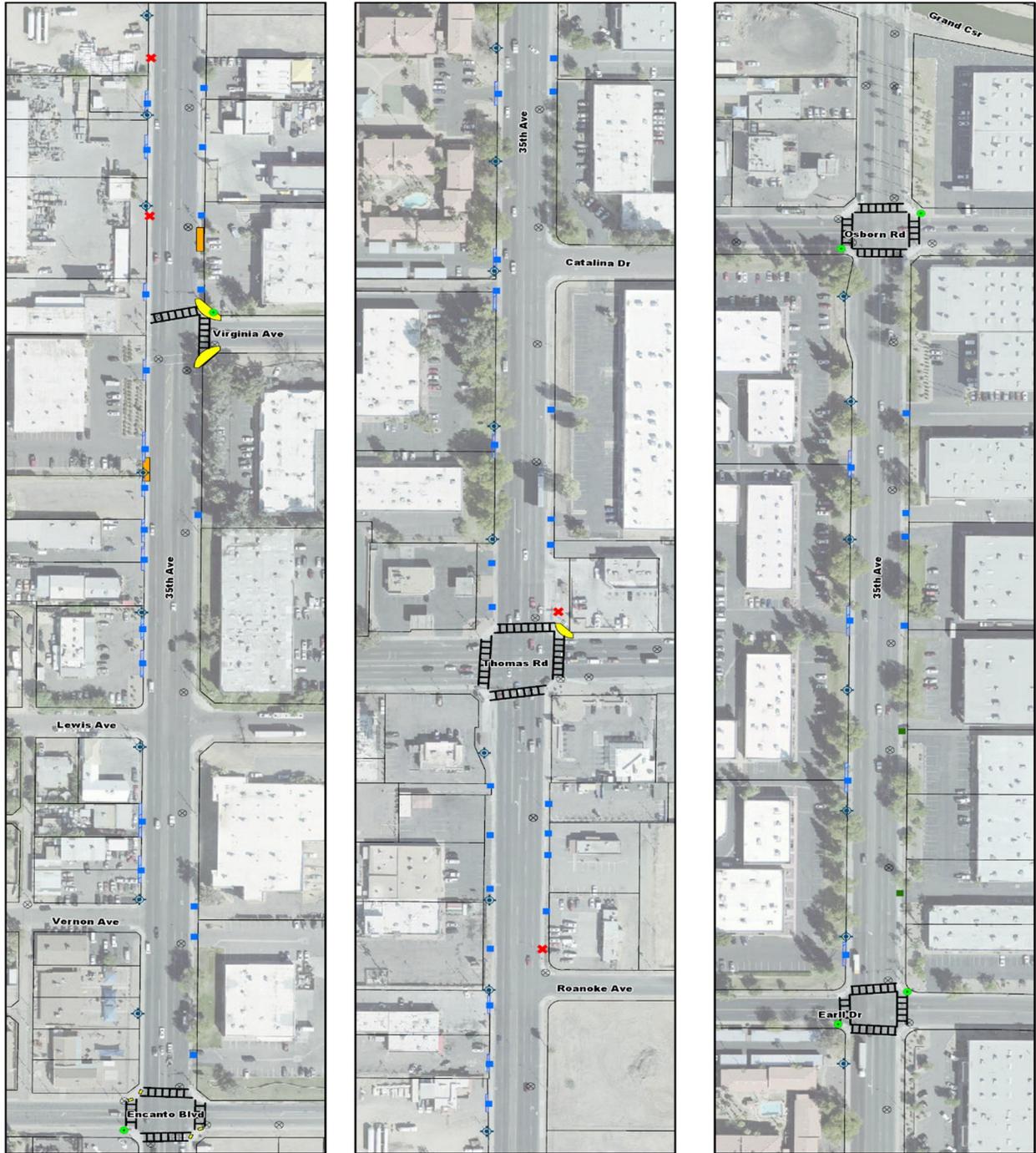
Key Destinations: Key destinations include the businesses at Thomas Road and Osborn Road as well as the bus stops at Thomas Road and along 35<sup>th</sup> Avenue. The improvements will also provide improved access to the Grand Canal pathway and the Osborn Road bike lanes.

Project Constraints:

- *Right-of-way* – It appears that new right-of-way will be required at many of the driveway retrofits to have enough space to construct the level walking surface behind the driveways.

Budgetary Cost Estimate:

Construction Cost	\$426,000
Design, Construction Administration & Other Fees	\$282,000
Right-of-Way Acquisition	<u>\$40,000</u>
<b>TOTAL</b>	<b>\$748,000</b>



**LEGEND**

- |                             |                                 |
|-----------------------------|---------------------------------|
| ◆ New Streetlight           | ⊗ Existing Streetlight          |
| ✖ Remove Driveway           | ● New Ped. Push Button Pole     |
| ■ New ADA Retrofit Driveway | ▬ New High Visibility Crosswalk |
| ■ Rebuild Driveway          | ■ New Truncated Domes           |
| ■ New Sidewalk Ramp         | ▨ New R/W                       |
| ■ New Bus Pad               |                                 |

**Exhibit 4: 35<sup>th</sup> Ave Ped. Improvements (Encanto Blvd – Osborn Rd)**

**Budgetary Cost Estimate: 35th Ave (Encanto Blvd – Osborn Rd)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK RAMPS	EACH	3	\$3,000.00	\$9,000.00
2	BUS SHELTER PAD	EACH	2	\$6,000.00	\$12,000.00
3	TRUNCATED DOMES	EACH	4	\$600.00	\$2,400.00
4	REBUILD DRIVEWAYS	EACH	2	\$4,500.00	\$9,000.00
5	ADA RETROFIT DRIVEWAYS	EACH	50	\$2,000.00	\$100,000.00
6	REPLACE DRIVEWAY W/CURB, GUTTER & SIDEWALK	EACH	4	\$2,500.00	\$10,000.00
7	STREET LIGHT	EACH	14	\$5,000.00	\$70,000.00
8	LUMINAIRE ON EXIST. POWER POLE	EACH	9	\$800.00	\$7,200.00
9	PEDESTRIAN PUSH BUTTON POLE	EACH	6	\$5,000.00	\$30,000.00
10	PEDESTRIAN PUSH BUTTONS	EACH	37	\$400.00	\$14,800.00
11	HIGH VISIBILITY CROSSWALKS (LADDER)	EACH	18	\$2,000.00	\$36,000.00
12	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$30,000.00	\$30,000.00

**Subtotal Construction \$330,400.00**

Traffic Control/Police Officer (4%) \$13,216.00

Allowance for Extra Work (5%) \$16,520.00

Contingency (20%) \$66,080.00

**Total Construction \$426,216.00**

Design Phase (27%) \$115,078.32

Streetlighting Fee (2%) \$8,524.32

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Right-of-Way Acquisition 4000 S.F. @ \$10.00 \$40,000.00

Construction Administration (30%) \$127,864.80

**GRAND TOTAL \$747,683.44**

**E) 51<sup>ST</sup> AVE PEDESTRIAN HYBRID BEACON (AT EARLL DR)**  
NEW PED. HYBRID BEACON & SIDEWALK RAMP IMPROVEMENTS

Project Location: 51<sup>st</sup> Avenue at Earll Drive

Project Description:

- Install a new Pedestrian hybrid beacon to assist people crossing 51<sup>st</sup> Avenue; including a new crosswalk aligned with the north sidewalk on Earll Drive.
- Replace the existing sidewalk ramp at the NE corner of the intersection.

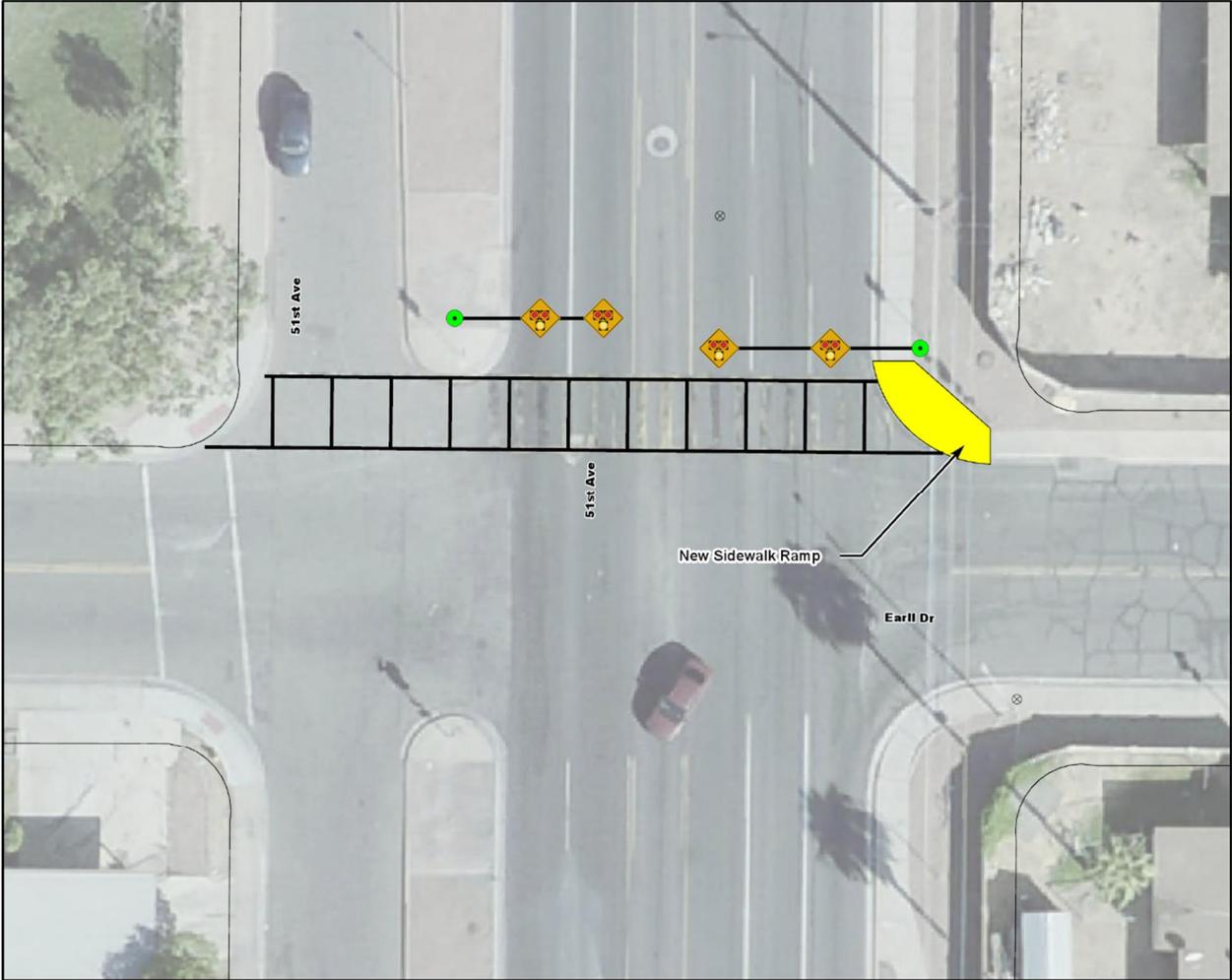
Project Benefits: The pedestrian hybrid beacon will add safety for crossing 51<sup>st</sup> Avenue at Earll Drive. Even though this intersection is outside the study area boundary, residents who live in the neighborhood east of 51<sup>st</sup> Avenue which is in the study area, walk to St. Vincent DePaul School to play on the recreational fields located at the school.

Key Destinations: St. Vincent DePaul Catholic Church and School and the 51<sup>st</sup> Avenue bus route.

Project Constraints: None

Budgetary Cost Estimate:

Construction Cost	\$170,000
Design, Construction Administration & Other Fees	\$127,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$297,000</b>



**Exhibit 5: 51<sup>st</sup> Ave Pedestrian Hybrid Beacon (at Earll Dr)**

**Budgetary Cost Estimate: 51st Ave Ped. Hybrid Beacon (at Earll Dr)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	PEDESTRIAN HYBRID BEACON	LS	1	\$125,000.00	\$125,000.00
2	SIDEWALK RAMPS	EACH	1	\$3,000.00	\$3,000.00
3	HIGH VISIBILITY CROSSWALKS (LADDER)	EACH	1	\$2,000.00	\$2,000.00
4	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$2,000.00	\$2,000.00

**Subtotal Construction \$132,000.00**

Traffic Control/Police Officer (4%) \$5,280.00

Allowance for Extra Work (5%) \$6,600.00

Contingency (20%) \$26,400.00

**Total Construction \$170,280.00**

Design Phase (27%) \$45,975.60

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$51,084.00

**GRAND TOTAL \$297,339.60**

**F) 43<sup>RD</sup> AVE PEDESTRIAN HYBRID BEACON (AT VIRGINIA AVE)**  
NEW PED. HYBRID BEACON & SIDEWALK RAMP IMPROVEMENTS

Project Location: 43<sup>rd</sup> Avenue at Virginia Avenue

Project Description:

- Install a new pedestrian hybrid beacon to assist people crossing 43<sup>rd</sup> Avenue; including a new crosswalk aligned with the north sidewalk on Virginia Avenue.
- Replace the existing sidewalk ramps at the SW, NW and NE corners of the intersection.

Project Benefits: The pedestrian hybrid beacon will add significant safety for crossing 43<sup>rd</sup> Avenue; particularly for school children who live in the apartment complexes west of 43<sup>rd</sup> Avenue and walk to P.T. Coe Elementary School at 39<sup>th</sup> Avenue.

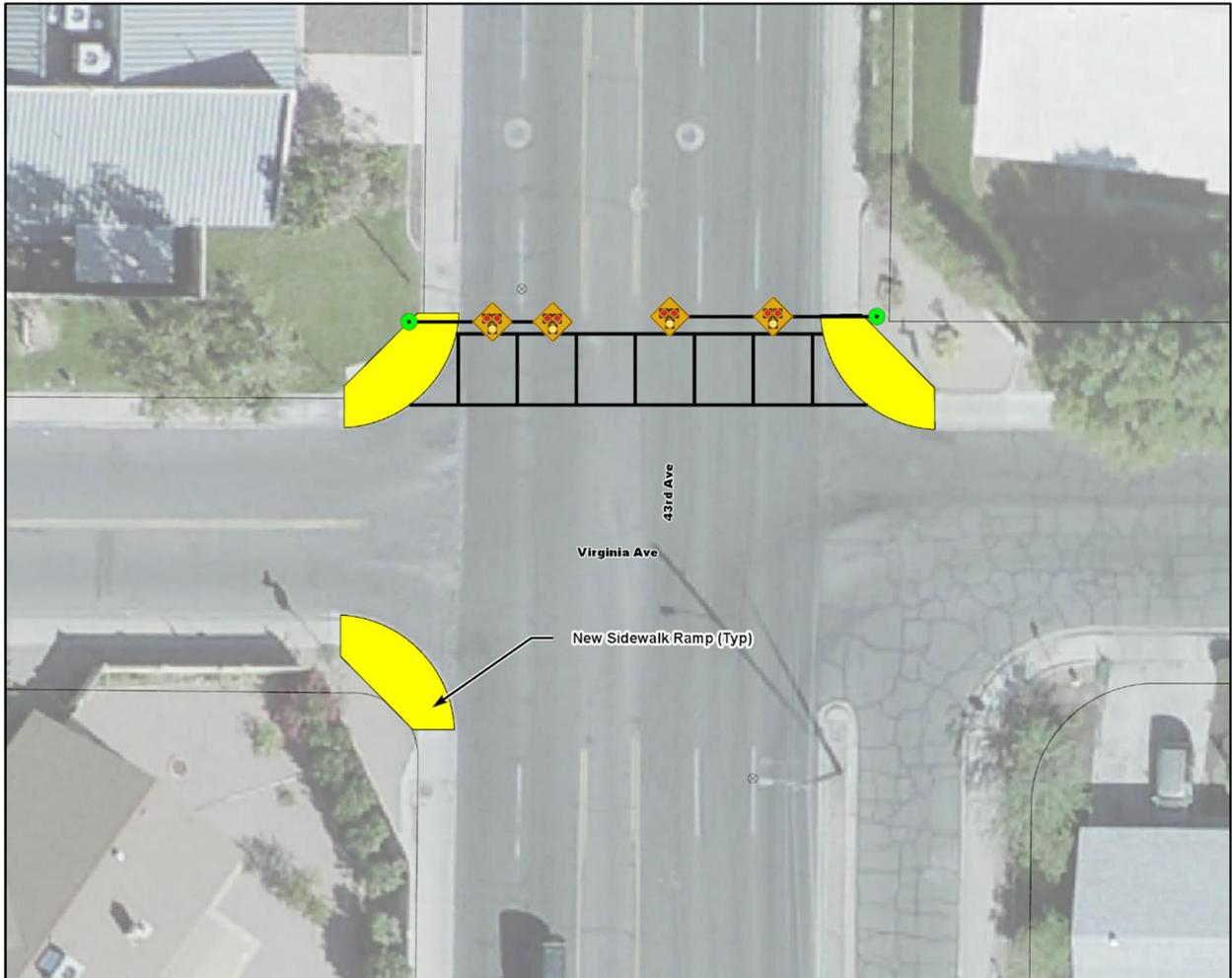
Key Destinations: 43<sup>rd</sup> Avenue bus route and P.T. Coe Elementary School.

Project Constraints:

- *Right-of-Way* – A small amount of new right-of-way may be required at the NW corner of the intersection.
- *Phoenix Manor Landscape Feature* – The landscape feature which includes a short wall at Phoenix Manor Senior Living apartments, NE corner of the intersection, will have to be rebuilt to allow space for the signal pole and sidewalk ramp.

Budgetary Cost Estimate:

Construction Cost	\$183,000
Design, Construction Administration & Other Fees	\$135,000
Right-of-Way Acquisition	<u>\$1,000</u>
<b>TOTAL</b>	<b>\$319,000</b>



**Exhibit 6: 43<sup>rd</sup> Ave Pedestrian Hybrid Beacon (at Virginia Ave)**

**Budgetary Cost Estimate: 43rd Ave Ped. Hybrid Beacon (at Virginia Ave)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	PEDESTRIAN HYBRID BEACON	LS	1	\$125,000.00	\$125,000.00
2	SIDEWALK RAMPS	EACH	3	\$3,000.00	\$9,000.00
3	HIGH VISIBILITY CROSSWALKS (LADDER)	EACH	1	\$2,000.00	\$2,000.00
4	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$6,000.00	\$6,000.00

**Subtotal Construction \$142,000.00**

Traffic Control/Police Officer (4%) \$5,680.00

Allowance for Extra Work (5%) \$7,100.00

Contingency (20%) \$28,400.00

**Total Construction \$183,180.00**

Design Phase (27%) \$49,458.60

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Right-of-Way Acquisition 100 S.F. @ \$10.00 \$1,000.00

Construction Administration (30%) \$54,954.00

**GRAND TOTAL \$318,592.60**

**G) 43<sup>RD</sup> AVE PEDESTRIAN HYBRID BEACON (AT EARLL DR)**  
NEW PED. HYBRID BEACON & SIDEWALK RAMP IMPROVEMENTS

Project Location: 43<sup>rd</sup> Avenue at Earll Drive

Project Description:

- Install a new pedestrian hybrid beacon to assist people crossing 43<sup>rd</sup> Avenue; including a new crosswalk aligned with the north sidewalk on Earll Drive.
- Replace the existing sidewalk ramps at the NW and NE corners of the intersection.

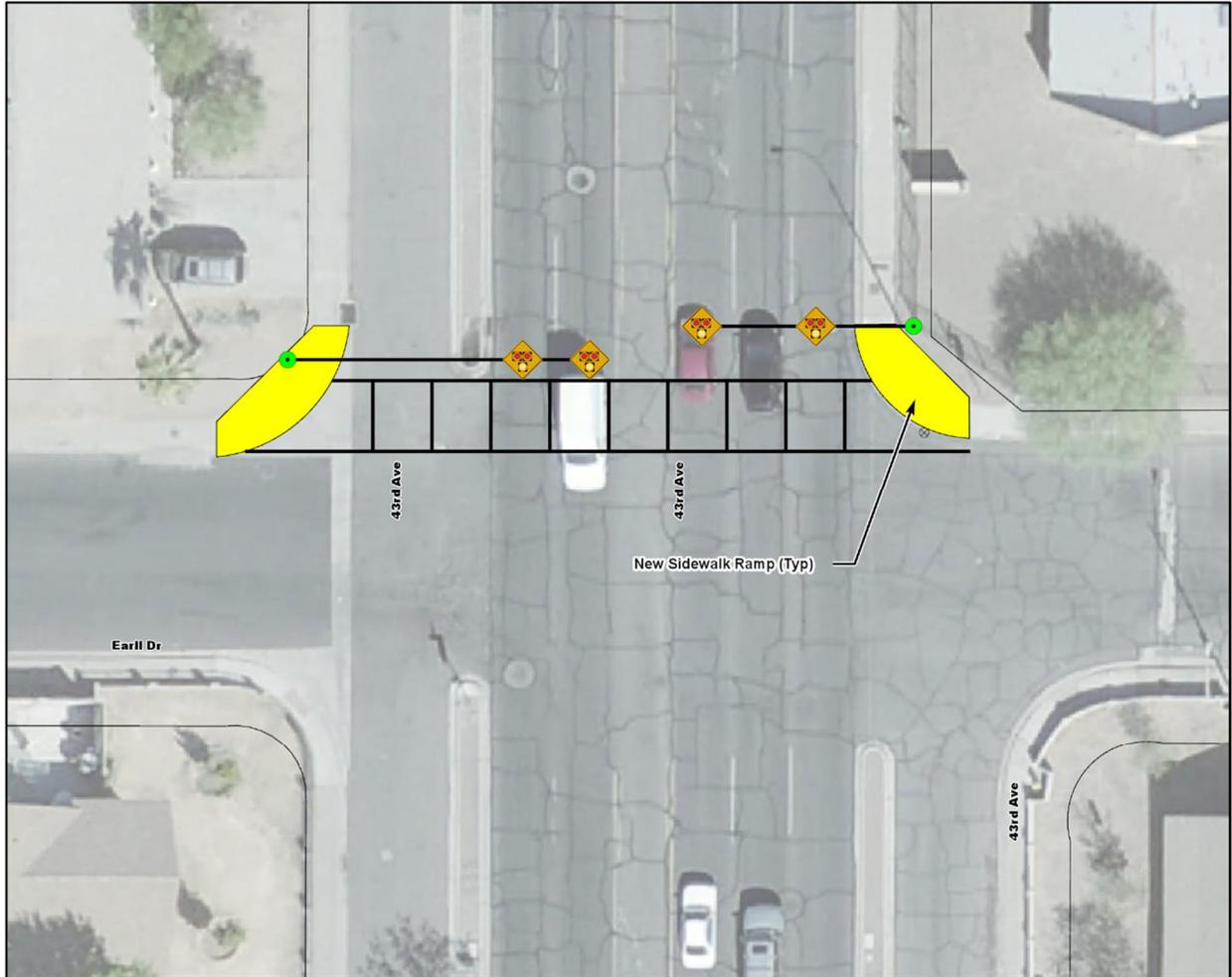
Project Benefits: The pedestrian hybrid beacon will add safety for crossing 43<sup>rd</sup> Avenue between Thomas and Osborn Roads where there has been a fatal pedestrian crash. Earll Drive functions as a collector for neighborhoods on both sides of 43<sup>rd</sup> Avenue. The pedestrian hybrid beacon will provide these neighborhood residents a safe way to cross 43<sup>rd</sup> Avenue.

Key Destinations: 43<sup>rd</sup> Avenue bus route.

Project Constraints: None

Budgetary Cost Estimate:

Construction Cost	\$177,000
Design, Construction Administration & Other Fees	\$131,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$308,000</b>



**Exhibit 7: 43<sup>rd</sup> Ave Pedestrian Hybrid Beacon (at Earll Dr)**

**Budgetary Cost Estimate: 43rd Ave Ped. Hybrid Beacon (at Earl Dr)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	PEDESTRIAN HYBRID BEACON	LS	1	\$125,000.00	\$125,000.00
2	SIDEWALK RAMPS	EACH	2	\$3,000.00	\$6,000.00
3	HIGH VISIBILITY CROSSWALKS (LADDER)	EACH	1	\$2,000.00	\$2,000.00
4	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$4,000.00	\$4,000.00

**Subtotal Construction \$137,000.00**

Traffic Control/Police Officer (4%) \$5,480.00

Allowance for Extra Work (5%) \$6,850.00

Contingency (20%) \$27,400.00

**Total Construction \$176,730.00**

Design Phase (27%) \$47,717.10

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$53,019.00

**GRAND TOTAL \$307,466.10**

**H) 48<sup>TH</sup> LN PED. IMPROVEMENTS (ENCANTO BLVD – THOMAS RD)**  
ADA IMPROVEMENTS, STREET LIGHTS & DRAINAGE IMPROVEMENTS

Project Location: 48<sup>th</sup> Lane from Encanto Boulevard to Thomas Road.

Project Description:

- Replace 74 existing driveways with roll curb and thickened sidewalk to provide a level walking surface without disruption to the existing front yard walls, fences and landscaping. Many of the homes have walls and fences at the back of the existing sidewalk that would have to be removed to construct a standard driveway whereas a roll curb driveway can be installed without widening the existing sidewalk which will allow the front yard walls to remain.
- Retrofit 3 existing driveways at the building just south of Thomas Road to create a level walking surface behind the driveway.
- Rebuild one other driveway at the alley south of Thomas Road.
- Install 2 new sidewalk ramps.
- Construct a new valley gutter at Encanto Boulevard where runoff puddles to a depth of several inches, which inundates the street and sidewalk ramp at the northeast corner of the intersection.
- Install 8 new street lights to meet current City standards for street light spacing.

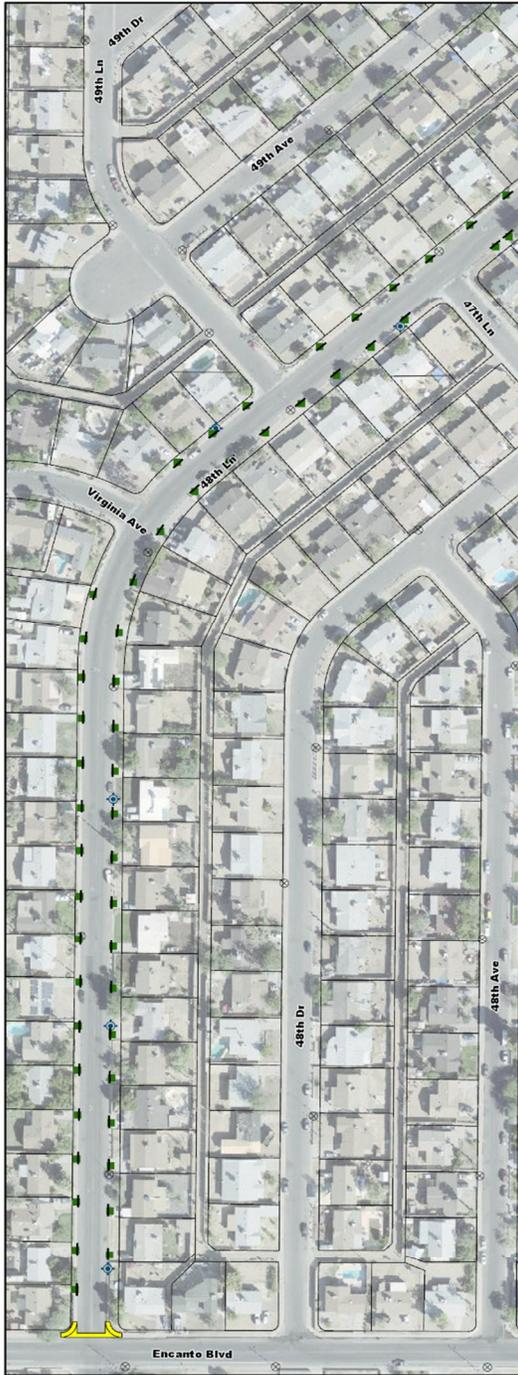
Project Benefits: This project will provide accessible sidewalks within the neighborhood and fill gaps in the existing street light coverage.

Key Destinations: Joseph Zito Elementary School, Thomas Road bus stops and Thomas road businesses.

Project Constraints: None

Budgetary Cost Estimate:

Construction Cost	\$360,000
Design, Construction Administration & Other Fees	\$242,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$602,000</b>



**LEGEND**

- ◆ New Streetlight
- New ADA Retrofit Driveway
- Rebuild Driveway
- New Sidewalk Ramp
- ⋯ Rebuild Driveway W/Roll Curb
- New Valley Gutter
- ⊗ Existing Streetlight

**Exhibit 8: 48<sup>th</sup> Ln Ped. Improvements (Encanto Blvd – Thomas Rd)**

**Budgetary Cost Estimate: 48th Ln (Encanto Blvd – Thomas Rd)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK RAMPS	EACH	2	\$3,000.00	\$6,000.00
2	VALLEY GUTTER	EACH	1	\$5,000.00	\$5,000.00
3	REBUILD DRIVEWAYS	EACH	1	\$4,500.00	\$4,500.00
4	ADA RETROFIT DRIVEWAYS	EACH	3	\$2,000.00	\$6,000.00
5	REPLACE DRIVEWAY W/CURB, GUTTER & SIDEWALK	EACH	75	\$2,500.00	\$187,500.00
6	STREET LIGHT	EACH	8	\$5,000.00	\$40,000.00
7	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$30,000.00	\$30,000.00

**Subtotal Construction \$279,000.00**

Traffic Control/Police Officer (4%) \$11,160.00

Allowance for Extra Work (5%) \$13,950.00

Contingency (20%) \$55,800.00

**Total Construction \$359,910.00**

Design Phase (27%) \$97,175.70

Streetlighting Fee (2%) \$7,198.20

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$107,973.00

**GRAND TOTAL \$602,256.90**

**I) 47<sup>TH</sup> AVE PED. IMPROVEMENTS (THOMAS RD – EARLL DR)**  
ROADWAY DIET, ADA IMPROVEMENTS, STREET LIGHTS & SHADE TREES

Project Location: 47<sup>th</sup> Avenue from Thomas Road to Earll Drive.

Project Description: This project takes advantage of the extra roadway width on 47<sup>th</sup> Avenue to create shaded walkways on both sides of the street and, since 47<sup>th</sup> Avenue is an established bike route, it will also provide shade for the bicyclists.

- Construct 2600 LF of new curb and gutter to narrow the roadway width from 62 to 42 feet which will provide a 10-foot wide landscape strip between the existing sidewalk and the back of the new curb. The 42-foot width matches the width of 47<sup>th</sup> Avenue, north of Earll Drive.
- Install 31 new driveways to replace the existing driveways.
- Install 600 LF of new, 6-inch thick sidewalk to replace the existing sidewalk at each driveway location.
- Install 4 new sidewalk ramps.
- Install 2 new street lights to meet current City standards for street light spacing.
- Install 54 new shade trees with landscaping and irrigation in the new 10-foot wide landscape strips.

Project Benefits: This project will provide accessible, shaded sidewalks and fill gaps in the existing street light coverage; and since this segment of 47<sup>th</sup> Avenue is an established bike route, the shade will also provide benefit to the bicyclists. In addition, the narrower roadway should help slow vehicular traffic; benefiting both pedestrians and bicyclists. This project will also blend well with the segment of 47<sup>th</sup> Avenue north of Earll Drive where there are many large, existing shade trees in the flood irrigated residential lots. Once the sidewalks are installed north of Earll Drive (Proposed Project S), this project will result in continuous shaded sidewalks along 47<sup>th</sup> Avenue between Thomas and Osborn Roads.

Key Destinations: Justine Spitalny Elementary School, Thomas Road bus stops, Thomas Road businesses.

Project Constraints:

- *Existing 6-inch Water Line* – There is an existing 6-inch water line along the east side of the street that lies under the proposed landscape strip which will restrict the planting of shade trees. However, the water line is more than 50 years old and will likely be replaced by the City's Water Services Department with a larger, 8-inch water line at some point in the future. It is recommended that this project be coordinated with the water line replacement project to move the water line farther into the roadway allowing enough space to plant trees. Alternatively, if the Water

Services Department does not plan to replace the waterline, the sidewalk on the east side of the street could be moved to the back of the new curb which would allow enough space behind the sidewalk to plant trees. These trees would probably require root barriers, however, because they would be planted about 6 feet from the existing 6-inch waterline.

Budgetary Cost Estimate:

Construction Cost	\$577,000
Design, Construction Administration & Other Fees	\$370,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$947,000</b>



**LEGEND**

- |                                  |                         |
|----------------------------------|-------------------------|
| ◆ New Streetlight                | ⊗ Existing Streetlight  |
| ■ New Sidewalk Ramp              | --- Exist. Sewer Line   |
| — New Sidewalk                   | - - - Exist. Water Line |
| ☼ New Shade Tree and Landscaping |                         |
| ..... New Curb                   |                         |
| ■ New Driveway                   |                         |

**Exhibit 9: 47<sup>th</sup> Ave Ped. Improvements (Thomas Rd – Earll Dr)**

**Budgetary Cost Estimate: 47th Ave (Thomas Rd – Earll Dr)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK	SF	3100	\$6.50	\$20,150.00
2	SIDEWALK RAMPS	EACH	4	\$3,000.00	\$12,000.00
3	NEW DRIVEWAYS	EACH	31	\$2,000.00	\$62,000.00
4	CURB AND GUTTER	LF	2625	\$40.00	\$105,000.00
5	SHADE TREES	EACH	54	\$400.00	\$21,600.00
6	STREET LIGHT	EACH	2	\$5,000.00	\$10,000.00
7	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$50,000.00	\$50,000.00
8	NEW AC PAVEMENT	SY	580	\$80.00	\$46,400.00
9	LANDSCAPING (D.G., SHRUBS & IRRIGATION)	SF	20000	\$6.00	\$120,000.00

**Subtotal Construction \$447,150.00**

Traffic Control/Police Officer (4%) \$17,886.00

Allowance for Extra Work (5%) \$22,357.50

Contingency (20%) \$89,430.00

**Total Construction \$576,823.50**

Design Phase (27%) \$155,742.35

Streetlighting Fee (2%) \$11,536.47

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$173,047.05

**GRAND TOTAL \$947,149.37**

**J) 39<sup>TH</sup> AVE PED. IMPROVEMENTS (ENCANTO BLVD – THOMAS RD)**  
ADA IMPROVEMENTS, STREET LIGHTS & SHADE TREES

Project Location: 39<sup>th</sup> Avenue from Encanto Boulevard to Thomas Road.

Project Description:

- Replace 7 existing driveways with roll curb and thickened sidewalk to provide a level walking surface without disruption to the existing front yard walls, fences and landscaping. Many of the homes have walls and fences at the back of the existing sidewalk that would have to be removed to construct a standard driveway whereas a roll curb driveway can be installed without widening having to remove the homeowner's front yard improvements.
- Retrofit 2 existing driveway at the driveway just north of Encanto Boulevard to create a level walking surface behind the driveway.
- Rebuild 7 other driveways that are in disrepair and don't have a level walking surface.
- Install 17 new sidewalk ramps to replace existing, non-standard ramps.
- Install 8 new street lights to meet current City standards for street light spacing.
- Install a high visibility crosswalk at Wilshire Drive to replace the existing standard crosswalk that serves P.T. Coe Elementary School.
- Plant 30 new shade trees in the existing landscape strip between the roadway curb and the sidewalk on the west side of 39<sup>th</sup> Avenue between Encanto Boulevard and Virginia Avenue. Also include new irrigation, shrubs and decomposed granite ground cover.

Project Benefits: This project will provide accessible sidewalks on both sides of 39<sup>th</sup> Avenue and fill gaps in the existing street light coverage. It will also provide shade trees for a ¼ mile segment on the west side of 39<sup>th</sup> Avenue.

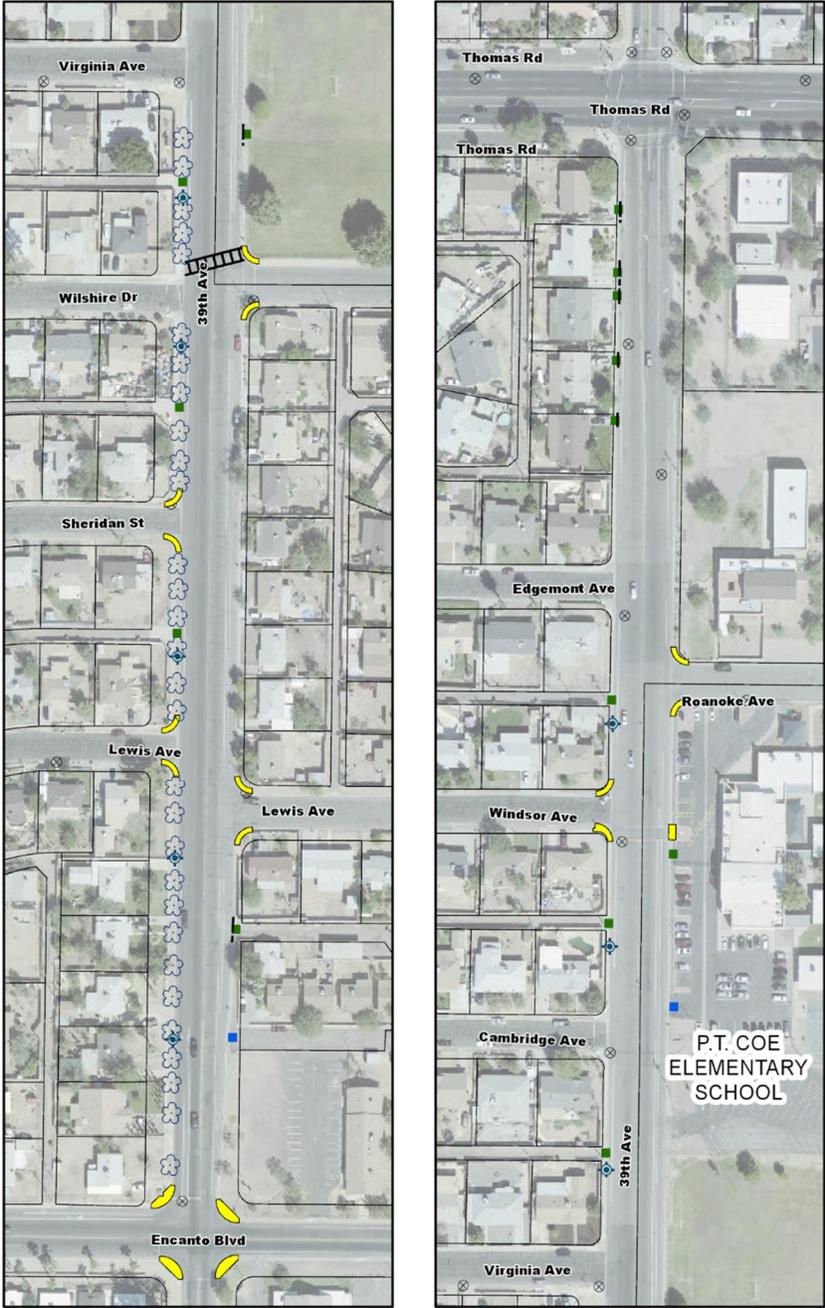
Key Destinations: P.T. Coe Elementary School, Thomas Road bus stops and Thomas road businesses.

Project Constraints:

- *Right-of-Way at P.T. Coe Elementary School* – New right-of-way may be required from Isaac School District to construct the new sidewalk ramps and driveways in front of P.T. Coe elementary School.

Budgetary Cost Estimate:

Construction Cost	\$292,000
Design, Construction Administration & Other Fees	\$203,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$495,000</b>



**LEGEND**

- ◆ New Streetlight
- New ADA Retrofit Driveway
- Rebuild Driveway
- New Sidewalk Ramp
- ▤ New High Visibility Crosswalk
- ☼ New Shade Tree and Landscaping
- ⋯ Rebuild Driveway W/Roll Curb
- ⊗ Existing Streetlight

**Exhibit 10: 39<sup>th</sup> Ave Ped. Improvements (Encanto Blvd – Thomas Rd)**

**Budgetary Cost Estimate: 39th Ave (Encanto Blvd – Thomas Rd)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK RAMPS	EACH	17	\$3,000.00	\$51,000.00
2	REBUILD DRIVEWAYS	EACH	6	\$4,500.00	\$27,000.00
3	ADA RETROFIT DRIVEWAYS	EACH	2	\$2,000.00	\$4,000.00
4	REPLACE DRIVEWAY W/CURB, GUTTER & SIDEWALK	EACH	7	\$2,500.00	\$17,500.00
5	SHADE TREES	EACH	30	\$400.00	\$12,000.00
6	STREET LIGHT	EACH	8	\$5,000.00	\$40,000.00
7	HIGH VISIBILITY CROSSWALKS (LADDER)	EACH	1	\$2,000.00	\$2,000.00
8	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$25,000.00	\$25,000.00
9	LANDSCAPING (D.G., SHRUBS & IRRIGATION)	SF	8000	\$6.00	\$48,000.00

**Subtotal Construction \$226,500.00**

Traffic Control/Police Officer (4%) \$9,060.00

Allowance for Extra Work (5%) \$11,325.00

Contingency (20%) \$45,300.00

**Total Construction \$292,185.00**

Design Phase (27%) \$78,889.95

Streetlighting Fee (2%) \$5,843.70

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$87,655.50

**GRAND TOTAL \$494,574.15**

**K) 39<sup>TH</sup> AVE PED. IMPROVEMENTS (THOMAS RD – OSBORN RD)**  
ADA IMPROVEMENTS & STREET LIGHTS

Project Location: 39<sup>th</sup> Avenue from Thomas Road to Osborn Road.

Project Description:

- Replace 19 existing driveways along the west side of the roadway. The east side of the roadway has roll curb, so those driveways are compliant with the ADA standards. It is recommended to replace the driveways with roll curb and thickened sidewalk to provide a level walking surface without disruption to the existing front yard walls, fences and landscaping. Most of the homes have walls and fences at the back of the existing sidewalk that would have to be removed to construct a standard driveway whereas a roll curb driveway can be installed without having to remove the homeowner’s front yard improvements.
- Retrofit 12 of the existing driveways on the west side of 39<sup>th</sup> Avenue where there are no conflicting walls or fences.
- Install 15 new sidewalk ramps to replace existing, non-standard ramps.
- Install 8 new street lights to meet current City standards for street light spacing.

Project Benefits: This project will provide accessible sidewalks on both sides of 39<sup>th</sup> Avenue and fill gaps in the existing street light coverage.

Key Destinations: Madrid Elementary School, Pueblo del Sol School, Thomas Road bus stops and Thomas road businesses.

Project Constraints: None

Budgetary Cost Estimate:

Construction Cost	\$234,000
Design, Construction Administration & Other Fees	\$168,000
Right-of-Way Acquisition	\$0,000
<b>TOTAL</b>	<b>\$402,000</b>



**LEGEND**

- ◆ New Streetlight
  - New ADA Retrofit Driveway
  - ▭ New Sidewalk Ramp
- ⊗ Existing Streetlight
  - Rebuild Driveway W/Roll Curb

**Exhibit 11: 39<sup>th</sup> Ave Ped. Improvements (Thomas Rd – Osborn Rd)**

**Budgetary Cost Estimate: 39th Ave (Thomas Rd – Osborn Rd)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK RAMPS	EACH	15	\$3,000.00	\$45,000.00
2	ADA RETROFIT DRIVEWAYS	EACH	12	\$2,000.00	\$24,000.00
3	REPLACE DRIVEWAY W/CURB, GUTTER & SIDEWALK	EACH	19	\$2,500.00	\$47,500.00
4	STREET LIGHT	EACH	8	\$5,000.00	\$40,000.00
5	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$25,000.00	\$25,000.00

**Subtotal Construction \$181,500.00**

Traffic Control/Police Officer (4%) \$7,260.00

Allowance for Extra Work (5%) \$9,075.00

Contingency (20%) \$36,300.00

**Total Construction \$234,135.00**

Design Phase (27%) \$63,216.45

Streetlighting Fee (2%) \$4,682.70

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$70,240.50

**GRAND TOTAL \$402,274.65**

**L) ENCANTO BLVD PED. IMPROVEMENTS (49TH AVE – 43RD AVE)**  
ADA IMPROVEMENTS, STREET LIGHTS, DRAINAGE IMPROVEMENTS & SHADE TREES

Project Location: Encanto Boulevard from 49<sup>th</sup> Avenue to 43<sup>rd</sup> Avenue.

Project Description:

- Replace 37 existing non-standard driveways with roll curb. It is recommended to replace the driveways with roll curb and thickened sidewalk to provide a level walking surface without disruption to the existing front yard walls, fences and landscaping. Most of the homes have walls and fences at the back of the existing sidewalk that would have to be removed to construct a standard driveway whereas a roll curb driveway can be installed without having to remove the homeowner's front yard improvements.
- Retrofit 12 of the existing driveways with a level walking surface behind the driveway where there are no conflicting walls or fences.
- Rebuild 17 existing non-compliant driveways with standard driveway between 47<sup>th</sup> Avenue and 45<sup>th</sup> Avenue where the existing sidewalks are 8 feet wide.
- Replace 14 non-standard sidewalk ramps with new sidewalk ramps.
- Remove 2 existing unused driveways in front of Joseph Zito Elementary School and replace them with vertical curb, gutter and sidewalk.
- Install 9 new street lights to meet current City standards for street light spacing.
- Install 2 new sidewalk scuppers, one at Joseph Zito Elementary School and the other at Sueno Park, where runoff currently flows over depressed sections of sidewalk.
- Install a valley gutter on the north side of Encanto Blvd. at 48<sup>th</sup> Ln. where runoff puddles to a depth of several inches which inundates the street and the sidewalk ramp at the NE corner of the intersection.
- Plant 7 new shade trees at the back of the sidewalk along Sueno Park to fill gaps in the existing tree coverage. Utilize the Park's irrigation system to water the new trees.

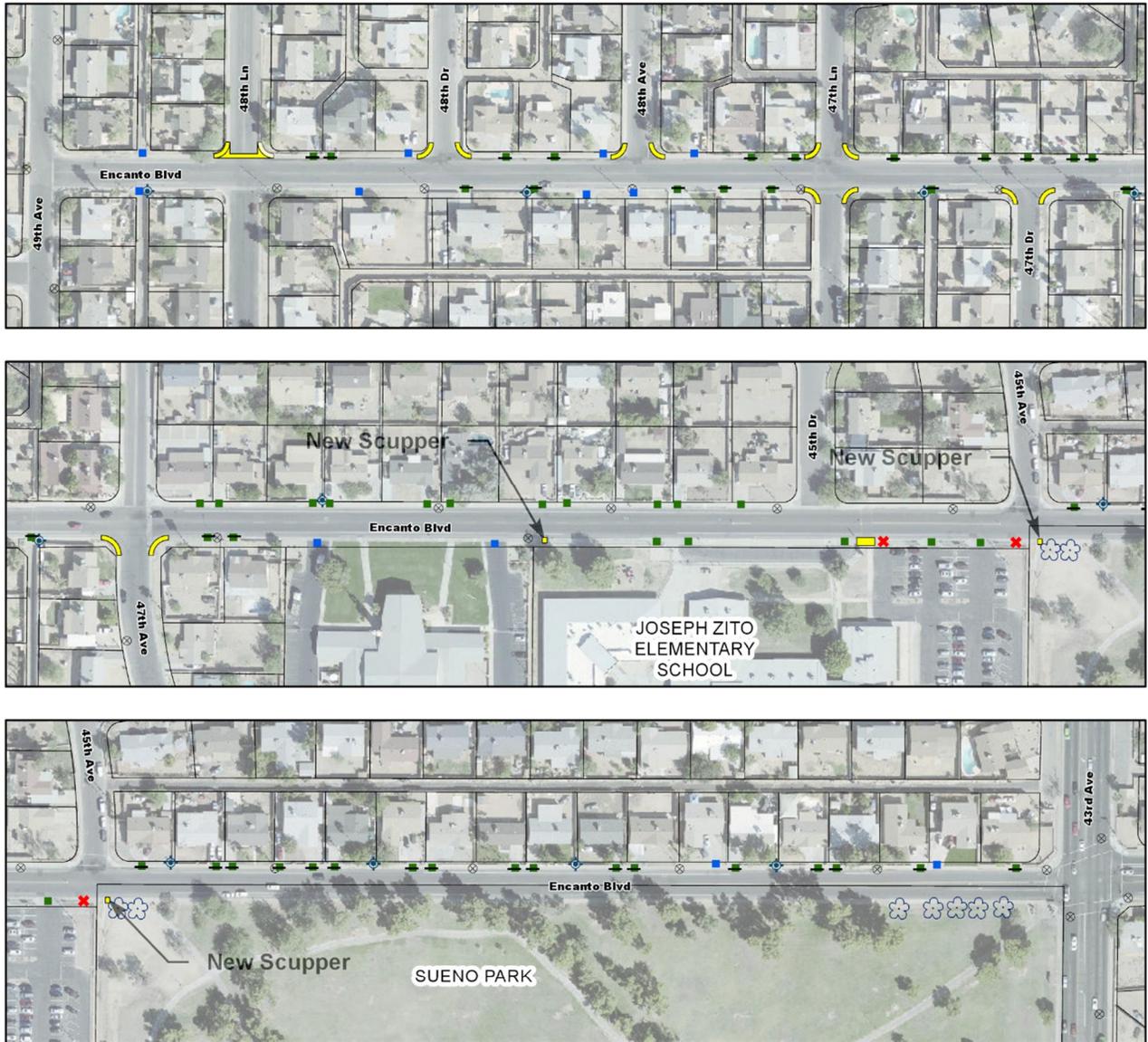
Project Benefits: This project will provide accessible sidewalks on both sides of Encanto Boulevard and fill gaps in the existing street light coverage. It will also fix an existing drainage problem and add shade trees along the sidewalk at Sueno Park

Key Destinations: Joseph Zito Elementary School, Sueno Park and the 43<sup>rd</sup> Avenue bus stops.

Project Constraints: None

Budgetary Cost Estimate:

Construction Cost	\$433,000
Design, Construction Administration & Other Fees	\$286,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$719,000</b>



**LEGEND**

- |                             |                                |
|-----------------------------|--------------------------------|
| ◆ New Streetlight           | ⊗ Existing Streetlight         |
| ✖ Remove Driveway           | ■ Rebuild Driveway W/Roll Curb |
| ■ New ADA Retrofit Driveway | ▬ New Valley Gutter            |
| ■ Rebuild Driveway          | ☼ New Shade Tree               |
| ▬ New Sidewalk Ramp         |                                |

**Exhibit 12: Encanto Blvd Ped. Improvements (49<sup>th</sup> Ave – 43<sup>rd</sup> Ave)**

**Budgetary Cost Estimate: Encanto Blvd (49th Ave – 43rd Ave)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK RAMPS	EACH	14	\$3,000.00	\$42,000.00
2	VALLEY GUTTER	EACH	1	\$5,000.00	\$5,000.00
3	SIDEWALK SCUPPER	EACH	2	\$2,000.00	\$4,000.00
4	REBUILD DRIVEWAYS	EACH	17	\$4,500.00	\$76,500.00
5	ADA RETROFIT DRIVEWAYS	EACH	12	\$2,000.00	\$24,000.00
6	REPLACE DRIVEWAY W/CURB, GUTTER & SIDEWALK	EACH	39	\$2,500.00	\$97,500.00
7	SHADE TREES	EACH	7	\$400.00	\$2,800.00
8	STREET LIGHT	EACH	9	\$5,000.00	\$45,000.00
9	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$35,000.00	\$35,000.00
10	SHADE TREE IRRIGATION	LS	1	\$4,000.00	\$4,000.00

**Subtotal Construction \$335,800.00**

Traffic Control/Police Officer (4%) \$13,432.00

Allowance for Extra Work (5%) \$16,790.00

Contingency (20%) \$67,160.00

**Total Construction \$433,182.00**

Design Phase (27%) \$116,959.14

Streetlighting Fee (2%) \$8,663.64

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$129,954.60

**GRAND TOTAL \$718,759.38**

**M) ENCANTO BLVD PED. IMPROVEMENTS (43<sup>RD</sup> AVE – 35<sup>TH</sup> AVE)**  
ADA IMPROVEMENTS, STREET LIGHTS & DRAINAGE IMPROVEMENTS

Project Location: Encanto Boulevard from 43<sup>rd</sup> Avenue 35<sup>th</sup> Avenue.

Project Description:

- Replace 50 existing, non-standard driveways with roll curb. It is recommended to replace the driveways with roll curb and thickened sidewalk to provide a level walking surface without disruption to the existing front yard walls, fences and landscaping. Many of the homes have walls and fences at the back of the existing sidewalk that would have to be removed to construct a standard driveway whereas a roll curb driveway can be installed without having to remove the homeowner’s front yard improvements.
- Retrofit 40 of the existing non-standard driveways with a level walking surface behind the driveway where there are no conflicting walls or fences.
- Rebuild 4 existing non-standard driveways.
- Replace 25 non-standard sidewalk ramps with new sidewalk ramps.
- Install 17 new street lights to meet current City standards for street light spacing.
- Install a valley gutter on the north side of Encanto Blvd. at 40<sup>th</sup> Ave. where runoff puddles to a depth of several inches which inundates the street and the sidewalk ramp at the NE corner of the intersection.

Project Benefits: This project will provide accessible sidewalks on both sides of Encanto Boulevard and fill gaps in the existing street light coverage. It will also fix an existing drainage ponding problem on the north side of Encanto Boulevard at 40<sup>th</sup> Avenue.

Key Destinations: P.T. Coe Elementary School, Sueno Park and the 43<sup>rd</sup> Avenue and 35<sup>th</sup> Avenue bus stops.

Project Constraints: None

Budgetary Cost Estimate:

Construction Cost	\$565,000
Design, Construction Administration & Other Fees	\$363,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$928,000</b>



**LEGEND**

- ◆ New Streetlight
- New ADA Retrofit Driveway
- Rebuild Driveway
- ▬ New Sidewalk Ramp
- ⊗ Existing Streetlight
- ▬ Rebuild Driveway W/Roll Curb

**Exhibit 13: Encanto Blvd Ped. Improvements (43<sup>rd</sup> Ave – 35<sup>th</sup> Ave)**

**Budgetary Cost Estimate: Encanto Blvd (43rd Ave – 35th Ave)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK RAMPS	EACH	25	\$3,000.00	\$75,000.00
2	VALLEY GUTTER	EACH	1	\$5,000.00	\$5,000.00
3	REBUILD DRIVEWAYS	EACH	4	\$4,500.00	\$18,000.00
4	ADA RETROFIT DRIVEWAYS	EACH	40	\$2,000.00	\$80,000.00
5	REPLACE DRIVEWAY W/CURB, GUTTER & SIDEWALK	EACH	50	\$2,500.00	\$125,000.00
6	STREET LIGHT	EACH	17	\$5,000.00	\$85,000.00
7	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$50,000.00	\$50,000.00

**Subtotal Construction \$438,000.00**

Traffic Control/Police Officer (4%) \$17,520.00

Allowance for Extra Work (5%) \$21,900.00

Contingency (20%) \$87,600.00

**Total Construction \$565,020.00**

Design Phase (27%) \$152,555.40

Streetlighting Fee (2%) \$11,300.40

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$169,506.00

**GRAND TOTAL \$928,381.80**

**N) OSBORN RD PED. IMPROVEMENTS (51<sup>ST</sup> AVE – 43<sup>RD</sup> AVE)**

ADA IMPROVEMENTS, CURB &amp; GUTTER, SIDEWALK, STREET LIGHTS &amp; SHADE TREES

Project Location: Osborn Road from 51<sup>st</sup> Avenue to 43<sup>rd</sup> Avenue.

Project Description:

- Retrofit 15 existing non-standard driveways along the south side of Osborn Rd. between 47<sup>th</sup> Ave. and 43<sup>rd</sup> Ave. Provide a level walking surface behind the driveway.
- Rebuild 1 existing non-standard driveway.
- Construct 375 LF of new curb, gutter and sidewalk on the south side of Osborn Rd. between 47<sup>th</sup> Ave. and 46<sup>th</sup> Dr. to fill a gap in the existing roadway curb and sidewalk. Also install 2 new driveways for the Assembly of God Church.
- Replace 11 non-standard sidewalk ramps with new sidewalk ramps.
- Install 17 new street lights to meet current City standards for street light spacing.
- Plant 125 new shade trees in the existing landscape strips each side of Osborn Road between 51<sup>st</sup> Ave. and 47<sup>th</sup> Ave. Also include new irrigation, shrubs and decomposed granite ground cover.
- Take advantage of the extra right-of-way on the south side of Osborn Road to plant 60 new shade trees. There is excess right-of-way in the roadway segment between 47<sup>th</sup> Avenue and 43<sup>rd</sup> Avenue that will allow the creation of a landscape area at the back of the sidewalk. Also include new irrigation, shrubs and decomposed granite ground cover. The landscape area will require a new header curb to define the limits of maintenance responsibility and will require relocation of the existing security fence at Justine Spitalny Elementary School

Project Benefits: This project will provide accessible, shaded sidewalks on both sides of Osborn Road. It will also fill gaps in the existing curb, gutter and sidewalk as well as gaps in the street light coverage.

Key Destinations: Justine Spitalny Elementary School and the 51<sup>st</sup> Avenue and 43<sup>rd</sup> Avenue bus stops.

Project Constraints:

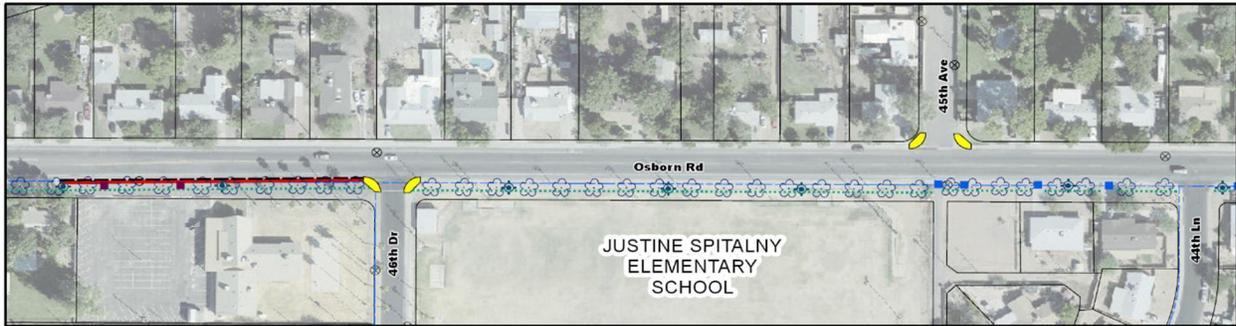
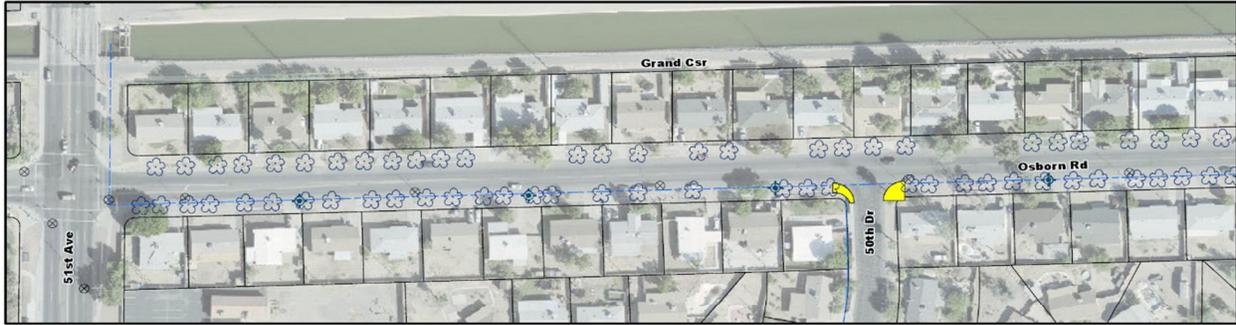
- *Existing 6-inch Water Line* – There is an existing 6-inch water line along the south side of the street that lies under the proposed landscape area which will restrict the planting of shade trees. However, the water line is more than 50 years old and will likely be replaced by the City's Water Services Department with a larger, 8-inch water line at some point in the future. It is recommended that this project be

coordinated with the water line replacement project to move the water line farther into the roadway allowing enough space to plant trees.

- *Justine Spitalny Elementary School* – There is enough right-of-way to construct the new landscape strip along Spitalny Elementary School, but coordination with the School will be necessary to relocate their security fence from the back of the existing sidewalk to about 10 feet behind the sidewalk.

Budgetary Cost Estimate:

Construction Cost	\$779,000
Design, Construction Administration & Other Fees	\$489,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$1,268,000</b>



**LEGEND**

- |                             |                                  |                        |
|-----------------------------|----------------------------------|------------------------|
| ◆ New Streetlight           | ☁ New Shade Tree and Landscaping | ⊗ Existing Streetlight |
| ■ New ADA Retrofit Driveway | ▬ New Curb                       | --- Exist. Sewer Line  |
| ■ Rebuild Driveway          | ■ New Driveway                   | --- Exist. Water Line  |
| ■ New Sidewalk Ramp         | ⋯ New Landscape Curb             |                        |
| — New Sidewalk              |                                  |                        |

**Exhibit 14: Osborn Rd Ped. Improvements (51<sup>st</sup> Ave – 43<sup>rd</sup> Ave)**

**Budgetary Cost Estimate: Osborn Road (51st Ave – 43rd Ave)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK	SF	1875	\$6.50	\$12,187.50
2	SIDEWALK RAMPS	EACH	11	\$3,000.00	\$33,000.00
3	NEW DRIVEWAYS	EACH	2	\$5,000.00	\$10,000.00
4	REBUILD DRIVEWAYS	EACH	1	\$4,500.00	\$4,500.00
5	ADA RETROFIT DRIVEWAYS	EACH	15	\$2,000.00	\$30,000.00
6	HEADER CURB	LF	2080	\$25.00	\$52,000.00
7	CURB AND GUTTER	LF	375	\$40.00	\$15,000.00
8	SHADE TREES	EACH	185	\$400.00	\$74,000.00
9	STREET LIGHT	EACH	17	\$5,000.00	\$85,000.00
10	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$60,000.00	\$60,000.00
11	LANDSCAPING (D.G., SHRUBS & IRRIGATION)	SF	38000	\$6.00	\$228,000.00

**Subtotal Construction \$603,687.50**

Traffic Control/Police Officer (4%) \$24,147.50

Allowance for Extra Work (5%) \$30,184.38

Contingency (20%) \$120,737.50

**Total Construction \$778,756.88**

Design Phase (27%) \$210,264.36

Streetlighting Fee (2%) \$15,575.14

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$233,627.06

**GRAND TOTAL \$1,268,223.43**

**O) OSBORN RD PED. IMPROVEMENTS (43<sup>RD</sup> AVE – 35<sup>TH</sup> AVE)**  
ADA IMPROVEMENTS & STREET LIGHTS

Project Location: Osborn Road from 43<sup>rd</sup> Avenue to 35<sup>th</sup> Avenue.

Project Description:

- Retrofit 39 existing non-standard driveways to provide a level walking surface behind the driveway.
- Replace 20 existing, non-standard driveways with roll curb. It is recommended to replace the driveways with roll curb and thickened sidewalk to provide a level walking surface without disruption to the existing front yard walls and landscaping. Many of the homes have walls at the back of the existing sidewalk that would have to be removed to construct a standard driveway whereas a roll curb driveway can be installed without having to remove the homeowner’s front yard improvements.
- Rebuild 11 existing non-standard driveways that are either in disrepair or are not able to be retrofitted.
- Replace 5 non-standard sidewalk ramps with new sidewalk ramps.
- Install 14 new street lights to meet current City standards for street light spacing.

Project Benefits: This project will provide accessible sidewalks on both sides of Osborn Road and will also fill gaps in the existing street light coverage.

Key Destinations: Madrid Elementary School, Pueblo del Sol Elementary School, and the 43<sup>rd</sup> Avenue and 35<sup>th</sup> Avenue bus stops.

Project Constraints:

- *Temporary Construction Easements* – There are about 15 new and/or retrofitted driveways that may require temporary construction easements to match existing Pavement on private property behind the sidewalk.

Budgetary Cost Estimate:

Construction Cost	\$384,000
Design, Construction Administration & Other Fees	\$256,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$640,000</b>



**LEGEND**

- ◆ New Streetlight
- ◆ Existing Streetlight
- New ADA Retrofit Driveway
- Rebuild Driveway
- Rebuild Driveway W/Roll Curb
- New Sidewalk Ramp

**Exhibit 15: Osborn Rd Ped. Improvements (43<sup>rd</sup> Ave – 35<sup>th</sup> Ave)**

**Budgetary Cost Estimate: Osborn Rd (43rd Ave – 35th Ave)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK RAMPS	EACH	5	\$3,000.00	\$15,000.00
2	REBUILD DRIVEWAYS	EACH	11	\$4,500.00	\$49,500.00
3	ADA RETROFIT DRIVEWAYS	EACH	39	\$2,000.00	\$78,000.00
4	REPLACE DRIVEWAY W/CURB, GUTTER & SIDEWALK	EACH	20	\$2,500.00	\$50,000.00
5	STREET LIGHT	EACH	14	\$5,000.00	\$70,000.00
6	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$35,000.00	\$35,000.00

**Subtotal Construction \$297,500.00**

Traffic Control/Police Officer (4%) \$11,900.00

Allowance for Extra Work (5%) \$14,875.00

Contingency (20%) \$59,500.00

**Total Construction \$383,775.00**

Design Phase (27%) \$103,619.25

Streetlighting Fee (2%) \$7,675.50

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$115,132.50

**GRAND TOTAL \$640,202.25**

**P) NEIGHBORHOOD SIDEWALKS**  
**(39<sup>TH</sup> AVE – 37<sup>TH</sup> AVE & ENCANTO BLVD – WILSHIRE DR)**  
 SIDEWALKS, ADA IMPROVEMENTS & STREET LIGHTS

Project Location: 39<sup>th</sup> Avenue to 37<sup>th</sup> Avenue from Encanto Boulevard to Wilshire Drive.

Project Description:

- Install 9,100 LF of new sidewalks in this neighborhood where there are no existing sidewalks.
- Install 14 new sidewalk ramps.
- Replace 10 existing alley driveways with roll curb and thickened sidewalk.
- Install 11 new street lights to meet current City standards for street light spacing.

Project Benefits: This project will provide accessible sidewalks within the neighborhood and fill gaps in the existing street light coverage.

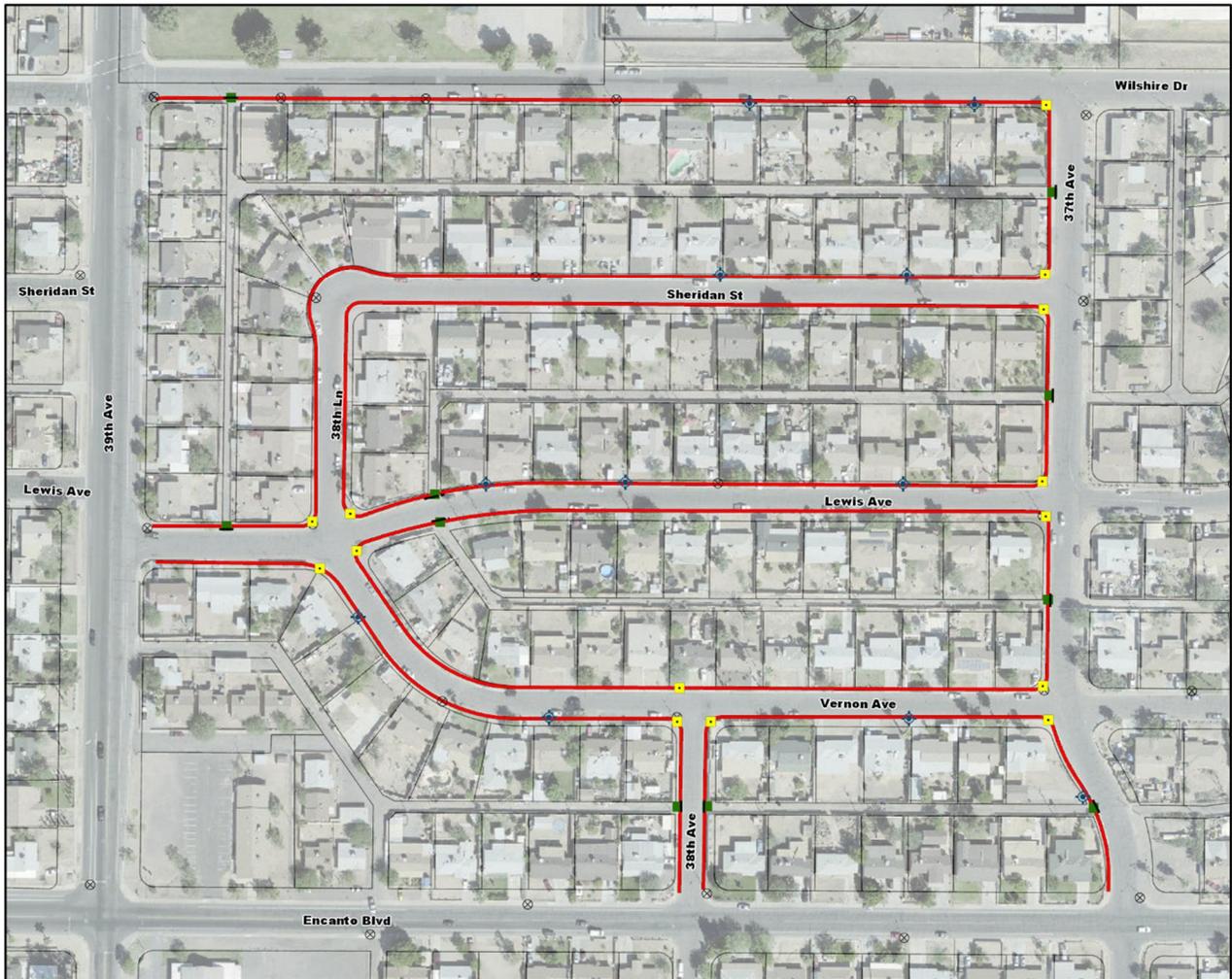
Key Destinations: The Encanto Boulevard and 39<sup>th</sup> Avenue sidewalks and P.T. Coe Elementary School.

Project Constraints:

- *Front Yard Walls and Fences* – Approximately 60 of the existing homes have front yard walls and fences that encroach into the right-of-way and will have to be removed to construct the new sidewalks. The project cost estimate includes a budget amount for removal but not for relocation or replacement.

Budgetary Cost Estimate:

Construction Cost	\$642,000
Design, Construction Administration & Other Fees	\$409,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$1,051,000</b>



**LEGEND**

- |   |  |
|---|--|
|  New Streetlight |  Existing Streetlight         |
|  New Sidewalk    |  New Sidewalk Ramp            |
|   |  Rebuild Driveway W/Roll Curb |

**Exhibit 16: Neighborhood Sidewalks  
(39<sup>th</sup> Ave – 37<sup>th</sup> Ave & Encanto Blvd – Wilshire Dr)**

**Budgetary Cost Estimate:**  
**39th Ave – 37th Ave & Encanto Blvd – Wilshire Dr**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK	SF	45500	\$6.50	\$295,750.00
2	SIDEWALK RAMPS	EACH	14	\$3,000.00	\$42,000.00
3	REPLACE DRIVEWAY W/CURB, GUTTER & SIDEWALK	EACH	10	\$2,500.00	\$25,000.00
4	STREET LIGHT	EACH	11	\$5,000.00	\$55,000.00
5	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$80,000.00	\$80,000.00

**Subtotal Construction \$497,750.00**

Traffic Control/Police Officer (4%) \$19,910.00

Allowance for Extra Work (5%) \$24,887.50

Contingency (20%) \$99,550.00

**Total Construction \$642,097.50**

Design Phase (27%) \$173,366.33

Streetlighting Fee (2%) \$12,841.95

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$192,629.25

**GRAND TOTAL \$1,050,935.03**

**Q) NEIGHBORHOOD SIDEWALKS**  
**(37<sup>TH</sup> AVE – 35<sup>TH</sup> AVE & ENCANTO BLVD – WILSHIRE DR)**  
SIDEWALKS, ADA IMPROVEMENTS & STREET LIGHTS

Project Location: 37<sup>th</sup> Avenue to 35<sup>th</sup> Avenue from Encanto Boulevard to Wilshire Drive.

Project Description:

- Install 8,400 LF of new sidewalks in this neighborhood where there are no existing sidewalks.
- Install 20 new sidewalk ramps.
- Replace 8 existing alley driveways with roll curb and thickened sidewalk on the streets that have roll curb.
- Retrofit 8 existing driveways along 36<sup>th</sup> Avenue with a level walking surface behind the driveway.
- Rebuild 5 other driveways along 36<sup>th</sup> Avenue with roll curb and gutter to avoid conflict with front yards walls and utility poles.
- Remove 2 unused driveways and replace them with vertical curb, gutter and sidewalk.
- Install 7 new street lights to meet current City standards for street light spacing.

Project Benefits: This project will provide accessible sidewalks within the neighborhood and fill gaps in the existing street light coverage.

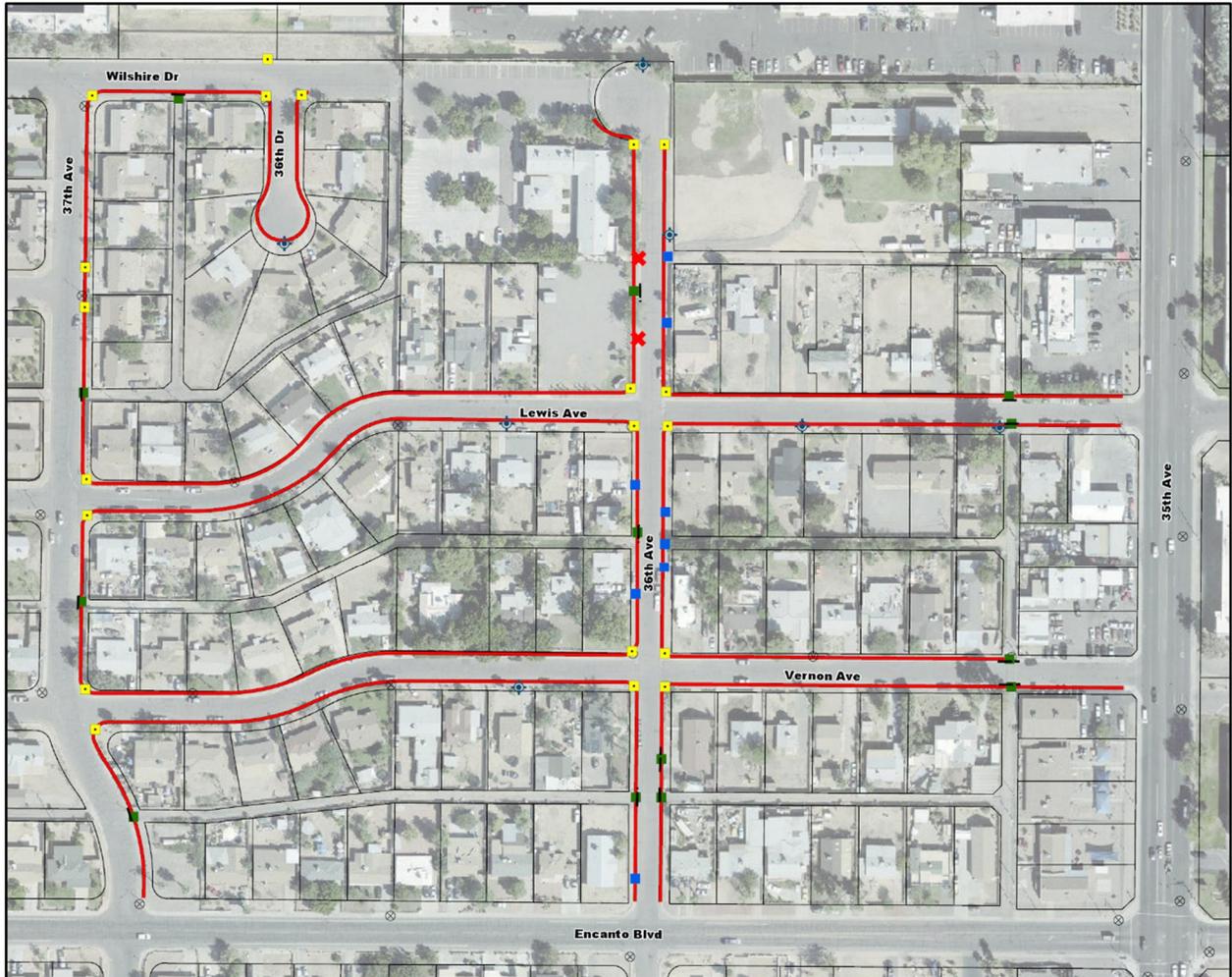
Key Destinations: The Encanto Boulevard and 39<sup>th</sup> Avenue sidewalks, 35<sup>th</sup> Avenue bus stops, and P.T. Coe Elementary School.

Project Constraints:

- *Front Yard Walls and Fences* – Approximately 25 of the existing homes have front yard walls and fences that encroach into the right-of-way and will have to be removed to construct the new sidewalks. The project cost estimate includes a budget amount for removal but not for relocation or replacement of the walls and fences.

Budgetary Cost Estimate:

Construction Cost	\$650,000
Design, Construction Administration & Other Fees	\$412,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$1,062,000</b>



**LEGEND**

- |   |  |
|---|--|
|  New Streetlight |  Existing Streetlight         |
|  New Sidewalk    |  New Sidewalk Ramp            |
|  Remove Driveway |  New ADA Retrofit Driveway    |
|   |  Rebuild Driveway W/Roll Curb |

**Exhibit 17: Neighborhood Sidewalks  
(37<sup>th</sup> Ave – 35<sup>th</sup> Ave & Encanto Blvd – Wilshire Dr)**

**Budgetary Cost Estimate:  
37th Ave – 35th Ave & Encanto Blvd – Wilshire Dr**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK	SF	42300	\$6.50	\$274,950.00
2	SIDEWALK RAMPS	EACH	20	\$3,000.00	\$60,000.00
3	ADA RETROFIT DRIVEWAYS	EACH	8	\$2,000.00	\$16,000.00
4	REPLACE DRIVEWAY W/CURB, GUTTER & SIDEWALK	EACH	15	\$2,500.00	\$37,500.00
5	STREET LIGHT	EACH	7	\$5,000.00	\$35,000.00
6	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$80,000.00	\$80,000.00

**Subtotal Construction \$503,450.00**

Traffic Control/Police Officer (4%) \$20,138.00

Allowance for Extra Work (5%) \$25,172.50

Contingency (20%) \$100,690.00

**Total Construction \$649,450.50**

Design Phase (27%) \$175,351.64

Streetlighting Fee (2%) \$12,989.01

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$194,835.15

**GRAND TOTAL \$1,062,626.30**

**R) NEIGHBORHOOD SIDEWALKS**  
**(39<sup>TH</sup> AVE – 37<sup>TH</sup> AVE & THOMAS RD – CHEERY LYNN RD)**  
SIDEWALKS, ADA IMPROVEMENTS & STREET LIGHTS

Project Location: 39<sup>th</sup> Avenue to 37<sup>th</sup> Avenue from Thomas Road to Cheery Lynn Road.

Project Description:

- Install 13,700 LF of new sidewalks in this neighborhood where there are no existing sidewalks.
- Install 25 new sidewalk ramps.
- Replace 14 existing alley driveways with roll curb and thickened sidewalk.
- Install 16 new street lights to meet current City standards for street light spacing.

Project Benefits: This project will provide accessible sidewalks within the neighborhood and fill gaps in the existing street light coverage.

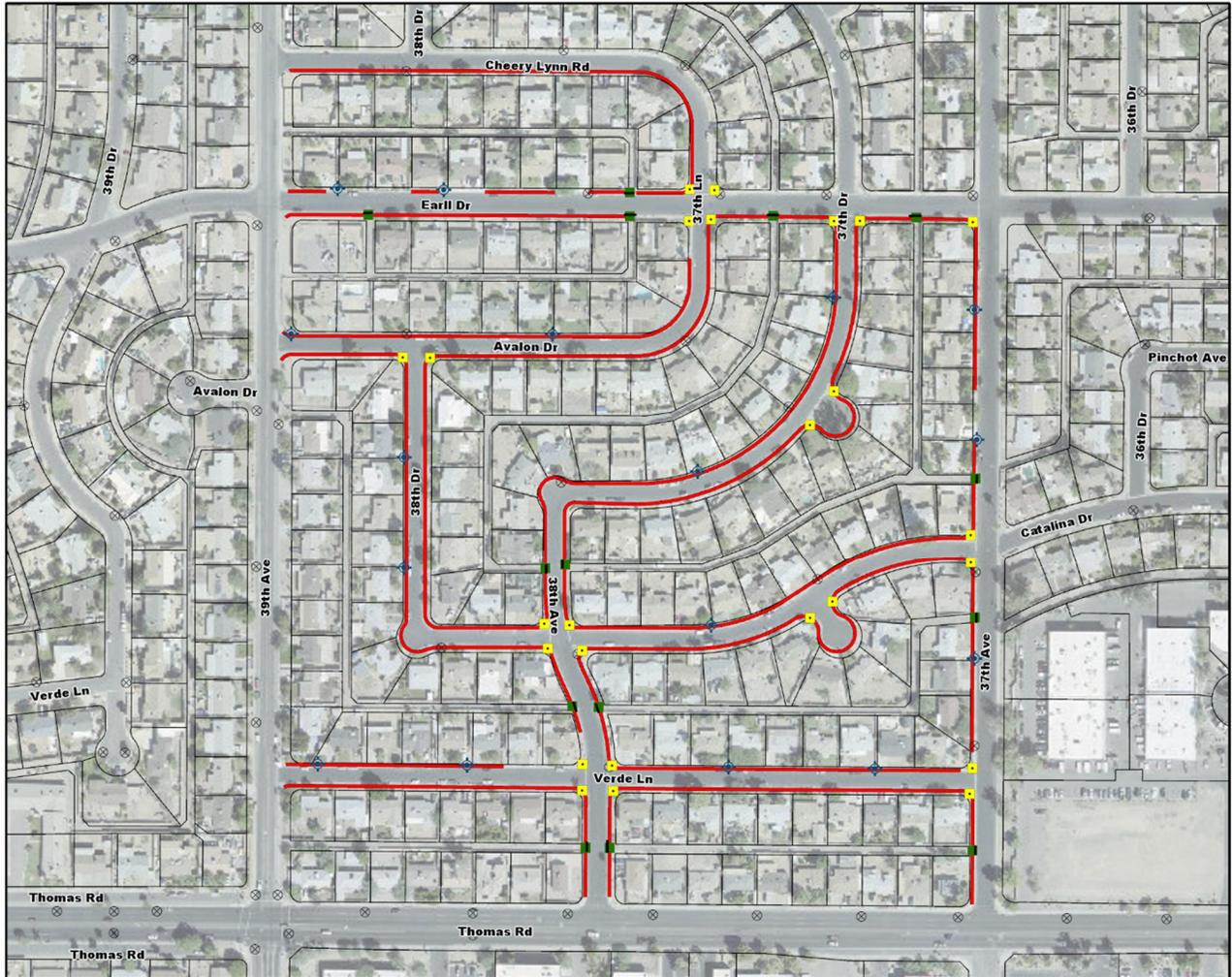
Key Destinations: The Thomas Road and 39<sup>th</sup> Avenue sidewalks, Thomas Road bus stops and businesses, and Madrid Elementary School.

Project Constraints:

- *Front Yard Walls and Fences* – Approximately 85 of the existing homes have front yard walls and fences that encroach into the right-of-way and will have to be removed to construct the new sidewalks. The project cost estimate includes a budget amount for removal but not for relocation or replacement of the walls and fences.

Budgetary Cost Estimate:

Construction Cost	\$975,000
Design, Construction Administration & Other Fees	\$605,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$1,580,000</b>



**LEGEND**

-  New Streetlight
-  New Sidewalk
-  Existing Streetlight
-  New Sidewalk Ramp
-  Rebuild Driveway W/Roll Curb

**Exhibit 18: Neighborhood Sidewalks  
(39<sup>th</sup> Ave – 37<sup>th</sup> Ave & Thomas Rd – Cheery Lynn Rd)**

**Budget Cost Estimate:**  
**39th Ave – 37th Ave & Thomas Rd – Cheery Lynn Rd**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK	SF	68600	\$6.50	\$445,900.00
2	SIDEWALK RAMPS	EACH	25	\$3,000.00	\$75,000.00
3	REPLACE DRIVEWAY W/CURB, GUTTER & SIDEWALK	EACH	14	\$2,500.00	\$35,000.00
4	STREET LIGHT	EACH	16	\$5,000.00	\$80,000.00
5	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$120,000.00	\$120,000.00

**Subtotal Construction \$755,900.00**

Traffic Control/Police Officer (4%) \$30,236.00

Allowance for Extra Work (5%) \$37,795.00

Contingency (20%) \$151,180.00

**Total Construction \$975,111.00**

Design Phase (27%) \$263,279.97

Streetlighting Fee (2%) \$19,502.22

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$292,533.30

**GRAND TOTAL \$1,580,426.49**

**S) NEIGHBORHOOD SIDEWALKS**  
**(47<sup>TH</sup> DR – 46<sup>TH</sup> DR & EARLL DR – OSBORN RD)**  
SIDEWALKS, ADA IMPROVEMENTS & STREET LIGHTS

Project Location: 47<sup>th</sup> Drive to 46<sup>th</sup> Drive from Earll Drive to Osborn Road.

Project Description:

- Install 4,000 LF of new sidewalks to fill gaps in the existing sidewalk network, including sidewalks along both sides of 47<sup>th</sup> Avenue, the west side of 46<sup>th</sup> Drive and the north side of Earll Drive.
- Install 10 new sidewalk ramps, including 5 ramps along 47<sup>th</sup> Drive to provide accessible access to Orme Park
- Retrofit 7 existing driveways with a level walking surface behind the driveway.
- Install 4 new street lights to meet current City standards for street light spacing.

Project Benefits: This project will provide new sidewalks along 47<sup>th</sup> Avenue, Earll Drive and 46<sup>th</sup> Drive and fill gaps in the existing street light coverage.

Key Destinations: Justine Spitalny Elementary School and connectivity to sidewalks on 47<sup>th</sup> Avenue and Osborn Road.

Project Constraints:

- *Front Yard Walls and Fences* – Approximately 12 of the existing homes have front yard walls, fences, shrubs and hedges that encroach into the right-of-way and will have to be removed to construct the new sidewalks. The project cost estimate includes a budget amount for removal but not for relocation or replacement of these existing features.

Budgetary Cost Estimate:

Construction Cost	\$304,000
Design, Construction Administration & Other Fees	\$209,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$513,000</b>



**LEGEND**

-  New Streetlight
-  New ADA Retrofit Driveway
-  New Sidewalk
-  Existing Streetlight
-  New Sidewalk Ramp

**Exhibit 19: Neighborhood Sidewalks (47<sup>th</sup> Dr – 46<sup>th</sup> Dr & Earll Dr – Osborn Rd)**

**Budget Cost Estimate:  
47th Dr – 46th Dr & Earll Dr – Osborn Rd**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK	SF	20250	\$6.50	\$131,625.00
2	SIDEWALK RAMPS	EACH	10	\$3,000.00	\$30,000.00
3	ADA RETROFIT DRIVEWAYS	EACH	7	\$2,000.00	\$14,000.00
4	STREET LIGHT	EACH	4	\$5,000.00	\$20,000.00
5	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$40,000.00	\$40,000.00

**Subtotal Construction \$235,625.00**

Traffic Control/Police Officer (4%) \$9,425.00

Allowance for Extra Work (5%) \$11,781.25

Contingency (20%) \$47,125.00

**Total Construction \$303,956.25**

Design Phase (27%) \$82,068.19

Streetlighting Fee (2%) \$6,079.13

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$91,186.88

**GRAND TOTAL \$513,290.44**

**T) PARK THOMAS SIDEWALKS  
(39<sup>TH</sup> AVE – 36<sup>TH</sup> AVE & CAMBRIDGE RD – THOMAS RD)  
SIDEWALKS, ADA IMPROVEMENTS & STREET LIGHTS**

Project Location: 39<sup>th</sup> Avenue to 36<sup>th</sup> Avenue from Cambridge Road to Thomas Road.

Project Description:

- Install 10,200 LF of new sidewalks in the Park Thomas business park where there are no existing sidewalks.
- Install 18 new sidewalk ramps.
- Retrofit 43 existing driveways with a level walking surface behind the driveway.
- Install 13 new street lights to meet current City standards for street light spacing.

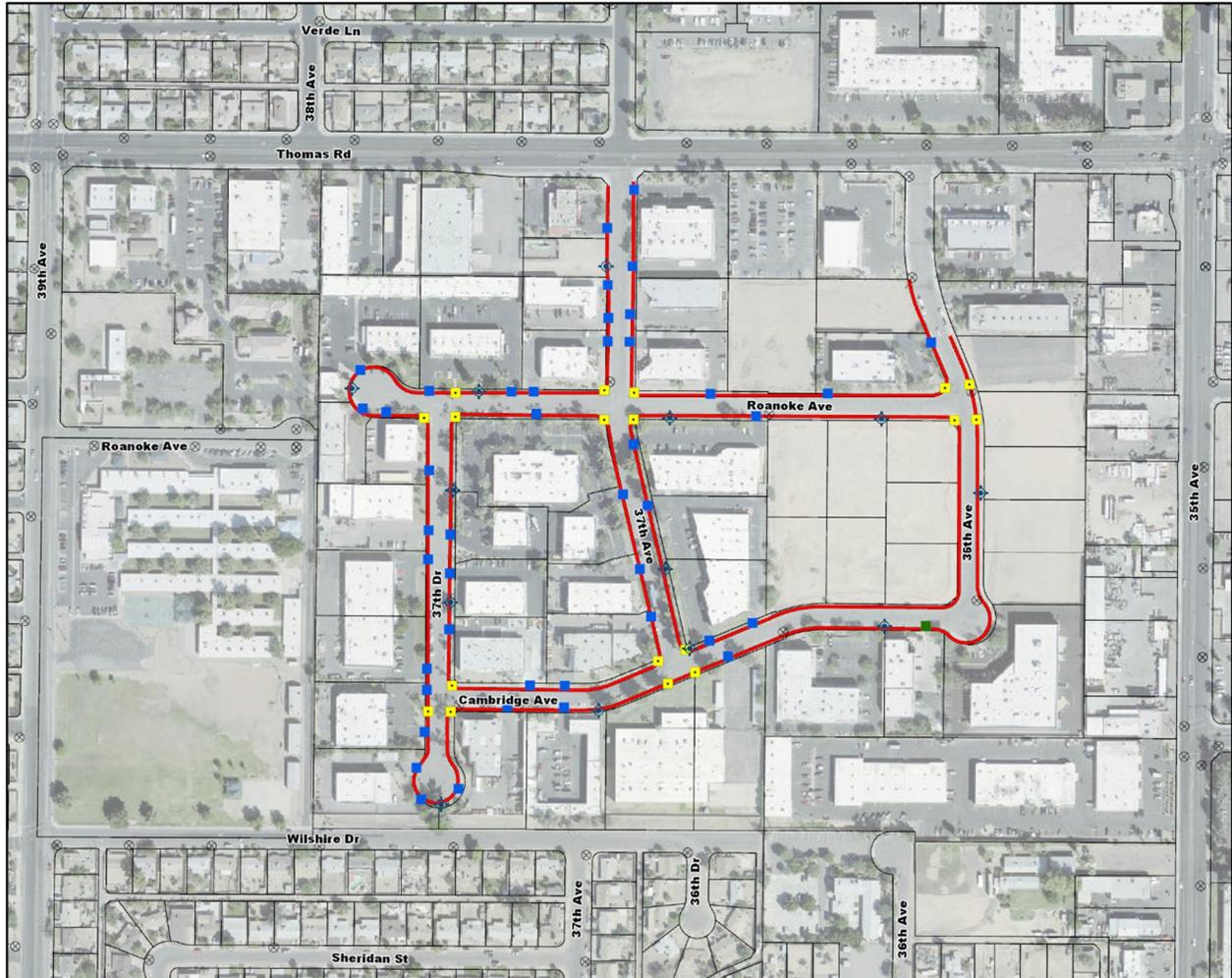
Project Benefits: This project will provide accessible sidewalks within the Park Thomas business park and fill gaps in the existing street light coverage.

Key Destinations: The Thomas Road bus stops and businesses and the Park Thomas businesses.

Project Constraints: None

Budgetary Cost Estimate:

Construction Cost	\$803,000
Design, Construction Administration & Other Fees	\$504,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$1,307,000</b>



**LEGEND**

- New Streetlight
- Rebuild Driveway
- New Sidewalk
- Existing Streetlight
- New Sidewalk Ramp
- New ADA Retrofit Driveway

**Exhibit 20: Park Thomas Sidewalks  
(39<sup>th</sup> Ave – 36<sup>th</sup> Ave & Cambridge Rd – Thomas Rd)**

**Budget Cost Estimate:  
39th Ave – 36th Ave & Cambridge Rd – Thomas Rd**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK	SF	51200	\$6.50	\$332,800.00
2	SIDEWALK RAMPS	EACH	18	\$3,000.00	\$54,000.00
3	REBUILD DRIVEWAYS	EACH	1	\$4,500.00	\$4,500.00
4	ADA RETROFIT DRIVEWAYS	EACH	43	\$2,000.00	\$86,000.00
5	STREET LIGHT	EACH	13	\$5,000.00	\$65,000.00
6	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$80,000.00	\$80,000.00

**Subtotal Construction \$622,300.00**

Traffic Control/Police Officer (4%) \$24,892.00

Allowance for Extra Work (5%) \$31,115.00

Contingency (20%) \$124,460.00

**Total Construction \$802,767.00**

Design Phase (27%) \$216,747.09

Streetlighting Fee (2%) \$16,055.34

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$240,830.10

**GRAND TOTAL \$1,306,399.53**

**U) THOMAS RD SHARED-USE PATHWAY (48<sup>TH</sup> LN – 47<sup>TH</sup> AVE)**  
SHARED-USE PATHWAY & ADA IMPROVEMENTS

Project Location: Thomas Road, 48<sup>th</sup> Lane to 47<sup>th</sup> Avenue

Project Description:

- Construct a new 12-foot wide, shared-use concrete pathway on the north side of Thomas Road between 48<sup>th</sup> Lane and 47<sup>th</sup> Avenue; connecting the bike route on 48<sup>th</sup> Lane with the bike route on 47<sup>th</sup> Avenue.
- Install 100 LF of new sidewalk to connect to the existing sidewalk west of 48<sup>th</sup> Lane.
- Install 3 new sidewalk ramps on the north side of Thomas road to accommodate the wider shared-use pathway.
- Replace the non-standard sidewalk ramp at the southeast corner of 48<sup>th</sup> Lane and Thomas Road.
- Install high-visibility crosswalks at the signalized intersection with 48<sup>th</sup> Lane.

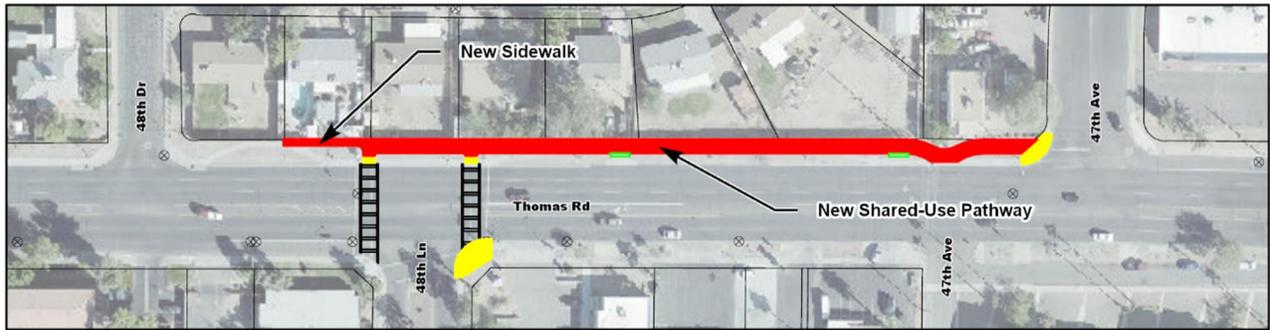
Project Benefits: The proposed improvements will provide connectivity between the 48<sup>th</sup> Lane and the 47<sup>th</sup> Avenue bike routes as well as safer, high visibility crosswalks on Thomas Road. The shared-use pathway also provides connectivity with the Osborn Road and Encanto Boulevard bike lanes.

Key Destinations: Access to the Thomas Road businesses and the Thomas Road bus stops.

Project Constraints: None.

Budgetary Cost Estimate:

Construction Cost	\$97,000
Design, Construction Administration & Other Fees	\$76,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$173,000</b>



**LEGEND**

-  New High Visibility Crosswalk
-  New Sidewalk Ramp
-  Driveway Connection

**Exhibit 21: Thomas Rd Shared-Use Pathway (48<sup>th</sup> Ln – 47<sup>th</sup> Ave)**

**Budgetary Cost Estimate: Thomas Rd (48th Ln – 47th Ave)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	SIDEWALK AND PATHWAY (includes driveway connection)	SF	7150	\$6.50	\$46,475.00
2	SIDEWALK RAMP	EACH	4	\$2,500.00	\$10,000.00
3	HIGH VISIBILITY CROSSWALKS (LADDER)	EACH	2	\$2,000.00	\$4,000.00
4	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$15,000.00	\$15,000.00

**Subtotal Construction \$75,475.00**

Traffic Control/Police Officer (4%) \$3,019.00

Allowance for Extra Work (5%) \$3,773.75

Contingency (20%) \$15,095.00

**Total Construction \$97,362.75**

Design Phase (27%) \$26,287.94

Procurement and PIO \$20,000.00

Construction Administration (30%) \$29,208.83

**GRAND TOTAL \$172,859.52**

**V) 39TH AVE / GRAND CANAL BIKEWAY (OSBORN RD – GRAND CANAL)**  
BIKE LANES, SHARED-USE PATHWAY & PEDESTRIAN / BIKE BRIDGE

Project Location: 39<sup>th</sup> Avenue, Osborn Road to the Grand Canal

Project Description:

- Extend the 39<sup>th</sup> Avenue bike lanes from Osborn Road to Sheila Lane which is just south of the Grand Canal
- Construct a new 12-foot wide shared-use concrete pathway in the unused right-of-way from Sheila Lane to the Grand Canal; connecting to the existing pathway on the south side of the Canal.
- Install a new sidewalk ramp at Sheila Lane for access to the share-use pathway.
- Construct a new, 12-foot wide pedestrian / bike bridge over the Grand Canal for connection to the future pathway on the north side of the Canal.
- Install 4 new street lights to fill gaps in the street light coverage along 39<sup>th</sup> Avenue and to provide lighting for the shared-use pathway and Canal bridge.

Project Benefits: The proposed improvements will provide connectivity between the bikeways on 39<sup>th</sup> Avenue and Osborn Road with the pathways on the Grand Canal.

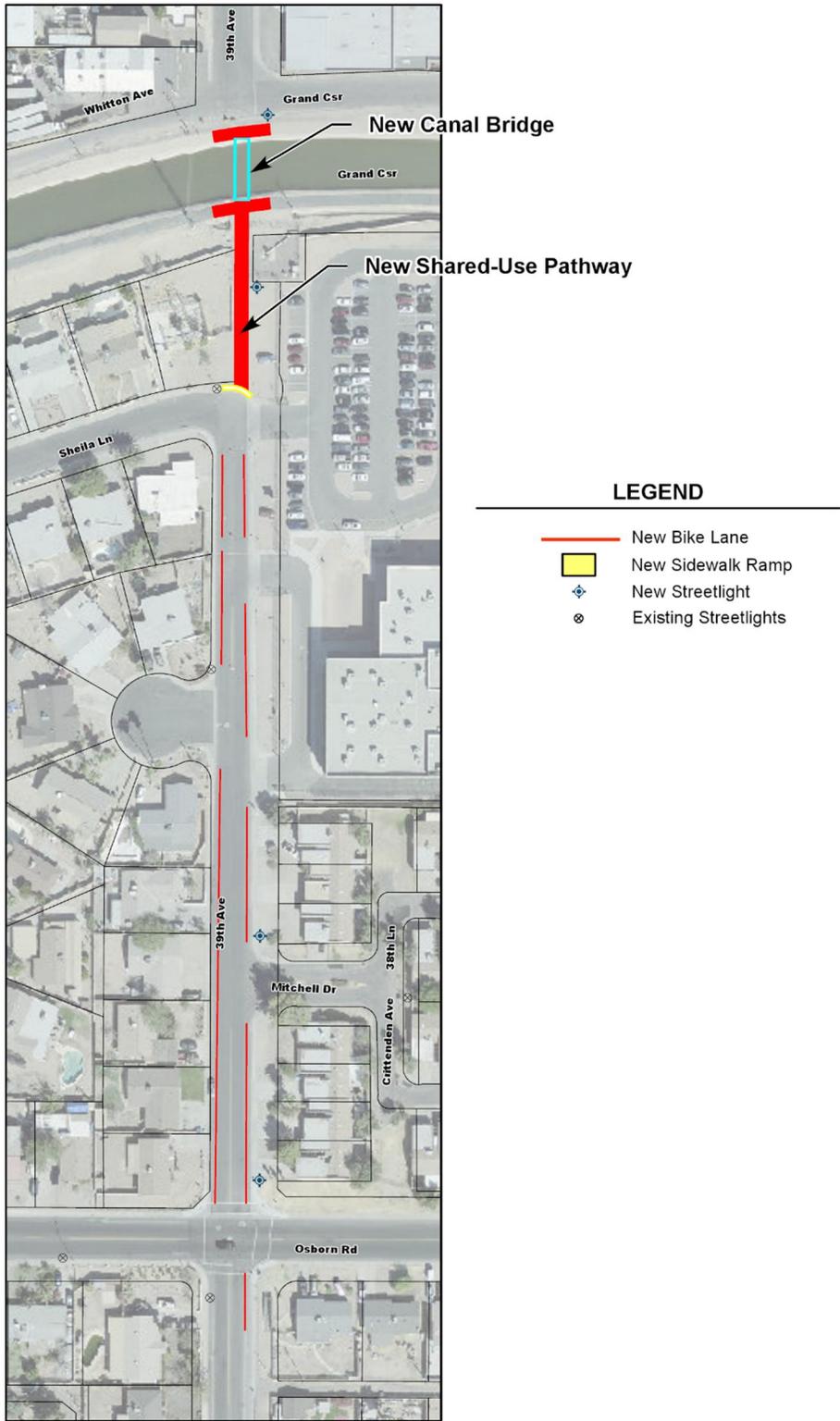
Key Destinations: Pueblo del Sol Elementary School and the Grand Canal pathways.

Project Constraints:

- *SRP License* – Installation of the Canal bridge and connections to the Canal pathways will require a license from the Salt River Project; although there is no reason to believe that the license could not be obtained because the City has obtained licenses for several other similar bridges in the past.

Budgetary Cost Estimate:

Construction Cost	\$505,000
Design, Construction Administration & Other Fees	\$328,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$833,000</b>



**Exhibit 22: 39<sup>th</sup> Ave/Grand Canal Bikeway (Osborn Rd – Grand Canal)**

**Budgetary Cost Estimate:  
39th Ave/Grand Canal (Osborn Rd – Grand Canal)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	BIKE LANE (INCLUDES STRIPES, SIGNAGE & SYMBOLS)	LF	1150	\$6.00	\$6,900.00
2	CONCRETE PATHWAY	SF	1800	\$6.50	\$11,700.00
3	SIDEWALK RAMP	EACH	1	\$2,500.00	\$2,500.00
4	STREET LIGHT	EACH	4	\$5,000.00	\$20,000.00
5	CANAL PED/BIKE BRIDGE	LS	1	\$350,000.00	\$350,000.00

**Subtotal Construction \$391,100.00**

Traffic Control/Police Officer (4%) \$15,644.00

Allowance for Extra Work (5%) \$19,555.00

Contingency (20%) \$78,220.00

**Total Construction \$504,519.00**

Design Phase (27%) \$136,220.13

Streetlighting Fee (2%) \$10,090.38

APS/SRP Design Fee \$10,000.00

Procurement and PIO \$20,000.00

Construction Administration (30%) \$151,355.70

**GRAND TOTAL \$832,185.21**

**W) OSBORN RD BIKEWAY (39<sup>TH</sup> AVE – 35<sup>TH</sup> AVE)**  
BUFFERED BIKE LANES

Project Location: Osborn Road, 39<sup>th</sup> Avenue to 35<sup>th</sup> Avenue

Project Description:

- Extend the existing Osborn Road bike lanes from 39<sup>th</sup> Avenue to approximately 800 feet east of 35<sup>th</sup> Avenue.
- Stripe bike lane buffers between 39<sup>th</sup> Avenue and 35<sup>th</sup> Avenue; narrowing the traffic lanes to 11 feet wide. This will help slow traffic for the two elementary schools in the area; Madrid Elementary and Pueblo del Sol Elementary.
- Restripe the left turn lanes on each side of 35<sup>th</sup> Avenue to provide enough space to extend the bike lanes to the intersection crosswalks.

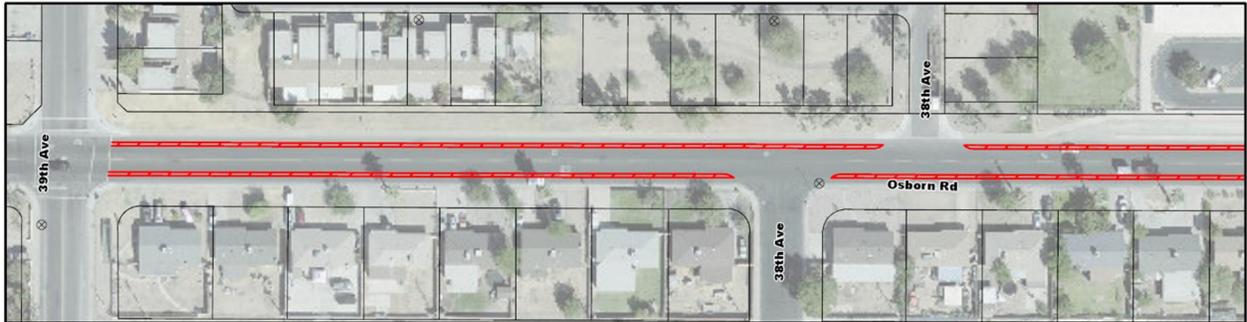
Project Benefits: The proposed improvements will extend the Osborn Road bike lanes; providing connectivity to the 35<sup>th</sup> Avenue bus route. The proposed buffered bike lanes will also narrow the traffic lanes which should lower vehicle speeds on Osborn road in vicinity of Madrid and Pueblo del Sol Elementary schools.

Key Destinations: Pueblo el Sol and Madrid Elementary Schools and 35<sup>th</sup> Avenue bus route.

Project Constraints: None.

Budgetary Cost Estimate:

Construction Cost	\$125,000
Design, Construction Administration & Other Fees	\$91,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$216,000</b>



LEGEND

-  New Buffered Bike Lane
-  New Bike Lane
-  New Bike Lane W/Adjacent Parking
-  Bike Lane Loop Detection

Exhibit 23: Osborn Rd Bikeway (39<sup>th</sup> Ave – 35<sup>th</sup> Ave)

**Budgetary Cost Estimate: Osborn Rd (39th Ave – 35th Ave)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	BIKE LANE (INCLUDES STRIPES, SIGNAGE & SYMBOLS)	LF	2780	\$6.00	\$16,680.00
2	BUFFERED BIKE LANE (INCLUDES STRIPES, SIGNAGE & SYMBOLS)	LF	4570	\$12.00	\$54,840.00
3	RE-STRIPING ROADWAY (1,650 LF & SYMBOLS)	LS	1	\$15,000.00	\$15,000.00
4	BIKE LANE LOOP DETECTION	EACH	2	\$5,000.00	\$10,000.00

**Subtotal Construction \$96,520.00**

Traffic Control/Police Officer (4%) \$3,860.80

Allowance for Extra Work (5%) \$4,826.00

Contingency (20%) \$19,304.00

**Total Construction \$124,510.80**

Design Phase (27%) \$33,617.92

Procurement and PIO \$20,000.00

Construction Administration (30%) \$37,353.24

**GRAND TOTAL \$215,481.96**

**X) 39TH AVE BIKEWAY (ENCANTO BLVD – THOMAS RD)**  
BUFFERED BIKE LANES, SHADE TREES & LANDSCAPING

Project Location: 39<sup>th</sup> Avenue, Encanto Boulevard to Thomas Road

Project Description: This project takes advantage of the extra width on 39<sup>th</sup> Avenue to narrow the traffic lanes and provide bike lane buffers and shade trees.

- Install striped buffers for the bike lanes on the east side of 39<sup>th</sup> Avenue; preserving the existing on-street parking and the drop off lane in front of PT Coe Elementary School. Narrow the northbound traffic lane to 12 feet.
- Install curbed landscaped buffers for the bike lanes on the west side of 39<sup>th</sup> Avenue. Narrow the southbound traffic lane to 12 feet. Widen the bike lanes to 8 feet between the buffer curb and the outside curb to allow access for street maintenance equipment.
- Plant 44 new shade trees in the landscaped bike lane buffers.
- Restripe the left and right turn lanes at Thomas Road to provide enough space to extend the northbound bike lane to the intersection crosswalk.

Project Benefits: The proposed improvements will provide buffered bike lanes while also narrowing the traffic lanes on 39<sup>th</sup> Avenue. 39<sup>th</sup> Avenue is currently 66 feet wide with only one traffic lane in each direction. The wide lanes encourage fast vehicle speeds which is a negative impact to PT Coe Elementary School. The proposed buffered bike lanes will narrow the traffic lanes which should lower the vehicle speeds. The project will also add shade to the street with the planting of trees in the landscaped bike lane buffers.

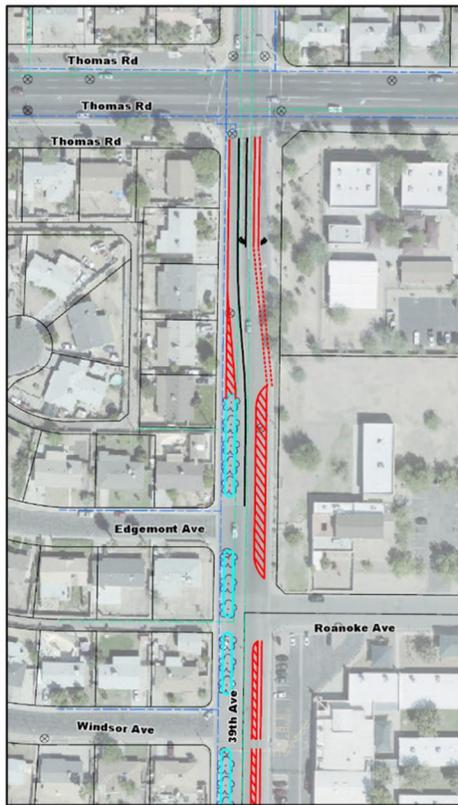
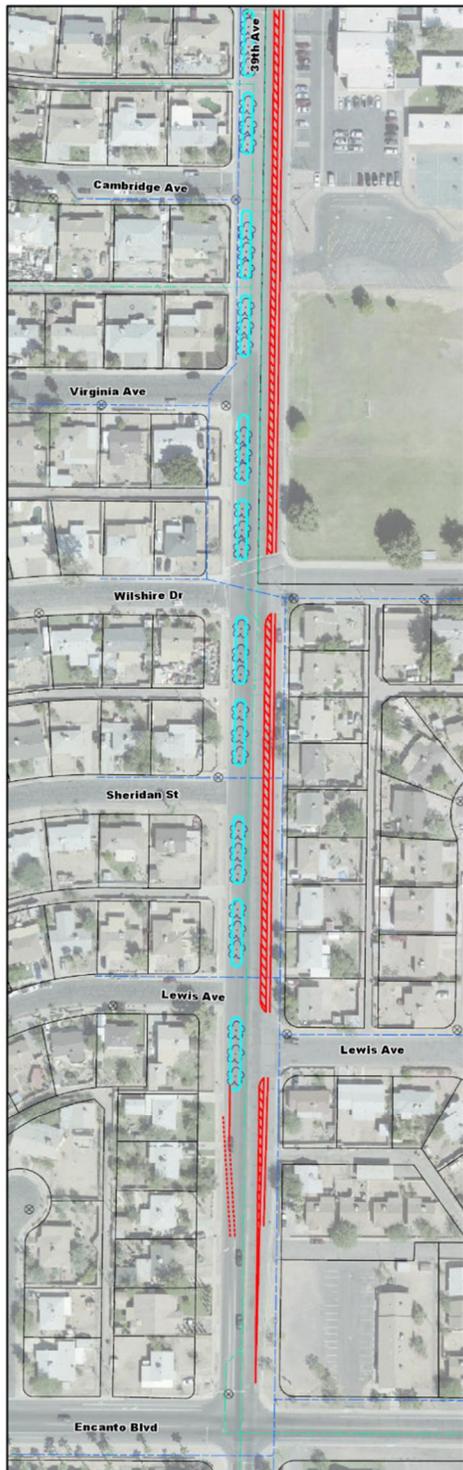
Key Destinations: PT Coe Elementary School, the Thomas Road businesses and the Thomas Road bus route.

Project Constraints:

- *Water and Sewer Lines* – Between Virginia Avenue and Thomas Road the proposed curbed landscape buffer is straddled by a water line and a sewer line which are separated by 18 feet. Therefore, a variance will be required from the Water Services Department since the proposed shade trees will be less than 10 feet horizontal distance from each of the utility lines.

Budgetary Cost Estimate:

Construction Cost	\$402,000
Design, Construction Administration & Other Fees	\$249,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$651,000</b>



**LEGEND**

-  New Buffered Bike Lane
-  New Bike Lane
-  New Shade Tree and Landscaping
-  New Curbed Landscape Buffer

**Exhibit 24: 39<sup>th</sup> Ave Bikeway (Encanto Blvd – Thomas Rd)**

**Budgetary Cost Estimate: 39th Ave Bikeway (Encanto Blvd – Thomas Rd)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	BIKE LANE (INCLUDES STRIPES, SIGNAGE & SYMBOLS)	LF	1200	\$6.00	\$7,200.00
2	BUFFERED BIKE LANE (INCLUDES STRIPES, SIGNAGE & SYMBOLS)	LF	2110	\$12.00	\$25,320.00
3	RE-STRIPING (Turn Lanes at Thomas 610 LF, Symbols)	LS	1	\$5,000.00	\$5,000.00
4	CURB FOR LANDSCAPE ISLANDS	LF	2630	\$50.00	\$131,500.00
5	AC PAVEMENT	SY	600	\$80.00	\$48,000.00
6	SHADE TREES	EACH	44	\$400.00	\$17,600.00
7	LANDSCAPING (D.G./SHRUBS & IRRIGATION)	SF	12000	\$6.00	\$72,000.00
8	REMOVAL OF EXISTING IMPROVEMENTS, ADJUSTMENTS & RELOCATIONS	LS	1	\$5,000.00	\$5,000.00

**Subtotal Construction \$311,620.00**

Traffic Control/Police Officer (4%) \$12,464.80

Allowance for Extra Work (5%) \$15,581.00

Contingency (20%) \$62,324.00

**Total Construction \$401,989.80**

Design Phase (27%) \$108,537.25

Procurement and PIO \$20,000.00

Construction Administration (30%) \$120,596.94

**GRAND TOTAL \$651,123.99**

**Y) ENCANTO BLVD BIKEWAY (51<sup>ST</sup> AVE – 35<sup>TH</sup> AVE)**  
BIKE LANE IMPROVEMENTS, SHARED-USE LANES & LOOP DETECTION

Project Location: Encanto Boulevard, 51<sup>st</sup> Avenue to 35<sup>th</sup> Avenue

Project Description: Construct the bike lane improvements on Encanto Boulevard that were proposed in the City’s Comprehensive Bicycle Master Plan, which include:

- Loop detection at 43<sup>rd</sup> and 35<sup>th</sup> Avenue traffic signals.
- Shared-use markings on Vernon Avenue from 51<sup>st</sup> Avenue to 49<sup>th</sup> Avenue.
- Extend existing bike lanes to the 43<sup>rd</sup> Avenue and 35<sup>th</sup> Avenue intersections.

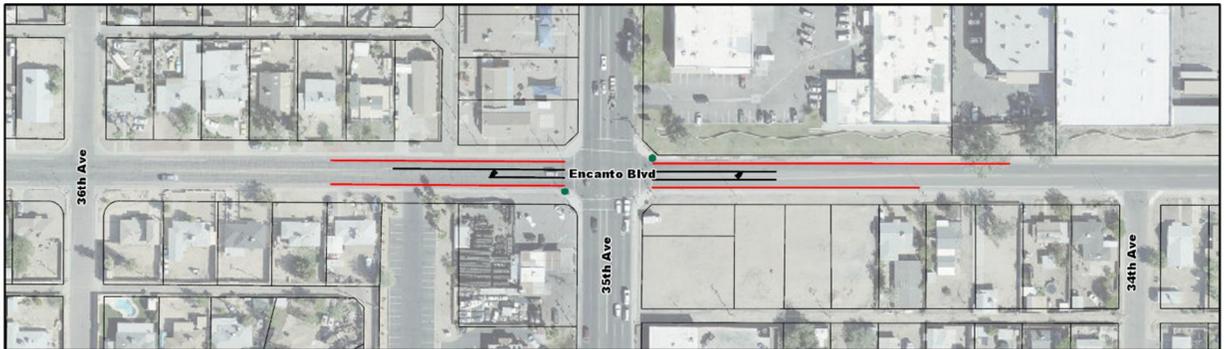
Project Benefits: The proposed bikeway improvements will fill a gap in the existing bikeway between 51<sup>st</sup> Avenue and 49<sup>th</sup> Avenue and make the rest of the bikeway safer and more efficient for bicyclists.

Key Destinations: Joseph Zito Elementary School and the 51<sup>st</sup>, 43<sup>rd</sup> and 35<sup>th</sup> Avenue bus routes.

Project Constraints: None

Budgetary Cost Estimate:

Construction Cost	\$87,000
Design, Construction Administration & Other Fees	\$70,000
Right-of-Way Acquisition	<u>\$0,000</u>
<b>TOTAL</b>	<b>\$157,000</b>



LEGEND

- Bike Lane
- Shared Lane
- Bike Lane Loop Detection

**Exhibit 25: Encanto Blvd Bikeway (51<sup>st</sup> Ave – 35<sup>th</sup> Ave)**

**Budgetary Cost Estimate: Encanto Blvd (51st Ave – 35th Ave)**

Item #	Description	Unit	Quantity	Unit Cost	Total Cost
1	BIKE LANE (INCLUDES STRIPES, SIGNAGE & SYMBOLS)	LF	2800	\$6.00	\$16,800.00
2	SHARED LANE (INCLUDES SIGNAGE & SYMBOLS)	LF	2300	\$2.50	\$5,750.00
3	RE-STRIPING ROADWAY (STRIPES & SYMBOLS)	LS	1	\$25,000.00	\$25,000.00
4	BIKE LANE LOOP DETECTION	EACH	4	\$5,000.00	\$20,000.00

**Subtotal Construction \$67,550.00**

Traffic Control/Police Officer (4%) \$2,702.00

Allowance for Extra Work (5%) \$3,377.50

Contingency (20%) \$13,510.00

**Total Construction \$87,139.50**

Design Phase (27%) \$23,527.67

Procurement and PIO \$20,000.00

Construction Administration (30%) \$26,141.85

**GRAND TOTAL \$156,809.02**

## PROJECT PRIORITIZATION

Each project was scored based on criteria provided by the City's Street Transportation Department. The resulting scores are shown below in **Table 3**. These scores were used to determine the project ranking previously identified in Tables 1 and 2. The project with the highest score was ranked number 1.

The scoring criteria included bicycle and pedestrian safety, roadway user stress level, connectivity to bus stops and key destinations, public input, constructability and cost. The Appendix includes the scoring summary for each project along with the worksheet that was used to develop the scores.

Project ID	Project Name	Route(s)	Project Limits	Project Length	Description/Scope	Type of Project (Bicycle, Curb-Ramp, Shade, Pedestrian, Traffic Calming, and/or Crossings)	Evaluation Criteria Score
A	Thomas Road Ped Improvements	Thomas Road	51st Ave - 43rd Ave	1 mile	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades & Landscaping	Pedestrian	88
B	Thomas Road Ped Improvements	Thomas Road	43rd Ave - 35th Ave	1 mile	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades & Landscaping	Pedestrian	87
C	43rd Avenue Ped Improvements	43rd Avenue	Encanto Blvd - Osborn Rd	1 mile	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades & Landscaping	Pedestrian	87
D	35th Avenue Ped Improvements	35th Avenue	Encanto Blvd - Osborn Rd	1 mile	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades	Pedestrian	83
E	51st Avenue Ped Hybrid Beacon	51st Avenue	At Earl I Dr	130 feet	New PHB & Sidewalk Ramp Improvements	Pedestrian	84
F	43rd Avenue Ped Hybrid Beacon	43rd Avenue	At Virginia Ave	100 feet	New PHB & Sidewalk Ramp Improvements	Pedestrian	83
G	43rd Avenue Ped Hybrid Beacon	43rd Avenue	At Earl I Dr	100 feet	New PHB & Sidewalk Ramp Improvements	Pedestrian	84
H	48th Lane Ped Improvements	48th Lane	Encanto Blvd - Thomas Rd	0.55 mile	ADA Improvements, Street Lights & Drainage Improvements	Pedestrian	92
I	47th Avenue Ped Improvements	47th Avenue	Thomas Rd - Earl I Dr	0.25 mile	Roadway Diet, ADA Improvements, Street Lights & Shade Trees	Pedestrian	99
J	39th Avenue Ped Improvements	39th Avenue	Encanto Blvd - Thomas Rd	0.5 mile	ADA Improvements, Street Lights & Shade Trees	Pedestrian	92
K	39th Avenue Ped Improvements	39th Avenue	Thomas Rd - Osborn Road	0.5 mile	ADA Improvements & Street Lights	Pedestrian	93
L	Encanto Boulevard Ped Improvements	Encanto Boulevard	49th Ave - 43rd Ave	0.78 mile	ADA Improvements, Street Lights, Drainage Improvements & Shade Trees	Pedestrian	88
M	Encanto Boulevard Ped Improvements	Encanto Boulevard	43rd Ave - 35th Ave	0.5 mile	ADA Improvements, Street Lights & Drainage Improvements	Pedestrian	89
N	Osborn Road Ped Improvements	Osborn Road	51st Ave - 43rd Ave	1 mile	ADA Improvements, Curb & Gutter, Sidewalk, Street Lights & Shade Trees	Pedestrian	91
O	Osborn Road Ped Improvements	Osborn Road	43rd Ave - 35th Ave	1 mile	ADA Improvements & Street Lights	Pedestrian	92
P	Neighborhood Sidewalks	39th Ave - 37th Ave	Encanto Blvd - Wilshire Dr	1.14 mile	Sidewalks, ADA Improvements & Street Lights	Pedestrian	90
Q	Neighborhood Sidewalks	37th Ave - 35th Ave	Encanto Blvd - Wilshire Dr	1.05 mile	Sidewalks, ADA Improvements & Street Lights	Pedestrian	90
R	Neighborhood Sidewalks	39th Ave - 37th Ave	Thomas Rd - Cheery Lynn Rd	1.7 mile	Sidewalks, ADA Improvements & Street Lights	Pedestrian	88
S	Neighborhood Sidewalks	47th Dr - 46th Dr	Earl I Dr - Osborn Rd	0.58 mile	Sidewalks, ADA Improvements & Street Lights	Pedestrian	92
T	Park Thomas Sidewalks	39th Ave - 36th Ave	Cambridge Rd - Thomas Rd	1 mile	Sidewalks, ADA Improvements & Street Lights	Pedestrian	93
U	Thomas Road Shared-Use Pathway	Thomas Road	48th Ln - 47th Ave	635 feet	Shared-Use Pathway & ADA Improvements	Bicycle	81
V	39th Avenue / Grand Canal Bikeway	39th Avenue	Osborn Rd - Grand Canal	0.2 mile	Bike Lanes, Shared-Use Pathway & Pedestrian/Bike Bridge	Bicycle	97
W	Osborn Road Bikeway	Osborn Road	39th Ave - 35th Ave	0.57 mile	Buffered Bike Lanes	Bicycle	82
X	39th Avenue Bikeway	39th Avenue	Encanto Blvd - Thomas Rd	0.5 mile	Buffered Bike Lanes, Shade Trees & Landscaping	Bicycle	91
Y	Encanto Boulevard Bikeway	Encanto Boulevard	51st Ave - 35th Ave	0.5 mile	Bike Lane Improvements, Shared-Use Lanes &	Bicycle	82

Table 3 – Summary of Project Scores

APPENDIX – Project Scoring Summary and Criteria

**Scoring Summary - Study Area 6 - Westside Neighborhoods**

City of Phoenix Criteria

							Individual Project Components										
Project ID	Project Name	Route(s)	Project Limits	Project Length	Description/Scope	Type of Project (Bicycle, Curb-Ramp, Shade, Pedestrian, Traffic Calming, and/or Crossings)	Bicycle Facilities (Y/N/#)	Type	Curb Ramp (Y/N/#)	Trees/shade (Y/N/#)	Type	Pedestrian/Side walk (Y/N/L.f.)	Traffic Calming (Y/N/#)	Type	Pedestrian Crossing (Y/N/#)	Type	Evaluation Criteria Score
A	Thomas Rd. Ped Improvements	Thomas Road	51st Ave - 43rd Ave	1 mile	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades & Landscaping	Pedestrian	N		Y/9	Y/32	Trees	Y/125 lf	N		Y/8	High Visibility	88
B	Thomas Rd. Ped Improvements	Thomas Road	43rd Ave - 35th Ave	1 mile	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades & Landscaping	Pedestrian	N		Y/25	Y/39	Trees	Y/960 lf	N		Y/8	High Visibility	87
C	43rd Avenue Ped Improvements	43rd Avenue	Encanto Blvd - Osborn Rd	1 mile	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades & Landscaping	Pedestrian	N		Y/27	Y/130	Trees	Y/1238 lf	N		Y/12	High Visibility	87
D	35th Avenue Ped Improvements	35th Avenue	Encanto Blvd - Osborn Rd	1 mile	ADA Improvements, Street Lights, Traffic Signal/Crosswalk Upgrades	Pedestrian	N		Y/3	N		N	N		Y/18	High Visibility	83
E	51st Avenue Ped Hybrid Beacon	51st Avenue	At Earll Dr	130 feet	New PHB & Sidewalk Ramp Improvements	Pedestrian	N		Y/1	N		N	N		Y/2	PHB & High Visibility	84
F	43rd Avenue Ped Hybrid Beacon	43rd Avenue	At Virginia Ave	100 feet	New PHB & Sidewalk Ramp Improvements	Pedestrian	N		Y/3	N		N	N		Y/2	PHB & High Visibility	83
G	43rd Avenue Ped Hybrid Beacon	43rd Avenue	At Earll Dr	100 feet	New PHB & Sidewalk Ramp Improvements	Pedestrian	N		Y/2	N		N	N		Y/2	PHB & High Visibility	84
H	48th Lane Ped Improvements	48th Lane	Encanto Blvd - Thomas Rd	0.55 mile	ADA Improvements, Street Lights & Drainage Improvements	Pedestrian	N		Y/2	N		N	N		N		92
I	47th Avenue Ped Improvements	47th Avenue	Thomas Rd - Earll Dr	0.25 mile	Roadway Diet, ADA Improvements, Street Lights & Shade Trees	Pedestrian	N		Y/4	Y/54	Trees	Y/600 lf	N		N		99
J	39th Avenue Ped Improvements	39th Avenue	Encanto Blvd - Thomas Rd	0.5 mile	ADA Improvements, Street Lights & Shade Trees	Pedestrian	N		Y/17	Y/30	Trees	N	N		Y/1	High Visibility	92
K	39th Avenue Ped Improvements	39th Avenue	Thomas Rd - Osborn Road	0.5 mile	ADA Improvements & Street Lights	Pedestrian	N		Y/15	N		N	N		N		93
L	Encanto Boulevard Ped Improvements	Encanto Boulevard	49th Ave - 43rd Ave	0.78 mile	ADA Improvements, Street Lights, Drainage Improvements & Shade Trees	Pedestrian	N		Y/14	Y/7	Trees	N	N		N		88
M	Encanto Boulevard Ped Improvements	Encanto Boulevard	43rd Ave - 35th Ave	0.5 mile	ADA Improvements, Street Lights & Drainage Improvements	Pedestrian	N		Y/25	N		N	N		N		89
N	Osborn Road Ped Improvements	Osborn Road	51st Ave - 43rd Ave	1 mile	ADA Improvements, Curb & Gutter, Sidewalk, Street Lights & Shade Trees	Pedestrian	N		Y/11	Y/185	Trees	Y/375 lf	N		N		91
O	Osborn Road Ped Improvements	Osborn Road	43rd Ave - 35th Ave	1 mile	ADA Improvements & Street Lights	Pedestrian	N		Y/5	N		N	N		N		92
P	Neighborhood Sidewalks	39th Ave - 37th Ave	Encanto Blvd - Wilshire Dr	1.14 mile	Sidewalks, ADA Improvements & Street Lights	Pedestrian	N		Y/14	N		Y/9100 lf	N		N		90
Q	Neighborhood Sidewalks	37th Ave - 35th Ave	Encanto Blvd - Wilshire Dr	1.05 mile	Sidewalks, ADA Improvements & Street Lights	Pedestrian	N		Y/20	N		Y/8400 lf	N		N		90
R	Neighborhood Sidewalks	39th Ave - 37th Ave	Thomas Rd - Cheery Lynn Rd	1.7 mile	Sidewalks, ADA Improvements & Street Lights	Pedestrian	N		Y/25	N		Y/13700 lf	N		N		88
S	Neighborhood Sidewalks	47th Dr - 46th Dr	Earll Dr - Osborn Rd	0.58 mile	Sidewalks, ADA Improvements & Street Lights	Pedestrian	N		Y/10	N		Y/4000 lf	N		N		92
T	Park Thomas Sidewalks	39th Ave - 36th Ave	Cambridge Rd - Thomas Rd	1 mile	Sidewalks, ADA Improvements & Street Lights	Pedestrian	N		Y/18	N		Y/10200 lf	N		N		93
U	Thomas Road Shared-Use Pathway	Thomas Road	48th Ln - 47th Ave	635 feet	Shared-Use Pathway & ADA Improvements	Bicycle	Y/535 lf	Shared-Use	Y/4	N		Y/100 lf	N		Y/2	High Visibility	81
V	39th Avenue / Grand Canal Bikeway	39th Avenue	Osborn Rd - Grand Canal	0.2 mile	Bike Lanes, Shared-Use Pathway & Pedestrian/Bike Bridge	Bicycle	Y/1150 lf /150 lf	Bike Lane/Shared-Use	Y/1	N		Y/150 lf (SU)	N		Y/1	Bridge	97
W	Osborn Road Bikeway	Osborn Road	39th Ave - 35th Ave	0.57 mile	Buffered Bike Lanes	Bicycle	Y/7350 lf	BikeLane/Buff Bike Lane	N	N		N	N		N		82
X	39th Avenue Bikeway	39th Avenue	Encanto Blvd - Thomas Rd	0.5 mile	Buffered Bike Lanes, Shade Trees & Landscaping	Bicycle	Y/1200 lf /2110 lf	BikeLane/Buff Bike Lane	N	Y/44	Trees	N	Y/2630 lf	Raised Islands	N		91
Y	Encanto Boulevard Bikeway	Encanto Boulevard	51st Ave - 35th Ave	0.5 mile	Bike Lane Improvements, Shared-Use Lanes & Loop Detection	Bicycle	Y/3/2800 lf /2300 lf	Loop Detect/Bike Lane /Shared Lane	N	N		N	N		N		82

## T2050 Mobility Project Prioritization Criteria (100-point scale)

### Safety\* (23 points max.)

Proximity of proposed project to $\geq 1$ documented pedestrian/ bicycle <u>injury</u> within past 5 years			
>1.0 mi.	0.5 mi.-1.0 mi.	0.25 mi.-0.5 mi.	<0.25 mi.
0	1	5	7

Proximity of proposed project to $\geq 1$ documented pedestrian/ bicycle <u>fatality</u> within past 5 years			
>1.0 mi.	0.5 mi.-1.0 mi.	0.25 mi.-0.5 mi.	<0.25 mi.
0	2	7	10

Is the project location within 0.5 miles of $\geq 5$ pedestrian/ bicycle <u>injuries</u> or <u>fatalities</u> ?			
	No	Yes	
Points	0	3	

Does the proposed project have a positive Crash Reduction Factor (CRF) assigned by FHWA's Crash Modification Factors Clearinghouse? (* = derived from FHWA CMF Clearinghouse)					
No	Yes	CRF value*	Current Condition*	Proposed Condition*	Crash Type*
0	3				

### Roadway User Stress Level (15 points max.)

Stress Level based on the functional classification of the roadway on which project is recommended				
Functional classification	<u>Highway</u>	<u>Arterial</u> 5-6 lanes and/or >40 mph and/or >10,000 ADT	<u>Collector</u> 3-4 lanes and/or >=35 mph and/or >=5,000 ADT	<u>Local</u> 1-2 lanes and/or >=25 mph and/or <5,000 ADT
Points	0	5	10	15

### Connectivity Between Project and Destinations\* (22 points max.)

Total number of connections the project creates/improves to destinations, within 1/4 mile of the project (1/2 mi. for bike projects). This includes eliminating sidewalk and bikeway system gaps.								
# of cnxns	<3	3-5	6-8	9-11	12-14	15-17	18-19	20+
Points	0	1	2	3	4	5	6	7

Select all destination types that the project creates/improves connections to, within 1/4 mile of the project (1/2 mi. for bike projects). (Sum all points selected in this block, up to 21 points)						
Destinations	<u>Job/transit</u> (Employment, transit)	<u>Food/ Dining</u> (Restaurants, coffee shops)	<u>Errands</u> (Food shopping, other shopping)	<u>Health/ Community</u> (Doctor/clinic, places of worship, community centers)	<u>Schools</u> (Any school)	<u>Parks</u> (Any park)
Points	(1-6) TBD by public	(1-6) TBD by public	(1-6) TBD by public	(1-6) TBD by public	(1-6) TBD by public	(1-6) TBD by public

Proximity to existing or planned bus, BRT, or light rail line		
Proximity	>1/2 mi.	1/2-1/4 mi.
Points	0	1

## Public Input (20 points max.)

Public Input rank					
Rank	1 (low)	2	3	4	5 (high)
Points	4	8	12	16	20

## Deliverability/Constructability (10 points max.)

Is the project included in -- or does it abut -- an existing or programmed project/DCR		
	No	Yes
Points	0	2

Does the project incorporate shade?					
Trees added	<5	5-10	11-15	16-20	>20
Points	0	1	2	3	4

Does the project have utility constraints (water, sewer, gas, electric, fiber, etc.)				
# of constraints	>7	7-9	4-6	0-3
Points	0	1	2	3

Ease/cost of maintenance		
	Low ease/high cost	High ease/low cost
Points	0	1

## Cost (10 points max.)

Estimated total project cost (including ROW)						
Cost	>\$2.5M	\$2.5M-\$2.0M	\$2.0M-\$1.5M	\$1.5M-\$1M	\$1M-\$500k	<\$500k
Points	0	1	2	3	4	5

Estimated cost of required ROW takes						
ROW takes	>\$1.0M	\$750k-\$1.0M	\$500k-\$750k	\$250k-\$500k	>\$0-\$250k	\$0
Points	0	1	2	3	4	5

## Bonus/Equity (10 points max.)

Score based on staff's initial needs-based analysis and resulting Mobility Area # rank						
Mobility Area #	11	9-10	7-8	5-6	3-4	1-2
Points	5	6	7	8	9	10

## Summary

Criteria	Score
Safety*	(23)
Roadway User Stress Level	(15)
Connectivity*	(22)
Public Input	(20)
Deliverability/Constructability	(10)
Cost	(10)
Sub Total	(100)
Bonus/Equity	(10)
TOTAL	

\* This is a key component of Complete Streets