

**Final
Project Assessment
for
Bike Share Program**

Various locations throughout City of Tucson,
University of Arizona, and City of South Tucson

**Federal Project No. STP-TUC-0(259)D
TRACS No. 0000 PM TUC SZ128 01X
TIP ID #25.13**



Prepared for:
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Submitted to
Arizona Department of Transportation

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Table of Contents

1.0	Introduction.....	3
2.0	Background.....	3
2.1	Project Description.....	3
2.2	Project Development Summary	11
2.3	Station Design	13
2.4	Public Outreach.....	15
2.5	Structures and Utilities	17
3.0	Project Scope of Work	19
4.0	Project Development Considerations.....	20
4.1	Environmental Overview	20
4.1.1	Species Investigation – Animals and Plants	20
4.1.2	Wetland and Riparian Areas	20
4.1.3	Floodplain Encroachment	20
4.1.4	Section 401/404	20
4.1.5	Section 4(f) Impacts.....	20
4.1.6	Hazardous Materials	22
4.1.7	Socioeconomic Impacts	23
4.1.8	Cultural Resources Investigation	23
4.1.9	Scenic or Historic Route	24
4.1.10	Public Outreach.....	24
4.1.11	AZPDES Stormwater Permit	25
4.2	Construction and Contract Method	25
4.3	Geotechnical and Drainage Requirements	25
4.4	Critical Outside Agency Involvement.....	26
4.5	Right-of-Way Requirements	26
4.6	Utility Involvement	26
4.7	Seasonal Considerations.....	27
4.8	Traffic Requirements.....	27
4.9	Design Criteria	27
4.10	Design Exceptions	28
5.0	Other Requirements	28
6.0	Estimated Cost	28
7.0	Project Schedule.....	30
8.0	Service Involvement Matrix	31

Appendix A Site Plans

Appendix B Bike Corral Design Example

Appendix C City of Tucson Bike Share Program, April 4, 2016 Memorandum from
Historic Preservation Officer, Summary of Local Historic review and Findings

1.0 Introduction

Federal Project #: STP-TUC-0(259)D
TRACS Number: 0000 PM TUC SZ128 01X
TIP ID #: 25.13
Project Name: Bike Share Program

Route Numbers: Various, City of Tucson, University of Arizona, City of South Tucson
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This project assessment document has been prepared to present pertinent information related to the implementation of a bike share system to be located in the City of Tucson, the City of South Tucson, and the University of Arizona, in Pima County, Arizona.

2.0 Background

2.1 Project Description

The Bike Share Program is a roll-out of bike share in the City of Tucson, on the University of Arizona campus, and in the City of South Tucson. The proposed implementation plan was identified in the recently completed *Tucson Bike Share Feasibility Study* and this project includes funding for up to 30 bike share stations. The first year includes the purchase of bikes and related bike share station equipment and the second year involves installation of the equipment. The operation and maintenance of the bike share stations will be financed locally.

All of the municipalities in the Pima Association of Governments (PAG) region, as well as the University of Arizona were contacted to gauge their level of interest in joining the Bike Share Program. Pima County, Marana, Oro Valley, and Sahaurita were not interested in participating at this time. However, they indicated that they would be monitoring the progress and success of the Bike Share Program over the next several years, and may opt to join in at a later date. The University of Arizona and South Tucson were the only two agencies that requested to be included in the Bike Share Program. Their participation will be formalized through a Memorandum of Understanding (MOU), currently under development. When and if the other agencies in the PAG region elect to join the program, which is predicted to occur as the program expands in future years, their participation will be formalized through additional Memoranda of Understanding.

The Feasibility Study conducted recently for the City of Tucson also identifies several future expansions that would infill and expand the bike share service area. Federal funding may be sought for these future expansions.

This Project Assessment document addresses the procurement and installation of bike share equipment for 30 bike share station locations, 300 bicycles, 510 bike share docks, and 30 bike share kiosks.

The current project will install bike share stations at 30 locations in an approximately 6 square mile area that extends from St. Mary's Hospital in the west to Gene C. Reid Park in the east and from 26th Street in the south to Copper Street in the north. To provide maximum flexibility in the event that one of the 30 station sites is not feasible, optional sites in the immediate area have been identified, for a total of 41 potential sites. In the event that the location itself is an issue, 14 alternate locations have also been identified. Table 1 provides a listing of all of the 55 sites proposed for preliminary approval.

Figure 1 shows a statewide map of the project location and Figure 2 includes a vicinity map that shows all of the 55 of the potential bike share station sites. The map includes the station numbers, which were developed early in the process. The 30 proposed stations and the optional sites in the immediate vicinity are labeled 101 to 130, with optional sites identified as A, B, C and D. The 14 alternate locations were selected based on the relative ease of installation and can be easily substituted should one of the original 30 locations be determined to be unfeasible. These additional station locations can be easily identified, as each station number begins with 2 (i.e., 201, 202, etc.). In addition, these stations are shown in a different color. A list of station locations is included in Table 1.

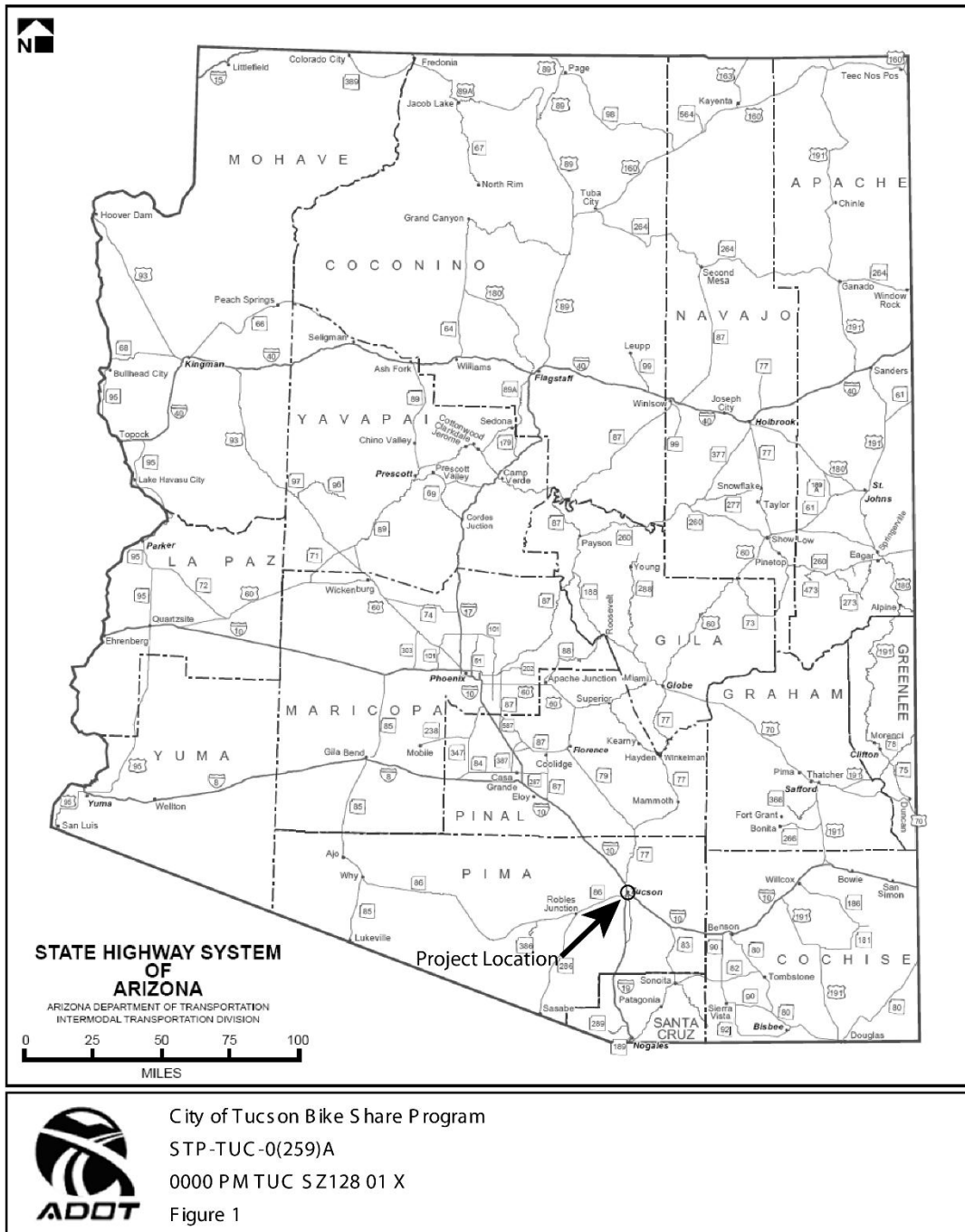


Figure 1: Statewide Location Map.

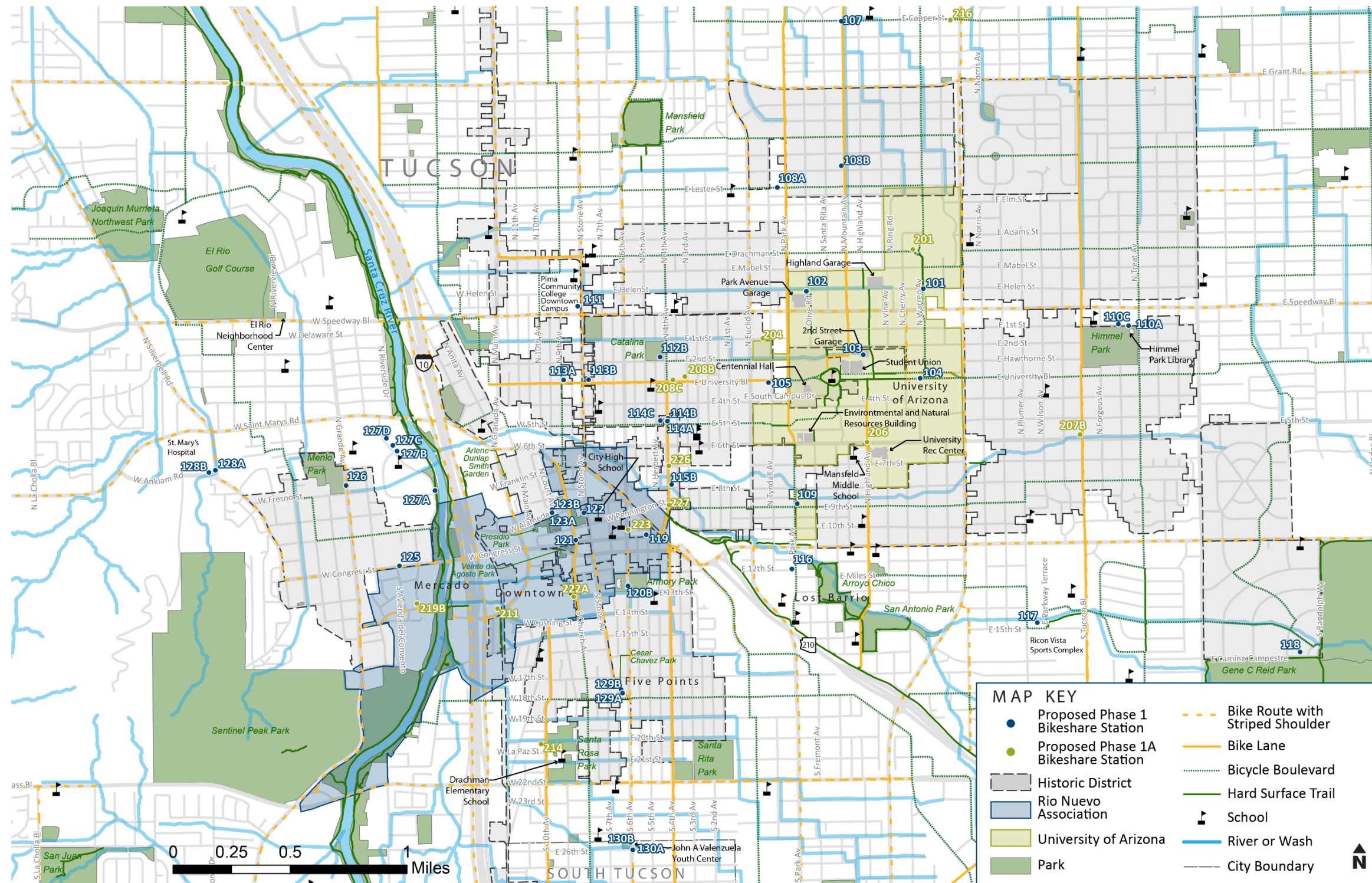


Figure 2: Project Vicinity Map.

Table 1: List of Proposed Stations, Station Options, and Alternate Stations

Station Number	Station Name	Station Location	In an Historic District?	On-Street	On-Sidewalk	Concrete Pad Needed?	UA	South Tucson
Proposed Station Locations and Station Options								
101	Warren Ave & Helen St	E Helen Street, east of N Warren Avenue	No		X	X	X	
102	Park Avenue Garage	N Olive Road, south of E Helen Street	No		X		X	
103 Option 1	Student Union / 2nd Street Garage	North Campus Drive, west of N Highland Avenue	No		X		X	
103 Option 2	Student Union / 2nd Street Garage	North Campus Drive, west of N Highland Avenue	No		X		X	
104	University Transit Hub	E University Boulevard, east of N Cherry Avenue	No		X	X	X	
105	Main Gate Village	N Tyndall Avenue, south of E University Boulevard	Yes		X		X	
107	Copper St & Mountain Ave	E Copper Street, east of N Mountain Avenue	No	X				
108A	Lester St & Park Ave	E Lester Street, west of N Park Avenue	No	X				
108B	Mountain Ave & Linden St	N Mountain Avenue, north of E Linden Street	Yes		X			
109	9th St & Park Ave	E 9 th Street, east of N Park Avenue	No	X				
110A	Himmel Park Library	N Treat Avenue, south of E 1 st Street	Yes	X				
110C	Himmel Park Library	E 1 st Street west of N Treat Avenue	Yes		X	X		
111	PCC - Downtown Campus	N Stone Avenue, north of W Speedway Boulevard	No		X	X		
112B	Catalina Park	E 2 nd Street, west of N 4 th Avenue	Yes		X	X		
113A	University Blvd &	E University Boulevard, east of N	No	X				

Station Number	Station Name	Station Location	In an Historic District?	On-Street	On-Sidewalk	Concrete Pad Needed?	UA	South Tucson
	9 th Ave	9 th Avenue						
113B	University Blvd & Stone Ave	E University Boulevard, east of N Stone Avenue	Yes	X				
114A	5th St & 4th Ave	E 5 th Street, east of N 4 th Avenue	Yes	X				
114B	5th St & 4th Ave	E 5 th Street, east of N 4 th Avenue	Yes	X				
114C	5th St & 4th Ave	E 5 th Street, west of N 4 th Avenue	Yes	X				
115B	8th Street & 4th Ave	E 8 th Street, east of N 4 th Avenue	Yes	X				
116	Lost Barrio	S Park Avenue, north of E Miles Street	No	X				
117	Rincon Vista Sports Complex	E 15 th Street, west of E Parkway Terrace	No	X				
118	Reid Park	E Camino Campestre, west of Randolph Way	No	X				
119	5th Ave & Congress St	S 5 th Avenue, south of E Congress Street	Yes		X			
120B	Armory Park	E 13 th Street, east of S 6 th Street	Yes	X				
121	Church Ave & Congress St	N Church Street, south of W Congress Street	No		X			
122	Pima County Main Library	N Stone Avenue, north of W Pennington Street	Yes		X			
123A	Presidio Park	W Alameda Street, west of N Court Avenue	Yes		X			
123B	Presidio Park	W Alameda Street, west of N Court Avenue	Yes		X			
125	Mercado	S Aveinda del Convento, south of	No		X			

Station Number	Station Name	Station Location	In an Historic District?	On-Street	On-Sidewalk	Concrete Pad Needed?	UA	South Tucson
		W Congress Street						
126	Menlo Park	N Grande Avenue, north of W Fresno Street	Yes		X	X		
127A	N Bonita Ave & Commerce Park Loop	N Bonita Avenue, opposite N Commerce Park Loop (S)	No	X				
127B	N Bonita Ave & Commerce Park Loop	N Bonita Avenue, south of N Commerce Park Loop (N)	No	X				
127C	N Bonita Ave & Commerce Park Loop	N Bonita Avenue, north of N Commerce Park Loop (S)	No	X				
127D	N Bonita Ave & Commerce Park Loop	N Bonita Avenue, south of W St. Mary's Road	No	X				
128A	St. Mary's Hospital	W Anklam Road, west of N Silverbell Road	No		X	X		
128B	St. Mary's Hospital	W Anklam Road, west of N Hasman Drive	No	X				
129A	Five Points	W 18 th Street, west of S Stone Avenue	Yes		X	X		
129B	Five Points	W 18 th Street, west of S Stone Avenue	Yes	X				
130A	6th Ave & 26th St	S 6 th Avenue, south of E 26 th Street	No		X			X
130B	6th Ave & 26th St	S 6 th Avenue, south of E 26 th Street	No	X				X
Alternate Station Locations								

Station Number	Station Name	Station Location	In an Historic District?	On-Street	On-Sidewalk	Concrete Pad Needed?	UA	South Tucson
201	Banner University Medical Center	N Warren Avenue, north of E Drachman Street	No		X		X	
204	1st St & Tyndall Ave	E 1 st Street, west of N Tyndall Avenue	Yes		X	X	X	
206	University Rec Center	E 6 th Street, east of N Highland Avenue	No		X		X	
207B	Rincon Market	E 6 th Street, east of N Tucson Boulevard	Yes		X			
208B	N 3rd Ave & E University Blvd	N 3 rd Avenue, north of E University Boulevard	Yes	X				
208C	E University Blvd & N 3 rd Ave	E University Boulevard, west of N 3 rd Avenue	Yes	X				
211	Granada Ave & Cushing St	N Granada Avenue, south of W Cushing Street	Yes		X			
214	Santa Rosa Park	W La Paz Street, west of S 10 th Avenue	No	X				
216	E Copper St & N Campbell Ave	E Copper Street, west of N Campbell Avenue	No	X				
219B	Cushing Street Station	W Cushing Street, west of S Linda Avenue	No		X			
222A	Convention Center	S Church Avenue, south of W McCormick Street	Yes		X			
223	Ronstadt Transit Center	N 6 th Avenue, north of E Congress Street	No		X	X		
226	7th St & 4th Ave	E 7 th Street, east of N 4 th Avenue	Yes	X				
227	9th St & 4th Ave	E 9 th Street, east of N 4 th Avenue	Yes	X				

The Bike Share Program will be administered by the City of Tucson, who will go through a competitive Request for Proposal (RFP) process to select a bike share equipment vendor who will also install the equipment. Through the same RFP, the City will select a third party operator to operate and maintain the program. Operating and maintenance (O&M) costs will be funded locally. ADOT and FHWA will be provided an opportunity to review and provide input on the draft RFP.

Bike share is an automated on-demand transportation system that incorporates information technology to operate a fleet of shared bicycles that may be rented from one bike share station and returned to another in a network of stations. It provides a transportation alternative to motor vehicle trips for Tucson residents, employees, students, and visitors. The system will complement Tucson's recent investments in streetcar, other transit, and bicycling infrastructure.

The primary objectives of the Tucson bike share program are to:

- Offer additional transportation options for residents, students, employees, and visitors to the region.
- Increase the attractiveness of the region as a place to live, work, visit, and do business.
- Increase the amount of bicycling conducted in the region.
- Create a public-private program that is financially viable.

The bike share program is a complement to the City and the region's existing bicycling infrastructure. The City of Tucson has a comprehensive bicycle network consisting of over 705 miles of bicycle facilities including bike lanes, residential routes and shared use path trails.

In 2006, Tucson became a "gold-level" Bicycle Friendly Community recognized by the League of American Bicyclists, and aims for a platinum status in the coming years. The City of Tucson is working on expanding the low stress bicycle network and in recent years has installed separated bike lanes and bicycle boulevards. These newer types of bike facilities will complement bike share for Tucson.

2.2 Project Development Summary

This project originated as an initiative of Mayor Rothschild in the City of Tucson. In 2014, the Tucson Department of Transportation (TDOT) secured \$75,000 in federal Transportation Alternative Program funds and \$4,533 in local funds to prepare a bike share feasibility study and business plan. The study was completed in 2014 and the resulting report is available online at:

<https://www.tucsonaz.gov/bicycle/tucson-bike-share>

The study was prepared with the oversight of a Bike Share Technical Committee that included representatives from the City of Tucson, Pima Association of Governments, the University of Arizona, the Tucson-Pima County Bicycle Advisory Committee, Visit Tucson, the Downtown Tucson Partnership, Living Streets Alliance, and Rio Nuevo Multipurpose Facilities District. The committee met three times during the study to provide input and review deliverables and will continue to meet through the implementation of this project.

The study also conducted significant public and stakeholder outreach including focus group meetings with over 30 agencies and organizations representing transportation, public health, economic development, tourism, advocacy, neighborhood groups, and other sectors of the community. The program is also supported by the City's Bicycle Advisory Committee.

Public outreach included a public open house conducted on October 6th, 2014 at the Main Library, an online crowdsourcing map, and an online survey. Overall, the public was supportive of the idea of a bike share system. A complete summary of stakeholder and public outreach is included in Section 2.4.

The study concluded that a bike share system is feasible in Tucson and recommended that a program be developed in several projects including a first project with 30 bike share station locations, 300 bicycles, and 510 docks, and 30 bike share kiosks with stations covering approximately a 6 square mile area. Stations would be placed in the City of Tucson, the University of Arizona, and the City of South Tucson. The study recommended that the program be owned and administered by the City of Tucson who would be responsible for fundraising for both capital and operations and take on other administrative responsibilities for overseeing the program.

In 2015, TDOT was successful in obtaining \$200,000 in federal Transportation Alternative Program funds and \$12,089 in local funds to retain their consultant to conduct more specific site planning, provide support for the environmental clearance process, and assist the City of Tucson in its efforts to implement the program.

The bike share system is recognized as a regional project and went through a regional evaluation process to be included in the 2016-2020 Pima Association of Governments' (PAG) 5-Year Regional Transportation Improvement Program (TIP) as TIP# 25.13. Funding for the current project is shown on Table 2 and will be provided through a combination of Federal Transportation Alternatives Program (TAP) funding in FY2016, Surface Transportation Program (STP) funding in FY2017, and local match funds. The FY2016 funds will be used for equipment purchase and the FY2017 funds will be used for installation of the bike share stations. Ongoing O&M costs will be funded through user-generated revenues from the program and local funding sources. A detailed cost estimate is provided in Section 5.

Table 2: Pima Association of Governments 2016-2020 TIP Project Allocation

Bike Share Program (TIP #25.13)				
Year	TAP	STP	Local Match	Total
2016	\$800,000	-	\$48,000	\$848,000
2017	-	\$500,000	\$30,000	\$530,000
Total	\$800,000	\$500,000	\$78,000	\$1,378,000

The City of Tucson will bid and administer this project according to both Federal Highway Administration (FHWA) and the City's certification acceptance procedures.

The City of Tucson has consulted with the University of Arizona and the City of South Tucson throughout the project and Memoranda of Understanding (MOUs) are under development between the City of Tucson and these agencies.

Other jurisdictions were invited to participate in the planning process. Although none expressed interest in joining the system at this time, as the program expands in coming years, these agencies will once again be contacted and invited to be part of the bike share program. Their participation will be formalized through a similar MOU process. It is anticipated that the O&M contract will also be renegotiated at this time as appropriate.

2.3 Station Design

Stations include a variety of on-street and off-street locations that will be entirely within the City of Tucson's right-of-way or on property owned by the University of Arizona or the City of South Tucson. On-street locations include stations that run adjacent to curb lines in place of on-street parking. Off-street locations include stations that run along wider sidewalks in the furniture zone or on improved surfaces between the sidewalk and the curb. Appendix A includes site plans for each of the proposed and alternate station locations.

Each bike share station consists of modular components that can be connected together to create different station configurations. Typical station components are shown on Figure 3 and include:

- Kiosk: electronic terminal where transactions are made.
- Informational panel: a display that can be used to provide maps, information, or space for sponsorship and advertising.
- Docks: the mechanism that holds, locks, and releases bicycles.
- Platform: the structure that holds the other components in place.
- Bicycles: custom designed to lock into the docking system and constructed of customized components to limit theft and vandalism.



Figure 3: Elements of a Typical Bike Share System.

The stations use wireless technology and are solar powered and as such require no excavation. The station components including the kiosk, information panel, and the docks are designed to be mounted on free standing platforms held in place by heavy steel or ballasted plates. Depending on the selected vendor, the platforms may require attachment to the surface using up to two (2) four inch (4") length bolts. These will not extend beneath the asphalt or concrete pavement surface layer.

Safety treatments will be required for on-street stations, consistent with the City of Tucson's established standards for on-street bicycle parking. An example of a bike corral installation is included in Appendix B. These safety treatments will include: flexible delineators, pavement markings, and concrete parking blocks will be utilized to reduce vehicle conflicts with the stations and station users. The delineators will be secured with six (6") bolts and the concrete parking blocks will be installed using twelve (12") rebar. Because pavement thickness varies between 6" and 12" depending on the class of street, none of the methods of securing bike station features will penetrate the pavement to the ground surface.

Most equipment vendors require that stations be placed on a hard, level surface. Where stations will be placed on existing asphalt or concrete surfaces, these stations will be placed directly on the surface and will result in no ground disturbance.

Twenty-eight (28) of the fifty-five (55) potential sites are located on the sidewalk. Of all the potential sites, eighteen (18) are located on existing sidewalks that are

at least 12-feet wide. The station, which takes up approximately 6-feet, would be placed in line with the street furniture zone so as to maintain at least a 5- to 6-foot wide pedestrian walkway that meets Americans with Disabilities Act (ADA) requirements. For the other ten (10) potential sidewalk locations where the existing sidewalk is not sufficiently wide, the station would require construction of a concrete pad next to the sidewalk. These locations have all been previously disturbed. Concrete pad construction would include minor grading to a depth of less than six inches (6"). Five (5) of the sites requiring concrete pad construction are located in historic districts.

Twenty-seven (27) of the 55 potential sites are located on-street, which, depending on the final sites selected, could replace up to 60 parking spaces. The conversion of parking spaces will be coordinated with the City of Tucson Parkwise and the City Planning and Development Services Department will be contacted to review any businesses impacted by the parking conversion to ensure these businesses still have the minimum number of spaces required under the City's Land Use Code.

2.4 Public Outreach

Public and stakeholder outreach was an important part of the feasibility study and will continue throughout the implementation of the project.

The feasibility study was completed under the guidance of a Technical Committee that included representatives from the City of Tucson, Pima Association of Governments, the University of Arizona, the Tucson-Pima County Bicycle Advisory Committee, Visit Tucson, the Downtown Tucson Partnership, Living Streets Alliance, and Rio Nuevo Multipurpose Facilities District. The committee will continue to meet through the implementation of the project.

Outreach for the feasibility study included focus group meetings with over 30 agencies and organizations representing transportation, public health, economic development, tourism, advocacy, neighborhood groups, and other sectors of the community. There were seven stakeholder sessions and a public open house held October 6 – 8, 2014. Each stakeholder session began with a general presentation on bike share, an opportunity to ask questions and concluded with a general discussion of bike share for Tucson. A list of the stakeholder sessions is below:

- 1) Elected Officials and Aides: a staff member from every City of Tucson Ward Office and the Mayor's Office was invited to attend this session. Staff from the City Manager's Office also attended. There were 17 attendees.
- 2) Internal City of Tucson Staff: staff members from nine departments within the City of Tucson were invited. 14 attended.
- 3) Business / Health / Economic Development / Tourism: 36 community leaders were invited to this session representing a broad spectrum of Tucson interests. 22 attended.

- 4) University of Arizona Campus Community and School of Public Health: this session was held on campus and was advertised by the College of Public Health. Staff from the Planning, Design and Construction Department; Parking and Transportation Services and Office of Sustainability attended. There were 14 participants overall.
- 5) Bicycle Groups: There was a stakeholder session conducted as part of a monthly Bicycle Advisory Committee meeting. In addition, representatives from other bicycle groups in town were invited. 28 attendees participated in this session.
- 6) Regional Partners: Staff from several Pima County Departments including Transportation, Flood Control, Administration, Communications and Environmental Quality were invited. Several staff members from Pima Association of Governments were invited and attended. In addition, staff from other jurisdictions in the region including the City of South Tucson, Oro Valley, Marana, and Sahaurita were invited. 9 attended.
- 7) Downtown Neighborhoods & Residents Council: This downtown groups includes representatives from over 7 neighborhood areas in the urban core of Tucson. The bike share stakeholder session occurred during a monthly meeting in which 27 individuals represented.
- 8) City at Large: Public outreach included a public open house conducted on October 6th, 2014 at the Main Library, an online crowdsourcing map, and an online survey. The meeting was attended by 12 people.

Overall, attendees were generally supportive of the idea of a bike share system. As well, the City of Tucson hosted an online crowdsourcing map where people could log on to the website and suggest potential station locations as well as complete an online survey. The crowdsourcing map received input on approximately 300 potential station locations and the online survey had over 270 responses. Overwhelmingly, respondents were supportive of the bike share program with approximately 75-percent of respondents saying they thought bike share was a good idea for the community.

Outreach efforts to neighborhood associations where bike share stations will be located will continue through final site selection and on-going environmental clearance work. Figure 4 shows the neighborhoods that could be impacted, which include:

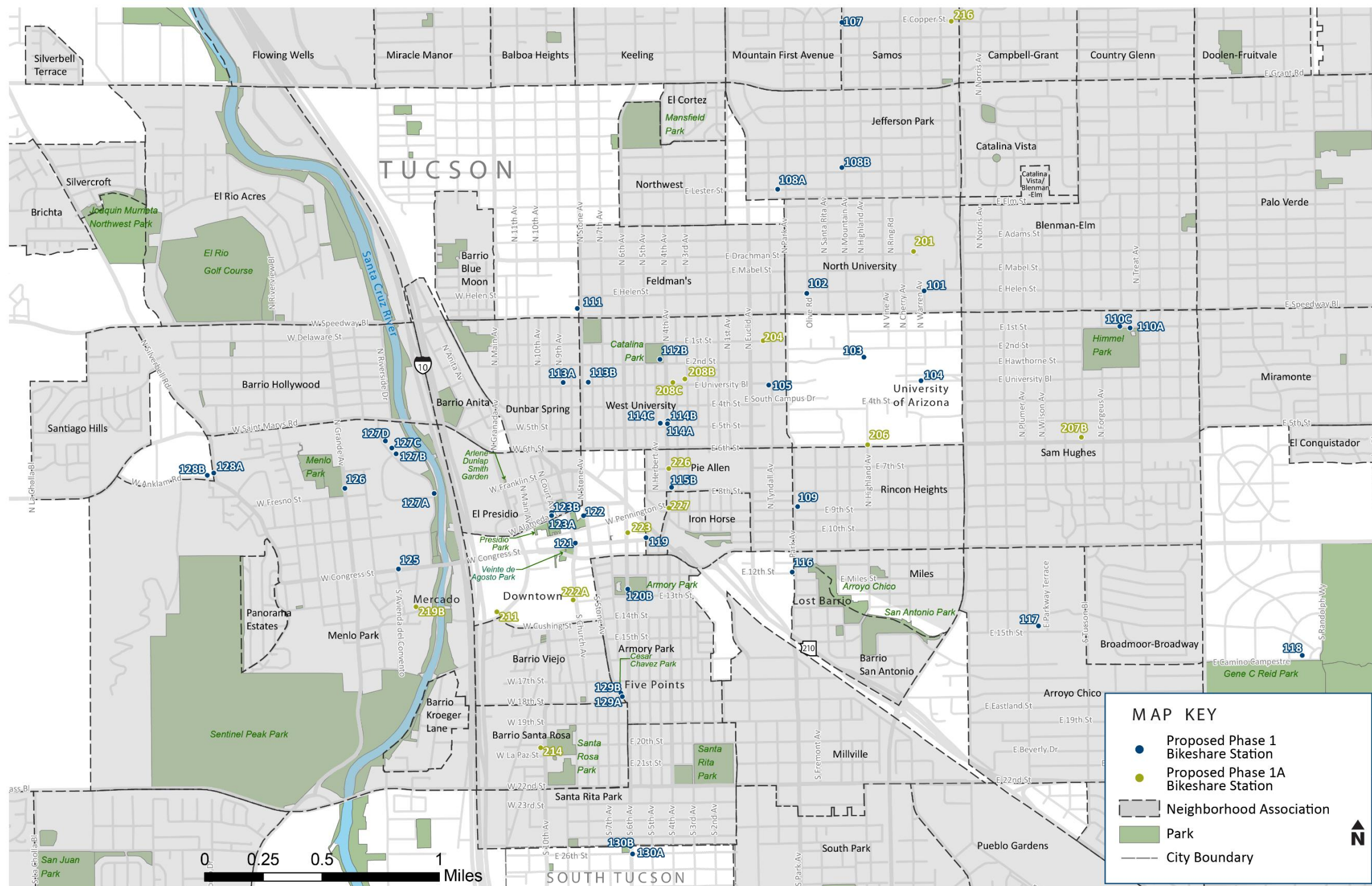
- West University Neighborhood Association (9 sites)
- Menlo Park Neighborhood Association (8 sites)
- Barrio Viejo Neighborhood Association (3 sites)
- North University Neighborhood Association (3 sites)
- Pie Allen Neighborhood Association (3 sites)
- Sam Hughes Neighborhood Association (3 sites)
- El Presidio Neighborhood Association (2 sites)
- Jefferson Park Neighborhood Association (2 sites)

- Rincon Heights Neighborhood Association (2 sites)
- Samos Neighborhood Association (2 sites)
- Armory Park Neighborhood Association (1 site)
- Arroyo Chico Neighborhood Association (1 site)
- Barrio San Antonio Neighborhood Association (1 site)
- Barrio Santa Rosa Neighborhood Association (1 site)
- Dunbar Spring Neighborhood Association (1 sites)
- Iron Horse Neighborhood Association (1 site)

In addition, the City will continue to update the project website to provide the public with updates on the status of the project and will continue outreach efforts with stakeholders and property owners at and nearby the proposed bike share station locations.

2.5 Structures and Utilities

The only permanent structures will be at sites with currently unimproved surfaces that will require construction of concrete pads for the bike share stations to rest upon. Sites not requiring concrete pads will be prioritized. Depending on which sites are selected for the final 30 stations, concrete pads would be required at ten (10) of the 54 potential sites. The concrete pads will be placed in areas which have been previously disturbed. The depth of disturbance for areas which will receive concrete pads is expected to be less than a 6" depth. Because of the limited depth of disturbance, underground utilities are not expected to be impacted. Above ground and below ground impacts to utility will be addressed during the utility clearance process.



3.0 Project Scope of Work

The scope of work for installation of bike share stations includes:

- Installing bike share stations at 30 locations by bolting or gravity-mounting (using the weight of the heavy steel plate to keep it in place) the base plates to either the road surface, to the sidewalk, or to a new concrete pad. If bolts are used to secure the station, two, 4-inch length bolts will be used, which will not extend to the soil surface beneath the concrete or asphalt pavement.
- Install kiosk, informational panel, and docks to the base plates.
- For on-street station installation (up to 20 locations):
 - Install two flexible delineators at each end of the stations utilizing either epoxy or 6" bolts.
 - Apply a one-foot wide green paint stripe along the length of the station on the street side of the station.
 - Apply one 8" white stripe along the length of the station on the street side of the station.
 - Place two 4-foot long, 6" thick concrete parking blocks at each end of the station and secure these blocks to the pavement with rebar stakes; each rebar stake will go 6" into the pavement. The rebar stakes will not penetrate the ground surface underneath the pavement.
- Construct up to ten (10) new concrete pads for bike station placement depending on which 30 station locations are selected.
- Install up to ten (10) stations on new concrete pads and up to sixteen (16) stations on wider sidewalks depending on which 30 station locations are selected. These stations will be placed in line with the furniture zone, such that they are out of the way of the pedestrian walkway and maintain ADA requirements.
- Install way-finding signs for certain stations. Work will consist of installing new signs on existing sign posts.

The design and placement of the system and its components will result in only minimal disturbance to sidewalks or pavement. No marking obliteration is anticipated, and ground disturbance is expected to be minimal in cases where concrete pads are needed, where stations are secured with bolts and where parking blocks are bolted to the pavement.

No additional right-of-way or easements are required for the location of the bike share stations. No temporary construction easements will be required for this project.

Utility impacts are anticipated to be minor or non-existent. Most sites involve no ground disturbance and the construction of concrete pads for unimproved sidewalk sites, potential bolting of the station kiosk to the surface, and installation

of flexible delineators and parking blocks is expected to disturb a depth of 6-inches or less and is not expected to disturb any underground utility lines. The station designs will avoid conflicts with surface and overhead utilities.

Station way-finding may also be applied for certain stations. This will consist of signage attached to existing sign posts.

4.0 Project Development Considerations

4.1 Environmental Overview

Based on the project's scope, the following environmental requirements have been evaluated as described.

4.1.1 Species Investigation – Animals and Plants

No known threatened or endangered species habitat exists in the project areas, and only minimal ground disturbing activities will result from the project. Additionally all potential station locations are in fully urbanized areas. It is anticipated that no Urban Biological Evaluation will be needed for this project.

4.1.2 Wetland and Riparian Areas

There are no wetlands or riparian areas present within the project vicinity; therefore, there will be no impacts to these areas.

4.1.3 Floodplain Encroachment

The project will not modify the topography of the project area; therefore, no floodplain impacts are anticipated. However, during the environmental clearance process a review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps will be conducted and the City will coordinate with the City Floodplain Manager and provide them with an opportunity to review and provide comments on the plans.

4.1.4 Section 401/404

Several washes are located within the project area that would be considered jurisdictional under Section 401 and 404 of the Clean Water Act. The project will not result in discharge of fill into these jurisdictional waters; therefore, no Section 404 permit or Section 401 certification will be required. Clean Water Act Section 401 and 404 will be addressed during the environmental clearance process.

4.1.5 Section 4(f) Impacts

Segments of the projects lie within 500-feet of potential Section 4(f) resources (namely public parks and schools). These are listed in Table 3. No permanent or constructive use of Section 4(f) resources will take place as a result of this project. The contractor will be required to maintain access to all Section 4(f) resources during installation. Where stations are

located on-street and displace parking for park patrons, these impacts will be offset by increasing bicycle access to the park. Section 4(f) concerns will be addressed in the environmental clearance document.

Table 3: Section 4f Resources Table

Resource	Resource Type	Location / Distance to Project Area (feet)	Station Number	Discussion of potential impacts and support for conclusion of No Use
Armory Park	Park	10	120B	The project will be located in street right-of-way adjacent the park. Access to the park will be maintained during construction
Arroyo Chico	Park	280	116	The project will not incorporate land from the park. Access to the park will be maintained during construction
Arroyo Chico Greenway	Greenway	85	117	The project will not incorporate land from the greenway. Access will be maintained during construction
Catalina Park	Park	10	112B	The project will be located in street right-of-way adjacent the park. Access to the park will be maintained during construction
Cesar Chavez Park	Park	85	129A, 129B	The project will not incorporate land from the park. Access to the park will be maintained during construction
De Anza Park	Park	230	111	The project will not incorporate land from the park. Access to the park will be maintained during construction
El Paso & Southwestern Greenway	Greenway	40	211	The project will not incorporate land from the greenway. Access will be maintained during construction
El Presidio Park	Park	70, 80	123A, 123B	The project will not incorporate land from the park. Access to the park will be maintained during construction
Gene C Reid Park	Park	5	118	The project will be located in street right-of-way adjacent the park. Access to the park will be maintained during construction
Himmel Park	Park	5, 5	110A, 110C	The project will be located in street right-of-way adjacent the park. Access to the park will be maintained during construction
Jacome Plaza	Park	10	122	The project will not incorporate land from the park. Access to the park will be maintained during construction
John A Valenzuela Youth Center	Park	240, 110	130A, 130B	The project will not incorporate land from the park. Access to the park will be maintained during construction
Menlo Park	Park	10	126	The project will be located in street right-of-way adjacent the park. Access to the park will be maintained during construction
Santa Cruz	Park	5, 435, 445,	127A, 127B,	The project will be located in street

Resource	Resource Type	Location / Distance to Project Area (feet)	Station Number	Discussion of potential impacts and support for conclusion of No Use
River Park		20, 350, 5	127C, 219B	right-of-way adjacent the park. Access to the park will be maintained during construction
Santa Rosa Park	Park	115	214	The project will not incorporate land from the park. Access to the park will be maintained during construction
Scott and Congress Plaza	Park	413	223	The project will be located in street right-of-way adjacent the park. Access to the park will be maintained during construction
Veinte de Agosto Park	Park	85, 385	121	The project will not incorporate land from the park. Access to the park will be maintained during construction
City High School	School	290	122	The project will not incorporate land from the school. Access to the school will be maintained during construction
Drachman Elementary School	School	470	214	The project will not incorporate land from the school. Access to the school will be maintained during construction
Imago Dei Middle School	School	295	223	The project will not incorporate land from the school. Access to the school will be maintained during construction
Mansfield Middle School	School	450	206	The project will not incorporate land from the school. Access to the school will be maintained during construction
PCC Downtown Campus	School	20	111	The project will not incorporate land from the school. Access to the school will be maintained during construction
PCC – West Campus	School	230, 375	127B, 127C	The project will not incorporate land from the school. Access to the school will be maintained during construction
University of Arizona	School	0	Various	A number of stations will be located on property owned by the University of Arizona. The University has been involved in the planning of this project and has assisted in the identification of sites on the UA campus. An MOU will be developed between the City of Tucson and the University of Arizona to allow the use of UA property. Access to the university will be maintained during construction

4.1.6 Hazardous Materials

No known hazardous material sites exist at the project sites. In addition, the installation methods will not include hazardous materials and in particular, no pavement markings will be obliterated. Because ground

disturbance will be minimal, it is anticipated that no Preliminary Initial Site Assessment (PISA) will be needed for the project.

4.1.7 Socioeconomic Impacts

The projects will enhance bicycle use in the City of Tucson and in the areas around the stations. Many of the stations are placed in low- or mid-income areas and the system will provide a low-cost mobility option that will complement recent investments in transit and improve access to jobs, community facilities, and local services.

There are 28 potential station sites located in the street, which would convert on-street vehicle parking to provide space for bike share stations. Depending on the station locations selected, up to 60 parking spaces could be converted. Bike share stations increase the capacity and turn-over of people that can use the space. The conversion of parking spaces will be coordinated with the City of Tucson Parkwise and any business impacted by the conversion will be evaluated by the City Planning and Development Services Department to ensure adequate parking remains. Adjacent businesses and residents would be contacted prior to installation of the bike share station equipment and access to businesses and residences would be maintained at all times.

Potential sites have been selected to maintain access to residential driveways, bus stops, post boxes, garbage cans, etc. Residential driveways may be temporarily affected for brief periods (less than 2 hours) during installation; however, no permanent adverse socioeconomic impacts are anticipated as a result of this project. One alternate site (site number 225) would require alterations to a bus shelter but access to the shelter and the bus stop would be maintained during installation and access would not be impacted once the program becomes operational.

4.1.8 Cultural Resources Investigation

Twenty-six potential sites are located within Historic Districts (see Figure 2). Of these, four (4) proposed sites and one (1) alternate site would require the construction of concrete pads. The concrete pads will be placed in areas which have been previously disturbed and the potential for impacting archaeological sites is minimal.

The bike share docks are designed to be free standing with no attachments to existing streets and/or sidewalk surfaces. Station kiosks will be placed on free standing platforms or on platforms that are attached with up to two (2) four inch (4") long bolts that will not extend beneath the street and/or street surface.

The City presented the project at several meetings of the Tucson-Pima County Historical Commission and interested Historic Preservation Zone

Advisory Boards. Each potential site located in a Historic District was reviewed by the Plans Review Subcommittee of the Tucson-Pima County Historical Commission. The City followed the regular steps in its Certified Local Government Historic Review Process. Through this process, several sites were eliminated from further consideration, and alternate sites were selected based on recommendations from the Commission. These changes are reflected in this Project Assessment.

The Certified Local Government Historic Review Process followed for this project is documented in more detail in a memorandum prepared by the City's Historic Preservation Officer and dated April 4, 2016. It is included in Appendix C. The memorandum found that there are "no adverse effects of this project on any historic properties for these proposed bike share station locations." This memorandum will be forwarded to SHPO for 106 consultation. Based on the finding of "no adverse effect," it is anticipated that once a vendor is selected and the station design is finalized, on-going 106 consultation would be required. This would be accomplished through additional meetings with the Tucson-Pima County Historical Commission, and interested Historic Preservation Zone Advisory Boards in compliance with the Local Government Historic Review Process. On-going 106 consultation with SHPO is also anticipated.

4.1.9 Scenic or Historic Route

None of the potential bike share station sites are located along designated scenic or historic routes.

4.1.10 Public Outreach

The project was developed with an extensive outreach process that included development of the feasibility study under the guidance of a multi-stakeholder Technical Committee, stakeholder outreach and meetings with over 30 agencies and organizations and 150 individuals representing transportation, public health, economic development, tourism, advocacy, neighborhood groups, and other sectors, a public open house attended by 12 people, an online crowdsourcing map that received approximately 300 suggestions for where stations should be located, and an online survey completed by over 270 individuals. Stakeholder and public outreach events were advertised in a number of ways including the City's website, partner agencies' websites and social media announcements, announcements and inclusion on the agenda of several large group meetings. The public open house also received television media coverage that encouraged people to provide input via the City's website.

Overwhelmingly, stakeholders, meeting attendees, and survey respondents were supportive of the bike share program with approximately 75-percent

of survey respondents saying they thought bike share was a good idea for the community. A detailed account of public outreach conducted to date is included in Section 2.4.

Outreach during final site selection and on-going environmental clearance will include:

- Meetings and/or correspondence with Neighborhood Associations where bike share stations will be located,
- Regular updates to the City's Bike Share Program website to keep the public informed on the progress, and
- Meetings and/or correspondence with stakeholders and property owners regarding the proposed bike share station locations.

4.1.11 AZPDES Stormwater Permit

Because the project will not result in more than one acre of disturbance, no Arizona Pollutant Discharge Elimination System (AZPDES) permit and no Stormwater Pollution Prevention Plan (SWPPP) will be required. The City of Tucson holds a Municipal Separate Storm Sewer System permit; all work will be required to comply with best management practices to reduce the discharge of pollutants in stormwater to the City's stormdrain system. A Best Management Practices plan will be reviewed and approved by the City's Stormwater Management Section, which is responsible for compliance of all City transportation projects with the AZPDES Construction General Permit and the City's municipal stormwater quality permit.

The Categorical Exclusion will be prepared by ADOT Environmental Planning Group and any required technical report documents will be prepared by Kimley Horn, reviewed by the City of Tucson (and the City of South Tucson or the University of Arizona where appropriate) and then submitted for review and approval by ADOT's Environmental Planning Group.

4.2 Construction and Contract Method

Upon authorization of the funding, the City of Tucson will issue a request for proposals and competitively award the projects based on qualifications, pricing and method of approach. The City of Tucson will administer the project and has certification acceptance.

4.3 Geotechnical and Drainage Requirements

There are forty potential bike share station sites under consideration that are located within one-quarter mile of a wash. Drainage in these areas, is generally controlled with water flowing along the vertical curbs to stormdrain inlets. It is assumed that the existing storm drainage features are adequately sized to handle the existing roadway runoff. The final station sites will be selected to avoid impacts to drainage structures, and to maintain existing flow patterns. The City's

Floodplain Manager will be provided with an opportunity to review and approve the final sites selected.

Based on the scope of work, which involves only minimal ground disturbance, no geotechnical or drainage studies are warranted.

4.4 Critical Outside Agency Involvement

A Memorandum of Understanding will be developed with South Tucson and the University of Arizona to allow installation of bike share stations in these two jurisdictions.

Members of the public traveling through the area may experience minor delays during station installation. Stations take less than two hours to install. The City will coordinate installation activities with the City of Tucson Police Department, City of Tucson Fire Department, and Sun Tran Transit Services to avoid any conflicts.

Access to residences and businesses located adjacent to the station locations may be temporarily impacted by the installation of stations. These impacts are anticipated to be less than 2 hours. Property owners will be notified in advance of the installation activities.

The City of Tucson Parkwise and the City Planning and Development Services Department will be consulted about the conversion of parking spaces for on-street stations.

4.5 Right-of-Way Requirements

No new right-of-way is needed for this project. No temporary construction easements will be required for this project.

The projects will not result in impacts to any major structures, underpasses or railroad crossings.

4.6 Utility Involvement

The existing utilities known to be within the project vicinity are listed in Table 4. Additional utility investigation will occur during the utility clearance process.

Table 4: Existing Utilities

Owner	Utility/Facility
CenturyLink (fka Quest)	Coaxial Cable, Fiber Optics
COX Communications	CATV Cable, Fiber Optics
El Paso Gas	Gas
Pima County Wastewater Management	Sewer
Southwest Gas	Gas
Sprint Communications Co.	Communication, Fiber Optics
City of Tucson DOT	Street Lighting, Traffic Signals
City of Tucson Parks and Recreation	Electrical

Tucson Electric Power	Electric
Tucson Water	Reclaimed Water, Water

Utility impacts are anticipated to be minor or non-existent. Sites were selected to avoid conflicts with above ground and overhead utilities and utility access points. Most stations require no ground disturbance. Construction of concrete pads for unimproved sidewalk sites and potential bolting of the station kiosk platform to the surface is expected to disturb a depth of less than 6-inches and will not disturb any underground utility lines. In addition, bolting of flexible delineators and use of rebar to secure parking blocks for on-street stations is not expected to penetrate the ground surface underneath the street.

There are no known prior rights issues in the project area; however, the project will go through the City's utility coordination procedure as outlined in the City's Certification Acceptance Procedures Manual.

4.7 Seasonal Considerations

No construction activities will take place during severe or inclement weather.

The City of Tucson will coordinate with the University of Arizona to ensure that installation does not disrupt University activities and will coordinate with its own departments, staff at the City of South Tucson, and others to minimize the impact on festivals or other activities.

4.8 Traffic Requirements

Impacts to traffic are expected to be minimal. If needed, traffic control will be in accordance with the most current *Manual on Uniform Traffic Control Devices for Streets and Highways*, published by the US Department of Transportation, Federal Highway Administration including any revisions or additions, and/or associated provisions in the projects plans, as determined by the City of Tucson during the administration of the project.

The City has reviewed the proposed station locations and avoided any conflicts with the Modern Streetcar.

4.9 Design Criteria

The project will be implemented in accordance with Pima County/City of Tucson Standard Specifications for Public Improvements, 2003 Edition, which is consistent with Arizona Department of Transportation standards. Additional design guidelines include:

- Guide for the Development of Bicycle facilities, AASHTO, 1999
- A Policy on Geometric Design of Highways and Streets (Green Book), AASHTO, 2011
- Manual on Uniform Traffic Control Devices (MUTCD), FHWA, 2003 Edition
- Pima County/City of Tucson Pavement Marking Design Manual, August 2008

- City of Tucson and Pima County Standard Details for Public Improvements, 2003

4.10 Design Exceptions

No AASHTO design exceptions apply to the projects.

4.11 FHWA “Buy America” Requirement

The manufacturer of the bicycles shall comply with the FHWA “Buy America” requirements as set forth in 23 CFR Part 635.410. This requirement will be included in the Request for Proposals.

5.0 Other Requirements

The federal funding sources are the Transportation Alternatives Program (TAP) and the Surface Transportation Program (STP). The local match funding source will be the Regional Transportation Authority. The estimated project schedule calls for the project to be awarded competitively upon authorization of federal FY 2016 funding for equipment purchase. Equipment purchase is expected to be completed by January 2017. Following equipment purchase, a request for funding authorization for installation of the equipment would be submitted before May 2017. A detailed project development schedule is provided in Section 7. The City of Tucson will perform project management and has certification acceptance.

6.0 Estimated Cost

The project’s capital cost estimate is \$1,378,000 to purchase, install, and set up the program. Capital funding for the project will come from the Federal Transportation Alternatives Program (TAP) in FY2016 in the amount of \$800,000 with a local match of \$48,000 and from the Federal Surface Transportation Program (STP) in FY2017 in the amount of \$500,000 with a local match of \$30,000. A breakdown of capital costs for FY2016 and FY2017 is included in Table 5 and Table 6, respectively.

Table 5: FY2016 Itemized Project Cost

Item	Description	Unit Price	Quantity	Total Cost
1	Purchase of Equipment for 30 stations including: - 30 bike share kiosks - 510 bike share docks - 300 bicycles - 30 information panels - 30 station platforms - 30 solar panels	\$24,026.67 per station	30 stations	\$720,800
2	TDOT Administration	15%		\$127,200
	Total FY2016 Costs			\$848,000

Table 6: FY2017 Itemized Project Cost

Item	Description	Unit Price	Quantity	Cost
1	- Purchase of parts and cables required to assemble and operate the system - Back-end software and communications installation	\$6,933.33 per station	30 stations	\$208,000

2	Site Preparation and construction of concrete pads at up to 10 sites	\$7,250 per site	10 sites	\$72,500
3	Purchase and installation of on-street safety devices at up to 20 sites including: - Parking blocks - Flexible delineators - Paint and roadway striping materials - Labor and equipment for contractor to install street safety devices	\$1,500 per station	20 stations	\$30,000
4	Assembly of bicycles, stations, and other bike share equipment, plus labor and equipment for contractor to install bike share stations	\$3,000 per station	30 stations	\$90,000
5	Launch Preparation Planning Support and Outreach			\$50,000
6	TDOT Administration	15%		\$79,500
	Total Equipment Costs			\$530,000

The local match and federal breakdown of these two project stages are shown in Table 7.

Table 7. Local Federal Cost Breakdown

Year	Project Stage	Federal Share 94.3%	Local Share 5.7%	Totals
FY2016	Equipment Purchase	\$679,714.40	\$41,085.60	\$720,800
	TDOT Administration (15%)	\$119,949.60	\$ 7,250.40	\$127,200
	Total FY2016	\$799,663.40	\$48,336.00	\$848,000
FY2017	Installation and Construction	\$424,821.50	\$25,678.50	\$450,500
	TDOT Administration (15%)	\$ 74,968.50	\$ 4,531.50	\$ 79,500
	Total FY2017	\$499,790.00	\$30,210.00	\$530,000

After project completion, Table 8 shows that there will be annual O&M costs in the order of \$612,000 per year. Ongoing O&M funding will be the responsibility of the City of Tucson and funds will come from a combination of user-generated revenues and sponsorship of the bikes, stations, and other program assets.

Table 8: Annual Operations and Maintenance Itemized Cost (to be locally funded)

Item	Description	Unit Price	Quantity	Cost
1	Annual Operating and Maintenance Costs	\$100 / dock / month	510 docks	\$612,000
	Total Annual O&M Costs			\$612,000

Once project funding is authorized, the City of Tucson will competitively award the project through a Request for Proposal process. The award will be based on vender qualifications, pricing and method of approach. The City will enter into a contract to procure the equipment with the FY2016 funds and install the equipment with FY 2017 funds. The contract will also specify the terms of operations and will outline a set of performance metrics that the operator will need to meet in maintaining and operating the program.

7.0 Project Schedule

The timeline of critical tasks to implement the bike share program from planning, procuring, and launching the program is given in Table 7.

Table 7: Project Milestones

Activity		Schedule	
1.		Procurement	Implementation
2.	Project Kick-Off Meeting	November 2015	
3.	Prepare Project Assessment Document	November 2015	
4.	Submit Project Assessment	December 2015	
5.	ADOT Review of Project Assessment	December 2015 - January 2016	
6.	Submit Revised Project Assessment	April 2016	
7.	Draft RFP Development	April 2016	
8.	ADOT Environmental Clearance	April 2016	
9.	Submit Draft RFP to ADOT / FHWA for review	April 2016	
10.	Obtain ROW Clearance	May 2016	
11.	Obtain Utility Clearance	May 2016	
12.	Assemble Funding Release Packet	May 2016	
13.	Review by ADOT	May 2016	
14.	Review and Authorization by ADOT / FHWA	June 2016	
15.	Release Final RFP	August 2016	
16.	Award, Contracting, Notice to Proceed	September - November 2016	
17.	Procurement of Bicycles/Stations	January 2017	
18.	Receiving equipment (Bikes, Stations, etc.)	April 2017	
19.	Assembly of Stations/Bicycles		April 2017
20.	Installation of Stations / Distribution of Bikes		May 2017
21.	Full Public Launch of System		May 2017

8.0 Service Involvement Matrix

Project Number: STP-TUC-0(259)A
 TRACS Number: 0000 PM TUC SZ128 01X
 TIP ID #: 25.13
 Project Name: Bike Share Program
 Project Location: Various locations through the City of Tucson, the University of Arizona and the City of South Tucson, Arizona

Table 8: Service Involvement Matrix

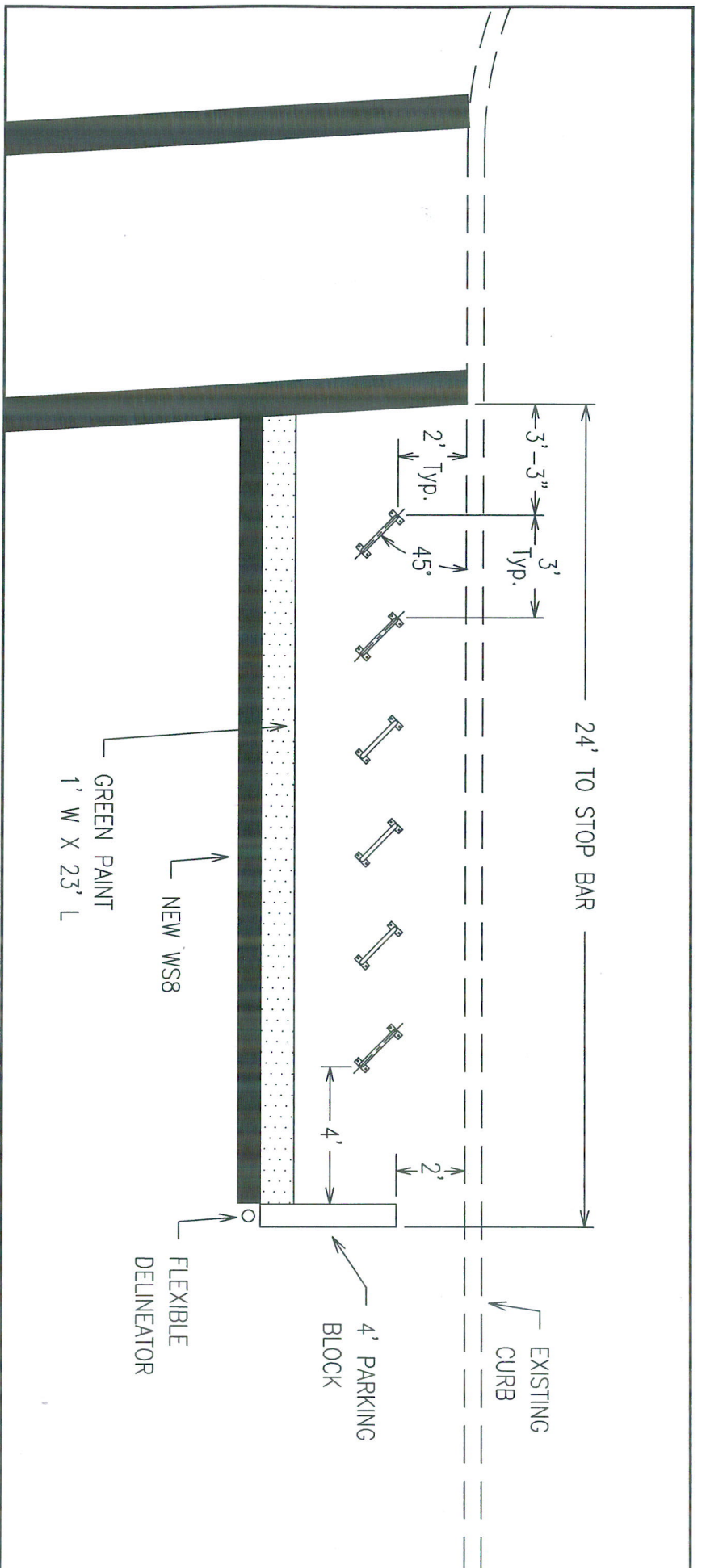
C O N T A C T E D	F I E L D R E V I E W	ORGANIZATION	INVOLVE- MENT				COMMENTS (ISSUES THAT MAKE INVOLVEMENT SIGNIFICANT OR MINIMAL)
			S I G N I F I C A N T	M I N I M U M	N O N E	U N K N O W N	
		ADOT Technology Group (For IT)			X		
		ADOT Local Public Agency	X				Coordination with the City
		ADOT Tucson Maintenance District			X		
		ADOT Roadway Design			X		
		ADOT Pavement Design			X		
		ADOT Bridge Design			X		
		ADOT Drainage Design			X		
		ADOT Transportation Planning			X		
		ADOT Traffic Design			X		
		ADOT Photogrammetry & Mapping			X		
		ADOT Engineering Survey			X		
		ADOT Geotechnical Services			X		
X		ADOT Environmental Planning Group	X				Review environmental documents, develop Environmental Clearance
X		ADOT Roadside Development		X			Review
		ADOT Right-of-Way Group		X			Certify ROW
		ADOT Utilities & Railroads			X		
		ADOT Contracts & Specifications		X			Review contract documents
		ADOT Procurement		X			Process Funding Authorization
		ADOT Transportation Enhancement Section	X				
		FHWA		X			Document review and Funding Authorization
X		City of Tucson Department of Transportation	X				Project Management
		Pima Association of Governments		X			Administration of TIP
		City of Tucson Police Department		X			Project Coordination
		City of Tucson Fire Department		X			Project Coordination
		Sun Tran Bus Service Provider		X			Project Coordination
		ParkWise Parking Service Provider		X			Project Coordination
		City of Tucson Planning and Development Services Department		X			Project Coordination

Appendix A

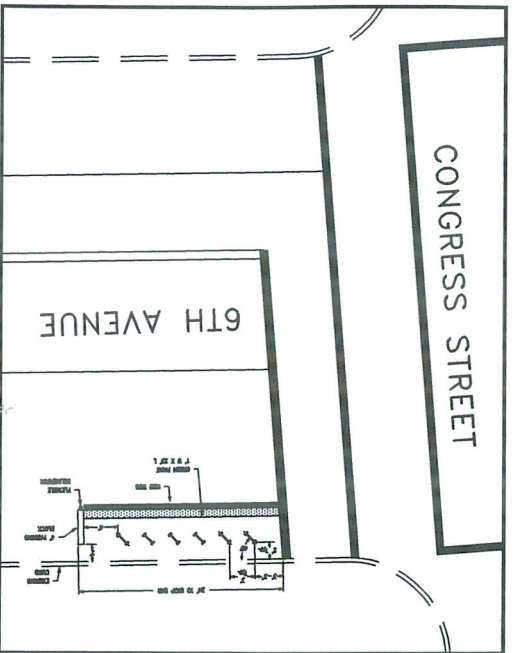
Site Plans

Appendix B


Bike Corral Design Example



PLAN VIEW



LOCATION MAP

BIKE PARKING CORRAL Gibson's Market 11 S. 6th Avenue			
 CITY OF TUCSON DEPARTMENT OF TRANSPORTATION	DRWN. WEW	DSGN. AHB	DATE 5/27/15



Appendix C

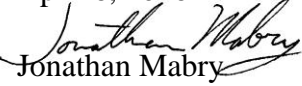
City of Tucson Bike Share Program, April 4, 2016 Memorandum from Historic Preservation Officer, Summary of Local Historic review and Findings



MEMORANDUM

TO: Sarah Karasz
Senior Environmental Planner, ADOT

DATE: April 6, 2016

FROM: 
Jonathan Mabry
Historic Preservation Officer
City of Tucson

SUBJECT: Local Historic Review of City of Tucson Bike Share Project
Federal Project Number: STP-TUC-0(259)A
ADOT TRACS Number: 0000 PM TUC SZ128 01X

Dear Ms. Karasz:

The City of Tucson (COT) Bike Share Project is funded through a combination of federal Surface Transportation Program funds and Transportation Alternative Program funds, and local matching funds. The Federal Highway Administration (FHWA) serves as the lead federal agency with the Arizona Department of Transportation providing project administration and the City of Tucson providing project management. At ADOT's request, the COT Bike Share Project has been reviewed by the Plans Review Subcommittee of the Tucson-Pima County Historical Commission and interested Historic Preservation Zone Advisory Boards, following the regular steps in our Certified Local Government Historic Review Process. This MEMO summarizes the outcome of this review process and documents how COT staff has addressed all concerns about impacts to historic resources that were raised throughout the process.

Historic Review - Meetings Overview:

Date	Organization	Summary
January 13, 2016	Tucson-Pima County Historical Commission	Tucson Department of Transportation (TDOT) and Toole Design Group staff gave a general overview of the bicycle share project and requested that the Historical Commission review the project.
February 10, 2016	Tucson-Pima County Historical Commission	TDOT provided an update to the Historical Commission and laid out the plan to have the Plans Review Committee review the sites.
February 24, 2016	Tucson-Pima County Historical Commission Plans Review Subcommittee Meeting	TDOT handed out information for members to review (Attachments 1 and 2) and asked that a special meeting be set up to go over the station locations.

TO: Sarah Karasz
SUBJECT: COT Bike Share Project
Page 2

March 3, 2016	Tucson-Pima County Historical Commission Plans Review Subcommittee – Special Meeting	The Plans Review Subcommittee reviewed proposed station locations and provided comments. The Subcommittee requested that TDOT meet with the Historic Preservation Zone Advisory Boards and get their input prior to finalizing their review.
March 14, 2016	El Presidio Neighborhood Association	By request of the El Presidio Historic Preservation Zone Advisory Board, TDOT staff presented on bike share and went over locations in and around El Presidio neighborhood.
March 15, 2016	West University Historic Preservation Zone Advisory Board	TDOT staff presented on bike share and there was a discussion on proposed station locations within the West University area.
March 15, 2016	Armory Park Historic Preservation Zone Advisory Board	TDOT staff presented on bike share and there was a discussion on the location of a proposed station location in Armory Park.
March 24, 2016	Plans Review Subcommittee of the Historical Commission	TDOT staff updated the Plans Review Subcommittee on the outcomes of the Historic Preservation Zone meetings and finalized the Historical Commission input.

*TDOT staff reached out to both Barrio Historico and El Presidio Historic Preservation Zone Advisory Boards. The chairs indicated that consultations with their Historic Preservation Zone Advisory Boards were not needed for the station sitings in their Historic Preservation Zones.

Plans Review Subcommittee Special Meeting – March 3

The Plans Review Subcommittee of the Tucson-Pima County Historical Commission was provided materials and information on all proposed bike share station locations. TDOT staff presented on every station that was proposed to be located in a National Register historic district, including a handout citing references in the National Register Forms related to historic streetscapes and parks where stations were proposed to be located, and the review committee provided input.

Attachment 3 is the Legal Action Report from the March 3, Plans Review Subcommittee meeting. The Legal Action Report shows that the Plans Review Subcommittee made the following motion:

It was moved by Commissioner Sauer, duly seconded by Commissioner Stables to:

(1) commend the City for proposing locations where the vast majority were found to have no historic concerns;

(2) note that our recommendations are contingent on the review and approval of these locations by the relevant Historic Zone Advisory Boards; we understand that Neighborhood Associations will be asked for input as part of the Section 106 process that is required for this project;

(3) note that our recommendations are made with the understanding that the BikeShare station design(s) will be brought back to the TPCHC-PRS for review;

(4) note that our review of the locations resulted in:

- two locations that were not listed in table form in the presentation were reviewed with no historic concerns identified: 124 (6th & Granada) and 218 (Franklin & Granada)

- one location listed in table form was not available to be reviewed: 121A (Church & Congress). 121B was reviewed and no historic concerns were identified, but 121A will be brought back to the subcommittee for review as needed

- eight locations were identified with historic concerns, largely concerns that the proposed bikeshare station in that location would be an intrusion in a historic park or landscape: 120A, 120C, 115, 110B, 222B, 222C, 112, and 224A.

- for the majority of locations with historic concerns, nearby alternatives were identified that did not raise any historic concerns:

120A: do not select 120A; either select 120B, or relocate by relocating this station into the parking area on 12th

120C: do not select 120C; 120B is the alternative

115: do not select 115; no alternatives identified (however, there is a streetcar stop nearby; suggestion to consider locating with stop)

110B: do not select 110B; 110A is the alternative

222B: do not select 222B; 222A is the alternative

222C: do not select 222C; 222A is the alternative

112: do not select 112; no alternatives identified, but it was noted that the area between the curb and sidewalk is wider at the south side of Catalina Park, possibly allowing for a bikeshare station that does not impact the ability to reintroduce street trees

224A: do not select 224A; 224B is the alternative

Motion carried. Voice Vote 5-0.

Historic Preservation Zone Advisory Board Reviews

The Plans Review Subcommittee motion included an item that their recommendations were contingent on the review and approval by the relevant Historic Preservation Zone Advisory Boards. As a result, City of Tucson reached out to the four Historic Preservation Zone Advisory Boards that have bike share stations proposed within their zone boundaries. Below summarizes the results of reaching out the Historic Preservation Zone Advisory Boards.

Historic Preservation Zone	Summary of Review Outcome	Documentation
Armory Park	TDOT staff presented to the Advisory Board on March 15.	Attachment 4 – March 15 Armory Park Historic Preservation Zone meeting notes related to bike share.
Barrio Historico	The Advisory Board indicated they did not feel it was necessary to review the one site.	Attachment 5 – Email documentation indicating Barrio Historico did not feel a review by them was needed.
El Presidio	<ul style="list-style-type: none">• The Advisory Board indicated they did not feel it was necessary for them to review bike share at this time; however, they asked that instead, the El Presidio Neighborhood Association provide input.• TDOT staff presented to the Neighborhood Association on March	Attachment 6 – Email documentation indicating the Historic Preservation Advisory Board did not feel a review by them was needed but instead, a request that the neighborhood association provide input at this time. Attachment 7 – March 14 El Presidio Neighborhood Association meeting notes related to bike share.
West University	TDOT staff presented to the Advisory Board on March 15.	Attachment 8 – March 15 West University Historic Preservation Zone Advisory Board meeting notes related to bike share.

Plans Review Subcommittee Meeting – March 24

During the March 24 meeting, TDOT staff updated the Subcommittee on the review by the Historic Preservation Zone Advisory Boards and handed out a document that included the meeting notes from the related meetings (Attachment 9). Also included in the packet and

TO: Sarah Karasz
SUBJECT: COT Bike Share Project
Page 5

included in the presentation was a discussion of alternative sites and a few new sites that had been identified by staff since the last meeting. There were no concerns raised about the new sites.

Attachment 10 is the Legal Action Report from the March 24, Tucson-Pima County Historical Commission Plans Review Subcommittee meeting. The Legal Action Report shows that the Subcommittee made the following motion:

It was moved by Commissioner Sauer, duly seconded by Commissioner Erickson to:

(1) Commend the City for all hard trying to balance so many stakeholders' interests;

(2) Note that the input from relevant HPZAB resulted in:

-5 locations have been removed from consideration 106B, 120C, 222B, 222C, and 224A.

-No concerns with, 106A, 222A, 224B, 114A, 114B, 114C, 209B, 207, 126, relocated 112, the four proposed options along 4th Ave at 7th, 8th (115), and 9th streets, 120B and 110A;

-Concerns for 2 locations that have not been withdrawn;

-Concerns with 110B in Himmel Park. 110A is acceptable and if needed, recommend identifying an alternate location in the parking lot along 1st St. west of the library.

-Concerns with 120A in Armory Park. 120B is acceptable and if needed, recommend exploring other options closer to the senior center.

(3) recommend approval as presented.

Motion carried. Voice Vote 6-0.

Historic Review Process:

There were some proposed station locations about which concerns were raised during the local historic review process. For some of these sites, the concern was not about impacts to historic resources, but is still documented in the table below because this input was received as part of the historic review process. The table below summarizes the bike share stations for which concerns

about impacts to historic resources were raised, and shows how the project team has addressed the concerns.

Station Number	Station Name	Historic Concern	Additional Stakeholder Input	Outcome of Concern being raised
106 B	ENR2		<p>1. From Historic Commissioner via email: ENR2 is the new LEED building based on a slot canyon. It has a serpentine walkway on the Sixth Street side with landscaping, reflective of its undulating facade. More appropriate would be the Sixth Street Garage to the east, or the parking lot across the street to the south, both have bus stops.</p> <p>2. UA staff indicated they did not support 106 B.</p>	106 B has been removed from consideration.
108 C	Seneca St and Mountain Ave		West University Historic Preservation Zone Advisory Board: Concern about locating stations in front of single-family residences.	108 C has been removed consideration.
110 B	Himmel Park Library	Tucson-Pima County Historical Commission Plans Review Subcommittee: Location would be an intrusion in a historic park or landscape		110 B has been removed from consideration. Tucson-Pima County Historical Commission Plans Review Subcommittee recommended identifying an

				alternative location along 1 st Street west of the library. 110 C has been identified as another option at Himmel Park Library.
112	Catalina Park	<p>Tucson-Pima County Historical Commission Plans Review Subcommittee: Originally proposed location would be an intrusion in a historic park or landscape.</p> <p>West University Historic Preservation Zone Advisory Board:</p> <ul style="list-style-type: none"> - Southside, middle of the block would be an acceptable alternative. - Shifting to closer to 4th Avenue would be out of line of sight from houses viewing the park and might be better. 		<p>Original location proposed for site 112 Catalina Park has been removed from consideration.</p> <p>After input from the Historic Preservation Zone Advisory Board in the area, an alternative site was presented to the Tucson-Pima County Historical Commission Plans Review Subcommittee on March 24. The alternative site was approved by the subcommittee.</p>
115	4 th Ave and 8 th St Goodwill	<p>Tucson-Pima County Historical Commission Plans Review Subcommittee: Do not select 115. Concerns about the bike share station blocking the view shed of this historic building.</p>		<p>Original location proposed for site 115 4th Ave and 8th St has been removed from consideration.</p> <p>Three alternative locations (8th St near 4th Ave; 7th St near 4th Ave; 9th St near 4th Ave were presented to the Tucson-Pima</p>

				County Historic Commission Plans Review Subcommittee on March 24. All three alternative sites were approved by the subcommittee.
120 A	Armory Park	Tucson-Pima County Historical Commission Plans Review Subcommittee: Location would be an intrusion in a historic park or landscape		120 A has been removed from consideration.
120 C	Armory Park	Tucson-Pima County Historical Commission Plans Review Subcommittee: Location would be an intrusion in a historic park or landscape		120 C has been removed from consideration.
207	Cherry Ave and 10 th St (original) Rincon Market (new)		<ol style="list-style-type: none"> 1. West University Historic Preservation Zone Advisory Board: Concern about locating stations in front of single-family residences. 2. The Technical Advisory Committee suggested adding a station at Rincon Market. 	<p>Original location proposed for site 207 Cherry Ave and 10th St has been removed from consideration.</p> <p>An alternative site at Rincon Market was presented to the Tucson-Pima County Historical Commission Plans Review Subcommittee on March 24. The alternative site was approved by the subcommittee.</p>
208 A	3 rd Ave and University		1. Internal City of Tucson staff review	208 A has been removed from

	Blvd.		suggested losing that much parking in that location would be challenging. 2. West University Historic Preservation Zone Advisory Committee agreed.	consideration.
208 D	3 rd Ave and University Blvd.		West University Historic Preservation Zone Advisory Committee: Already a lot going on at that location and having a station in the center would be problematic.	208 D has been removed from consideration.
209	Franklin St and Court Ave		El Presidio Neighborhood Association: Concern over loss of car parking especially when the lot is developed.	Original location proposed for 209 has been removed from consideration. An alternative site around the corner on Court Ave was presented to the Tucson-Pima County Historical Commission Plans Review Subcommittee on March 24. The alternative site was approved by the subcommittee.
210 A	Granada Ave and Alameda St		Site not taken to the El Presidio Neighborhood Association for input.	City of Tucson staff removed this site from consideration.
210 B	Granada Ave and Alameda St		Site not taken to the El Presidio Neighborhood Association for input.	City of Tucson staff removed this site from consideration.

TO: Sarah Karasz
SUBJECT: COT Bike Share Project
Page 10

218	Franklin St and Granada Ave		Site not taken to the El Presidio Neighborhood Association for input.	City of Tucson staff removed this site from consideration.
219 A	Cushing Street Station		Gadsden company indicated they preferred site 219 B	City of Tucson staff removed this site from consideration.
222 B	Convention Center	Tucson-Pima County Historical Commission Plans Review Subcommittee: Location would be an intrusion in a historic park or landscape		222 B has been removed from consideration.
222 C	Convention Center	Tucson-Pima County Historical Commission Plans Review Subcommittee: Location would be an intrusion in a historic park or landscape		222 C has been removed from consideration.
224 A	Church Ave and Ochoa St	Tucson-Pima County Historical Commission Plans Review Subcommittee: Location would be an intrusion in a historic park or landscape		224 A has been removed from consideration.

Summary:

The City of Tucson Public Bike Share Project has successfully completed our Certified Local Government Historic Review Process, including reviews by the Plans Review Subcommittee of the Tucson-Pima County Historical Commission and by interested Historic Preservation Zone Advisory Boards and Neighborhood Associations. All concerns raised through this process have been documented in this MEMO. For proposed station locations that raised concerns about impacts to historic resources, the bike share program team identified alternative locations. The alternative locations have been approved by the Tucson-Pima County Historical Commission Plans Review Subcommittee. Below is chart summarizing all the sites that were vetted through the local Historic Review Process and that the City of Tucson would like to move forward for cultural resource clearance.

TO: Sarah Karasz
SUBJECT: COT Bike Share Project
Page 11

	Station Number	Station Name	Notes
1	101	Warren Ave and Helen St	
2	102	Park Ave Garage	
3	103 – 1	Student Union and 2 nd St Garage	
4	103 – 2	Student Union and 2 nd St Garage	
5	104	University Transit Hub	
6	105	Main Gate Village	
7	106 A	6 th Street Parking Garage	Changed name from ENR2
8	107	Copper St and Mountain Ave	
9	108 A	Lester St and Park Ave	
10	109	9 th St and Park Ave	
11	110 A	Himmel Park Library	
12	110 C	Himmel Park Library	New site plan developed based on historic review.
13	111	PCC – Downtown Campus	
14	112 B	Catalina Park	Revised site location
15	113 A	University Bl and 9 th Ave	
16	113 B	University Bl and Stone Ave	
17	114 A	5 th St and 4 th Ave	
18	114 B	5 th St and 4 th Ave	
19	114 C	5 th St and 4 th Ave	Location approved by historic review – new site plan created.
20	115 B	8 th St and 4 th Ave	Location approved by historic review – new site plan created.
21	116	Lost Barrio	
22	117	Rincon Vista Sports Complex	
23	118	Reid Park	
24	119	5 th Ave and Congress St	
25	120 B	Armory Park	
26	121	Church Ave and Congress St	
27	122	Pima County Main Library	
28	123 A	Presidio Park	
29	123 B	Presidio Park	
30	124	6 th St and Granada Ave	
31	125	Mercado	
32	126	Menlo Park	
33	127 A	N Bonita Ave and N Commerce Park Loop	
34	127 B	N Bonita Ave and N Commerce	

TO: Sarah Karasz
SUBJECT: COT Bike Share Project
Page 12

		Park Loop	
35	127 C	N Bonita Ave and N Commerce Park Loop	
36	127 D	N Bonita Ave and N Commerce Park Loop	
37	128 A	St. Mary's Hospital	
38	128 B	St. Mary's Hospital	
39	129 A	Five Points	
40	129 B	Five Points	
41	130 A	S 6 th Ave and 26 th St	
42	130 B	S 6 th Ave and 26 th St	
43	201	Banner University Medical Center	
44	202	Highland Garage	
45	203	Centennial Hall	
46	204	1 st St and Tyndall Ave	
47	205	Tyndall Ave and 6 th St	
48	206	University Rec Center	
49	207 B	Rincon Market	Revised site location
50	208 B	N 3 rd Ave and E University Bl	
51	208 C	E University Bl and N 3 rd Ave	
52	209 B	Franklin St and Court Ave	Revised site location
53	211	Granada Ave and Cushing St	
54	212	The Loop at Speedway Bl	
55	213	El Rio	
56	214	Santa Rosa Park	
57	215	University Bl and 11 th Ave	
58	216	E Copper St and N Campbell Ave	
59	217	Stone Ave and Broadway	
60	219 B	Cushing Street Station	
61	220	The Loop at St. Mary's Rd	
62	222 A	Convention Center	
63	223	Ronstadt Transit Center	
64	224 B	Church Ave and Ochoa St	
65	225	Mountain Ave and Linden St	
66	226	7 th St and 4 th Ave	Location approved by historic review – new site plan created.
67	227	9 th St and 4 th Ave	Location approved by historic review – new site plan created.

TO: Sarah Karasz
SUBJECT: COT Bike Share Project
Page 13

FINDING AND RECOMMENDATION:

Based on the public input received and staff responses during our Certified Local Government Historic Review Process, **it is my finding that there are No Adverse Effects of this project on any historic properties for these proposed Bike Share station locations.** I recommend that ADOT concur with this finding when it submits this documentation and other program materials to FHWA so that agency can lead the consultation process with the Arizona State Historic Preservation Office in compliance with Section 106 implementing regulations for the National Historic Preservation Act of 1966, as amended. Please contact me if you have any questions about this finding or information in this MEMO.

C: Corrine Garey, Project Manager, ADOT
Ann Chanecka, Project Manager, City of Tucson
Andy McGovern, Engineering Administrator, City of Tucson
Robin Raine, Deputy Director, City of Tucson
Adrian Witte, Project Manager, Toole Design Group

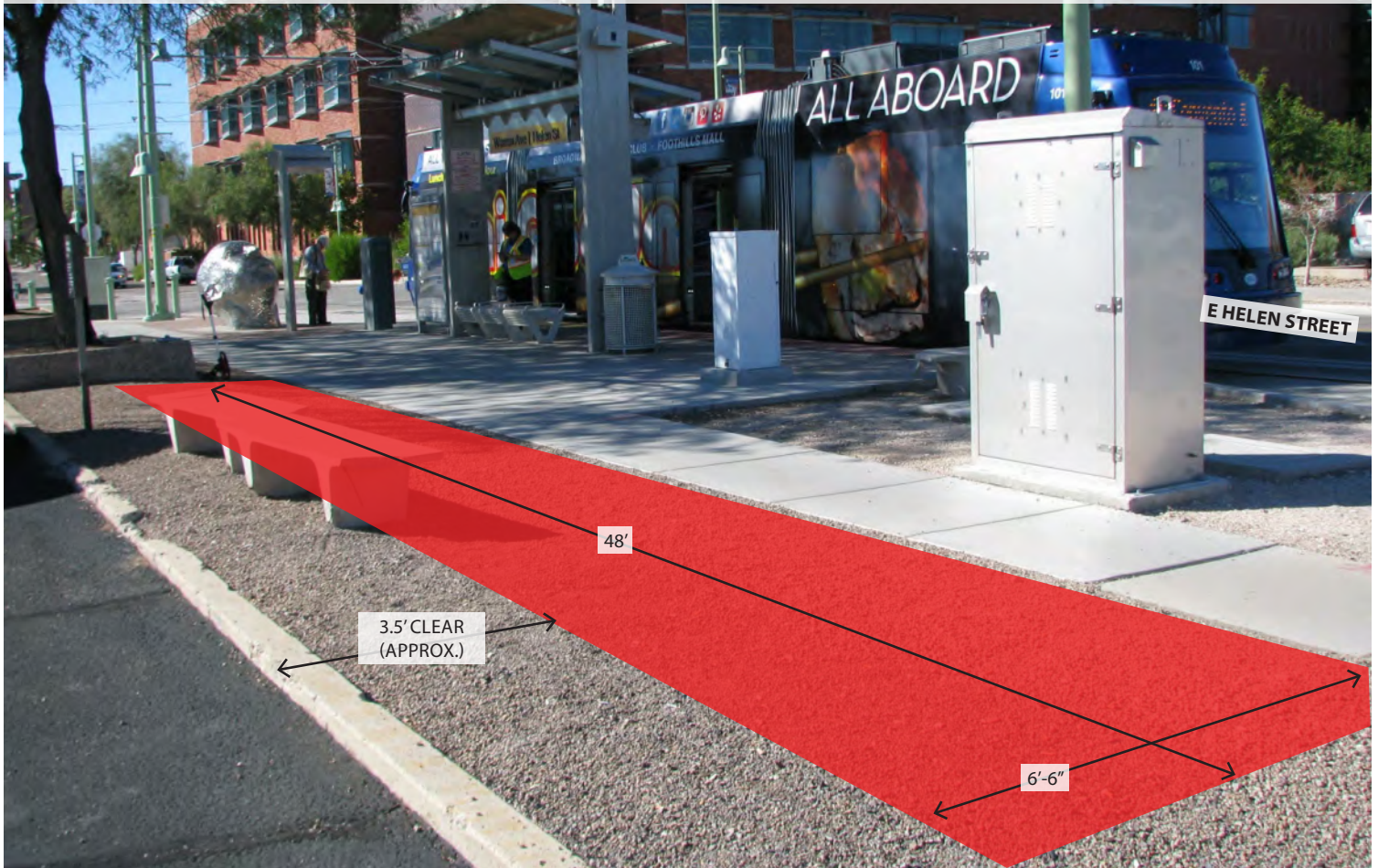
Attachments-

- Attachment 1: Tucson-Pima County Historical Commission Plans Review Subcommittee Packet of Information, February 24
- Attachment 2: National Register Forms Relevant to Proposed Bike Share Station Locations (Provided to the Plans Review Subcommittee)
- Attachment 3: March 3 Tucson-Pima County Historical Commission Plans Review Subcommittee Special Meeting Legal Action Report
- Attachment 4: Armory Park Historic Preservation Zone Advisory Board – meeting notes related to bike share
- Attachment 5: Email from Barrio Historico Historic Preservation Zone Advisory Board
- Attachment 6: Email from El Presidio Historic Preservation Zone Advisory Board
- Attachment 7: El Presidio Neighborhood Association – meeting notes related to bike share
- Attachment 8: West University Historic Preservation Zone Advisory Board – meeting notes related to bike share
- Attachment 9: Tucson-Pima County Historical Commission Plans Review Subcommittee Packet of Information, March 24
- Attachment 10: March 24 Tucson-Pima County Historical Commission Plans Review Subcommittee Meeting Legal Action Report

Appendix A

Site Plans

Bike share station on S side of E Helen Street, looking west towards N Warren Avenue



Location: S side of E Helen Street, E of N Warren Avenue

Coordinates: -110.94634 °, 32.23729 °

Type: Sidewalk

Size: 19 docks, 1 kiosk

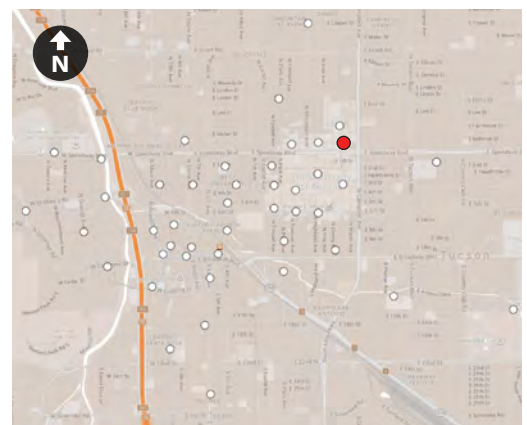
Station: Standard station with 90 degree docks

Owner: City of Tucson & University of Arizona

Power: Solar

Orientation: Bikes pull towards sidewalk, kiosk faces sidewalk

Notes: Concrete pad required prior to installation
Benches to be relocated



Bike share station on east side of N Olive Road, looking north towards E Helen Street



Location: East side of N Olive Road, south of E Helen Street

Coordinates: -110.95496 °, 32.23721 °

Type: Off-street

Size: 23 docks, 1 kiosk

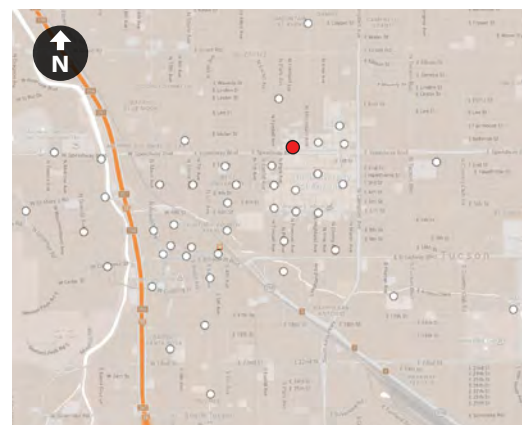
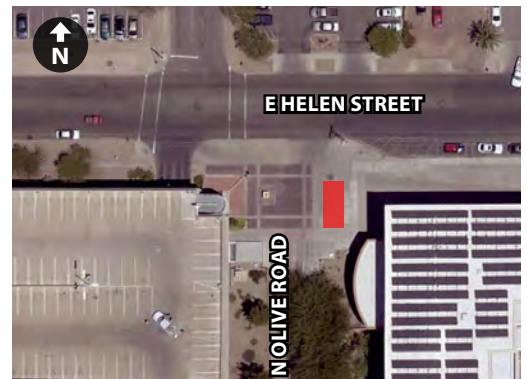
Station: Dual sided station with 90 degree docks

Owner: University of Arizona

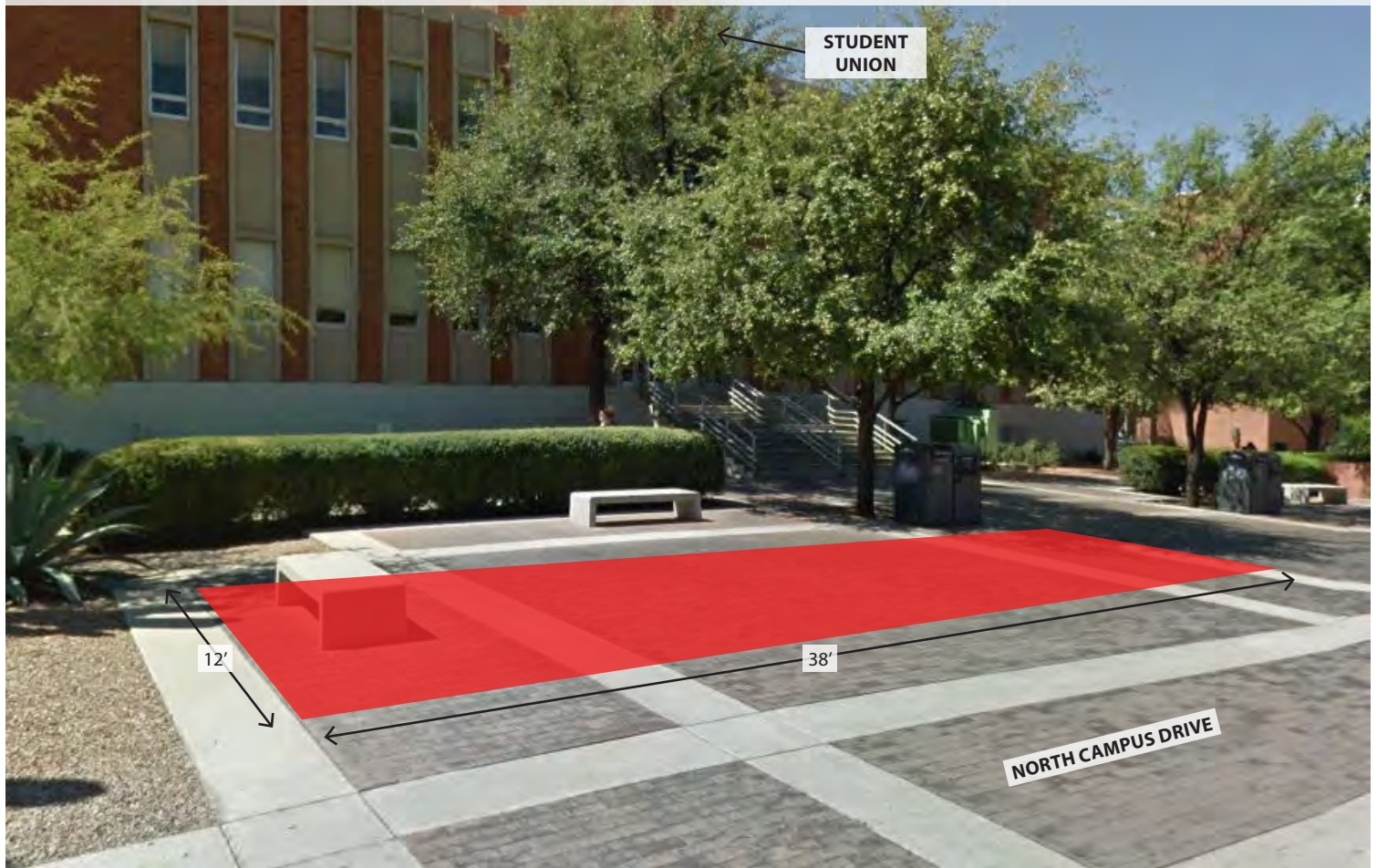
Power: Solar

Orientation: Bikes pull towards multiuse path and plaza, kiosk faces multiuse path

Notes:



Bike share station on south side of North Campus Drive, looking southwest from N Highland Avenue



Location: South side on North Campus Drive, west of N Highland Avenue

Coordinates: -110.95068 °, 32.23309 °

Type: Off-street

Size: 29 docks, 1 kiosk

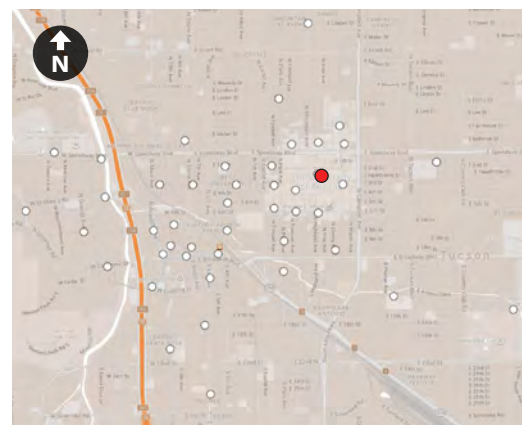
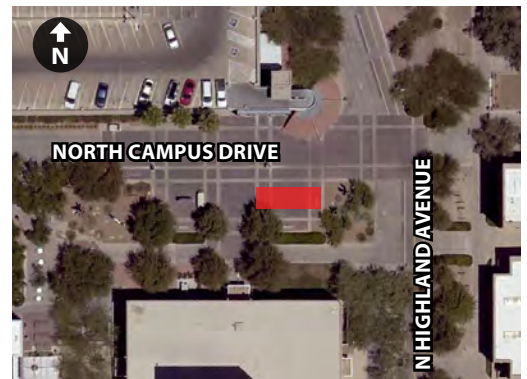
Station: Dual sided station with 90 degree docks

Owner: University of Arizona

Power: Solar

Orientation: Bikes pull towards plaza, kiosk faces plaza

Notes: Bench to be relocated



Bike share station on south side of North Campus Drive, looking southwest from N Highland Avenue



Location: South side on North Campus Drive, west of N Highland Avenue

Coordinates: -110.95068 °, 32.23309 °

Type: Off-street

Size: 15 docks, 1 kiosk

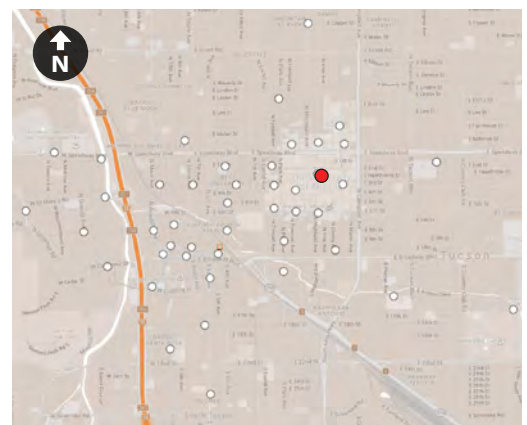
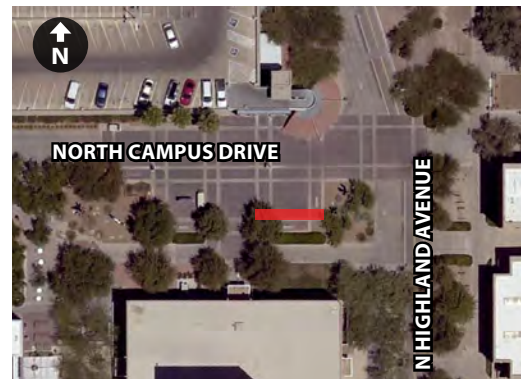
Station: Standard station with 90 degree docks

Owner: University of Arizona

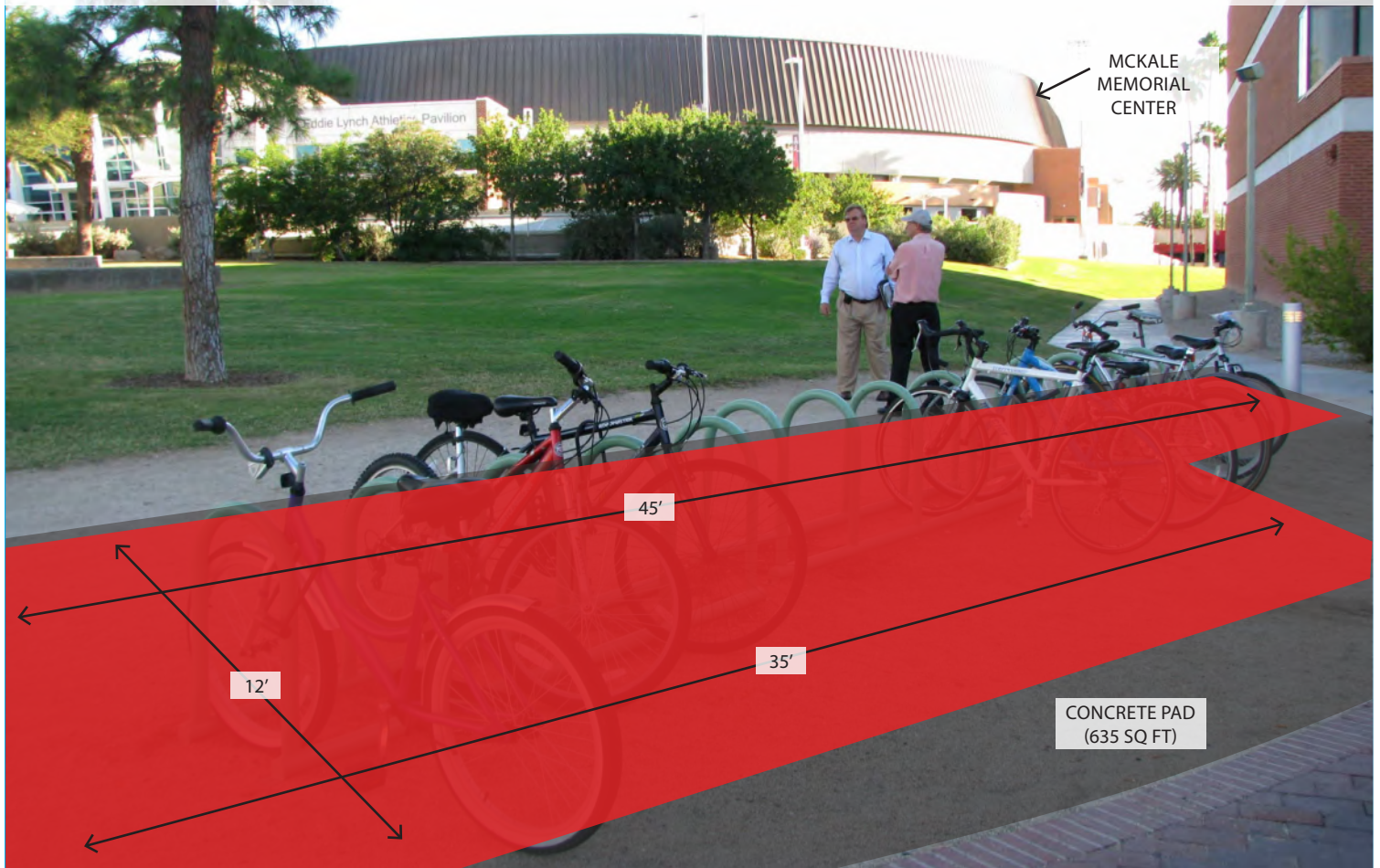
Power: Solar

Orientation: Bikes pull towards plaza, kiosk faces plaza

Notes: Bench, trash and recycling bins to be relocated



Bike share station on south side of E University Boulevard, looking southeast from University Transit Hub



Location: South side of E University Boulevard, east of N Cherry Avenue

Coordinates: -110.94657 °, 32.23165 °

Type: Off-street

Size: 31 docks, 1 kiosk

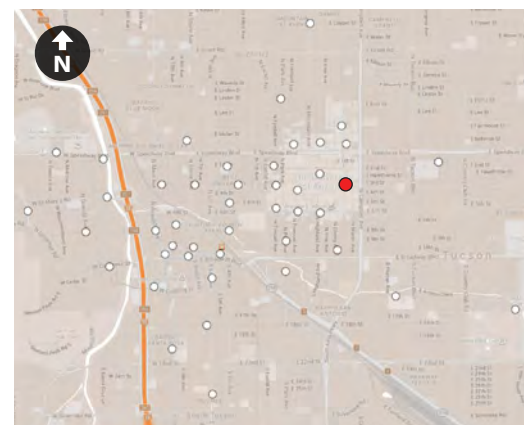
Station: Dual sided station with 90 degree docks

Owner: University of Arizona

Power: Solar

Orientation: Bikes pull towards pedestrian path and grass, kiosk faces pedestrian path

Notes: Concrete pad required prior to installation
Bike racks to be relocated



Bike share station on south side of E University Boulevard, aerial view

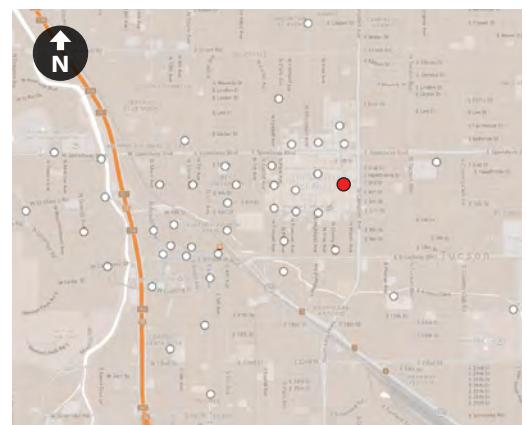
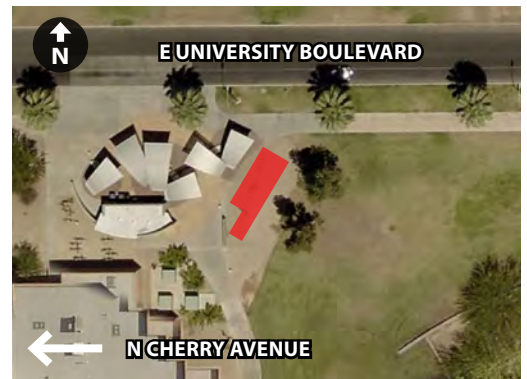


Location: South side of E University Boulevard, east of N Cherry Avenue

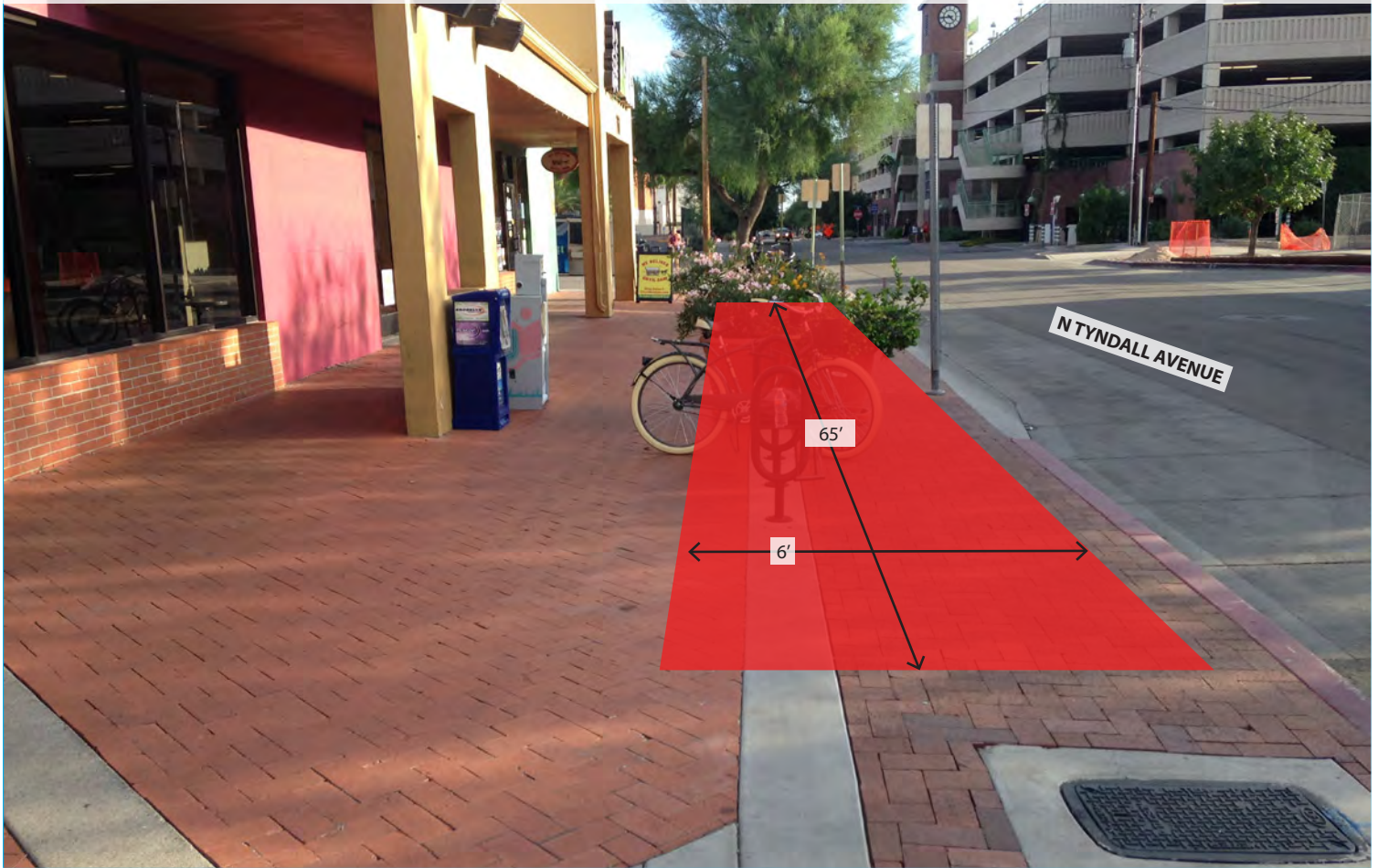
Coordinates: -110.94657 °, 32.23165 °

Type: Off-street

Size: 31 docks, 1 kiosk



Sidewalk station on east side of N Tyndall Avenue, looking south from University Boulevard



Location: East side of N Tyndall Avenue, south of E University Boulevard

Coordinates: -110.95784 °, 32.2315 °

Type: Sidewalk

Size: 25 docks, 1 kiosk

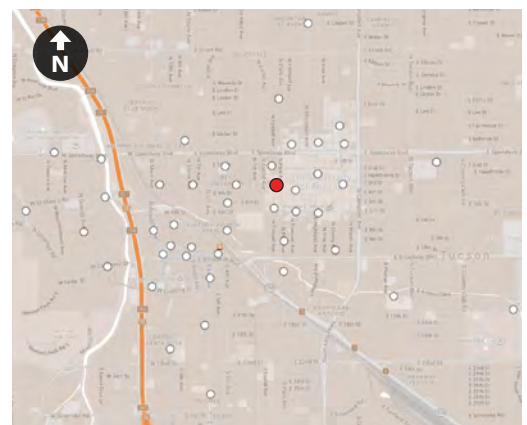
Station: Standard station with 90 degree docks

Owner: University of Arizona

Power: Solar

Orientation: Bikes pull towards sidewalk, kiosk faces sidewalk

Notes: Bike racks, benches, and planters will need to be relocated; located in West University Historic District



On-street station on north side of E Copper Street, looking west towards N Mountain Avenue



Location: North side of E Copper Street, east of N Mountain Avenue

Coordinates: -110.95242 °, 32.25401 °

Type: On-street

Size: 15 docks, 1 kiosk

Station: Standard station with 90 degree docks

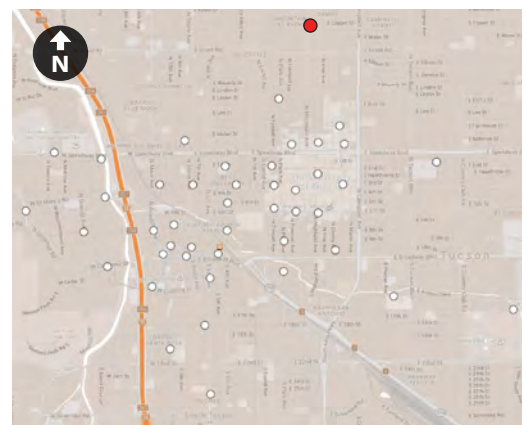
Owner: City of Tucson

Power: Solar

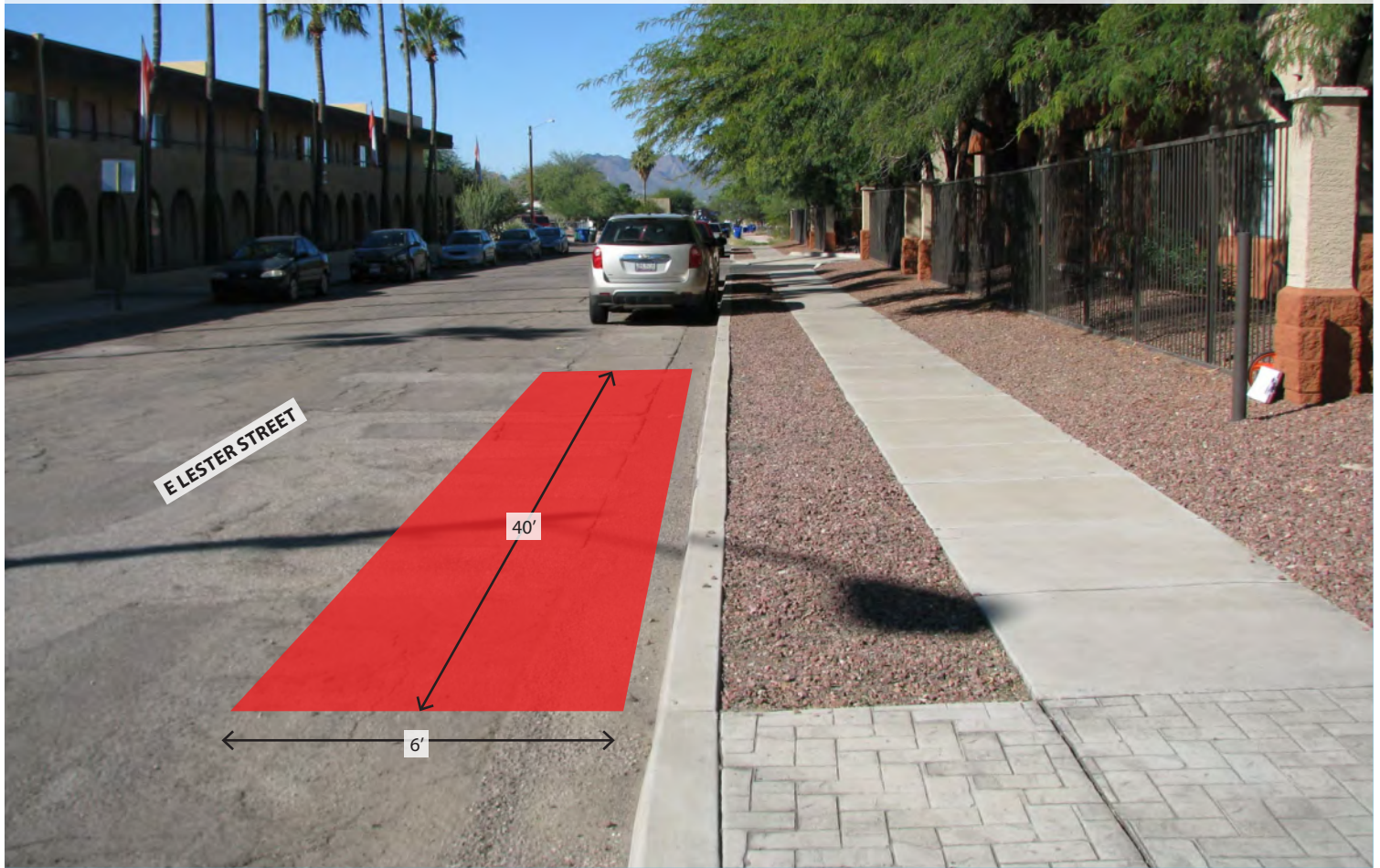
Orientation: Bikes pull towards street, kiosk faces sidewalk

Parking: Unrestricted

Notes:



On-street station on north side of E Lester Street, looking west from N Park Avenue



Location: North side of E Lester Street, west of N Park Avenue

Coordinates: - 110.95707 °, 32.24354 °

Type: On-street

Size: 15 docks, 1 kiosk

Station: Standard station with 90 degree docks

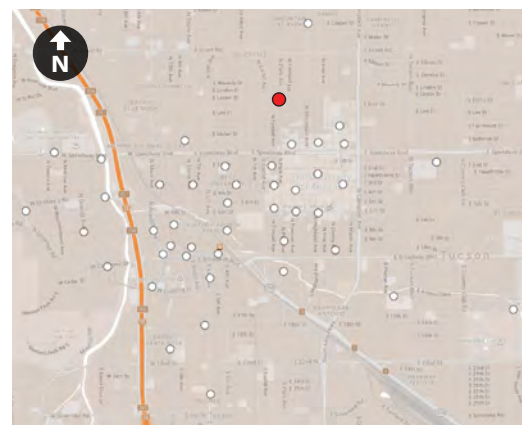
Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards street, kiosk faces sidewalk

Parking: Unrestricted

Notes:



Bike share station on the east side of N Mountain Avenue, looking east from just north of E Linden Street



Location: east side of N Mountain Avenue, north of E Linden Street

Coordinates: -110.9521, 32.2448

Type: sidewalk

Size: 7 docks, 1 kiosk

Station: standard station with 90-degree docks

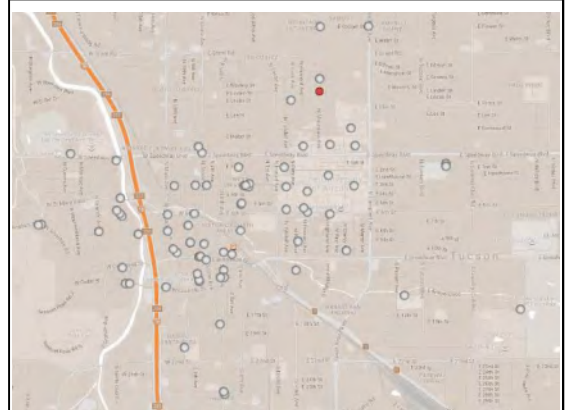
Owner: City of Tucson

Power: solar

Orientation: bikes pull towards sidewalk, kiosk faces sidewalk

Notes: Bus shelter to be modified and southern bench and light poles to be removed prior to installation.

Located in Jefferson Park Historic District



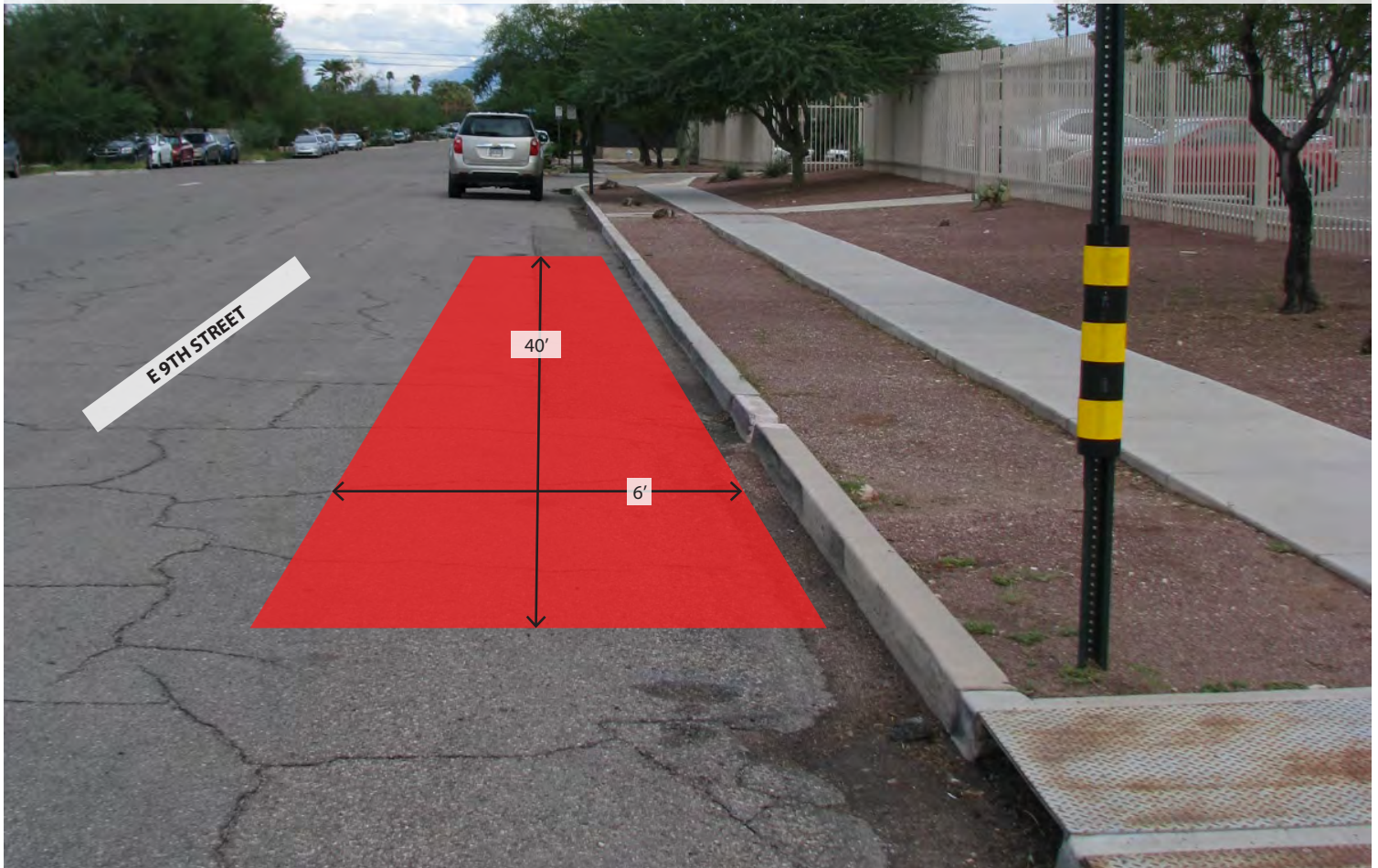
Tucson Bike Share

Date: 03/28/16
Version: 002

Designed: AW
Drawn: AW
Reviewed: AW

108B
Mountain Ave & Linden St

On-street station on south side of E 9th Street, looking east from N Park Avenue



Location: South side of E 9th Street, east of N Park Avenue

Coordinates: -110.95618 °, 32.22377 °

Type: On-street

Size: 15 docks, 1 kiosk

Station: Standard station with 90 degree docks

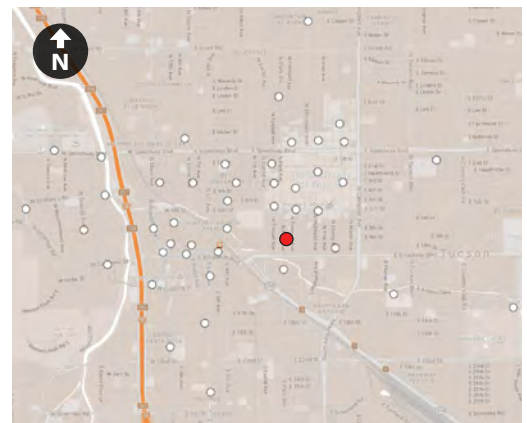
Owner: City of Tucson

Power: Solar

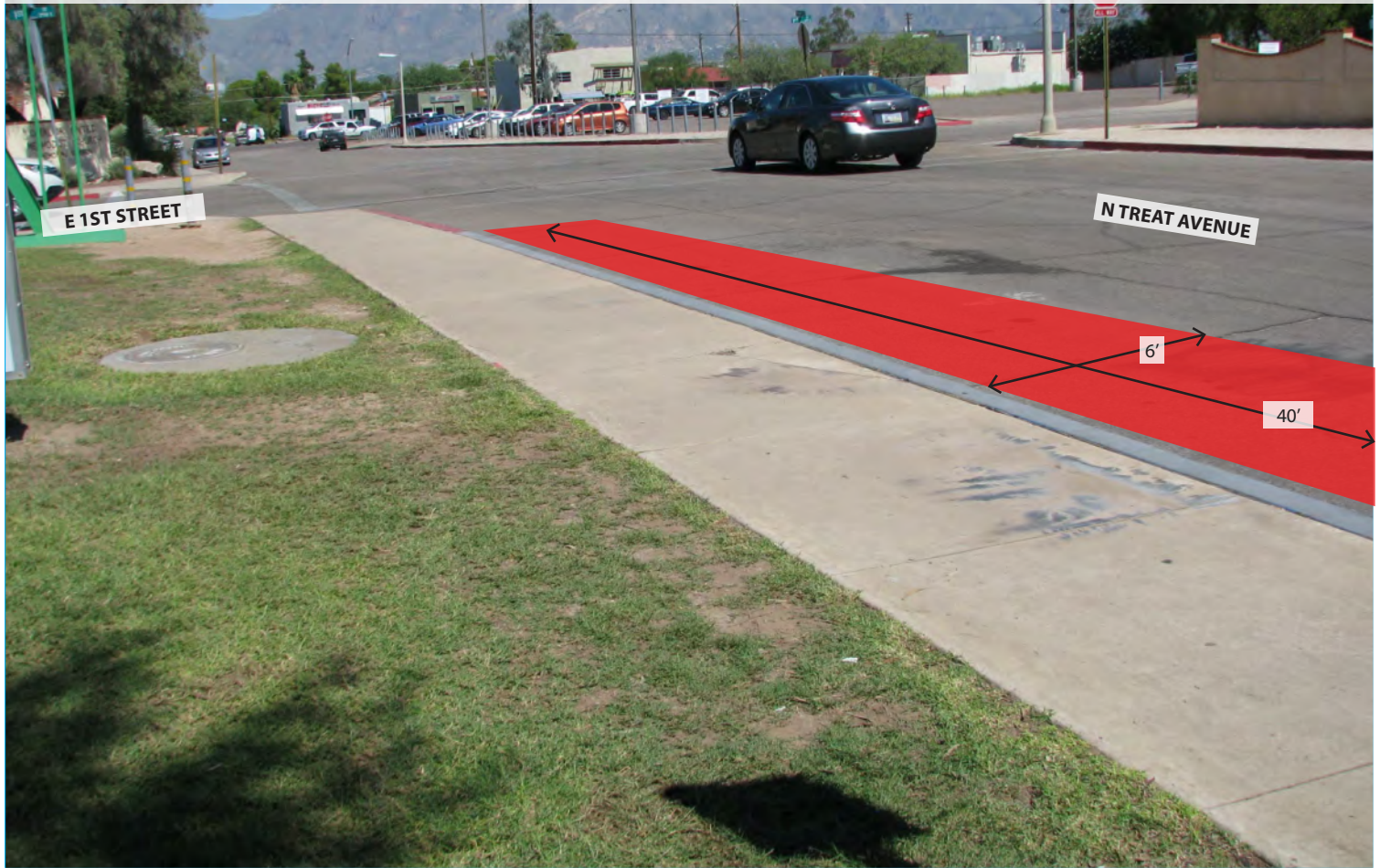
Orientation: Bikes pull towards street, kiosk faces sidewalk

Parking: Permit parking Mon - Fri 7am - 5pm

Notes:



On-street station on west side of N Treat Avenue, looking north towards E 1st Street



Location: West side of N Treat Avenue, south of E 1st Street

Coordinates: -110.93116 °, 32.23478 °

Type: On-street

Size: 15 docks, 1 kiosk

Station: Standard station with 90 degree docks

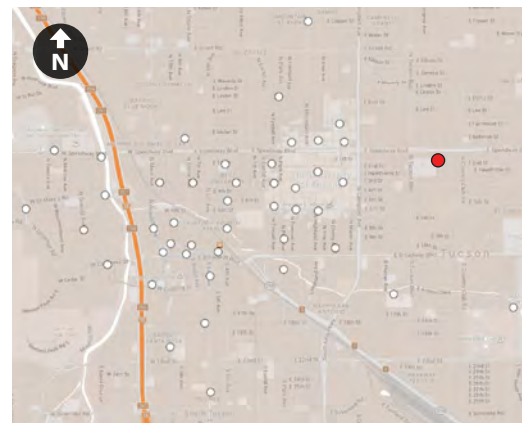
Owner: City of Tucson

Power: Solar

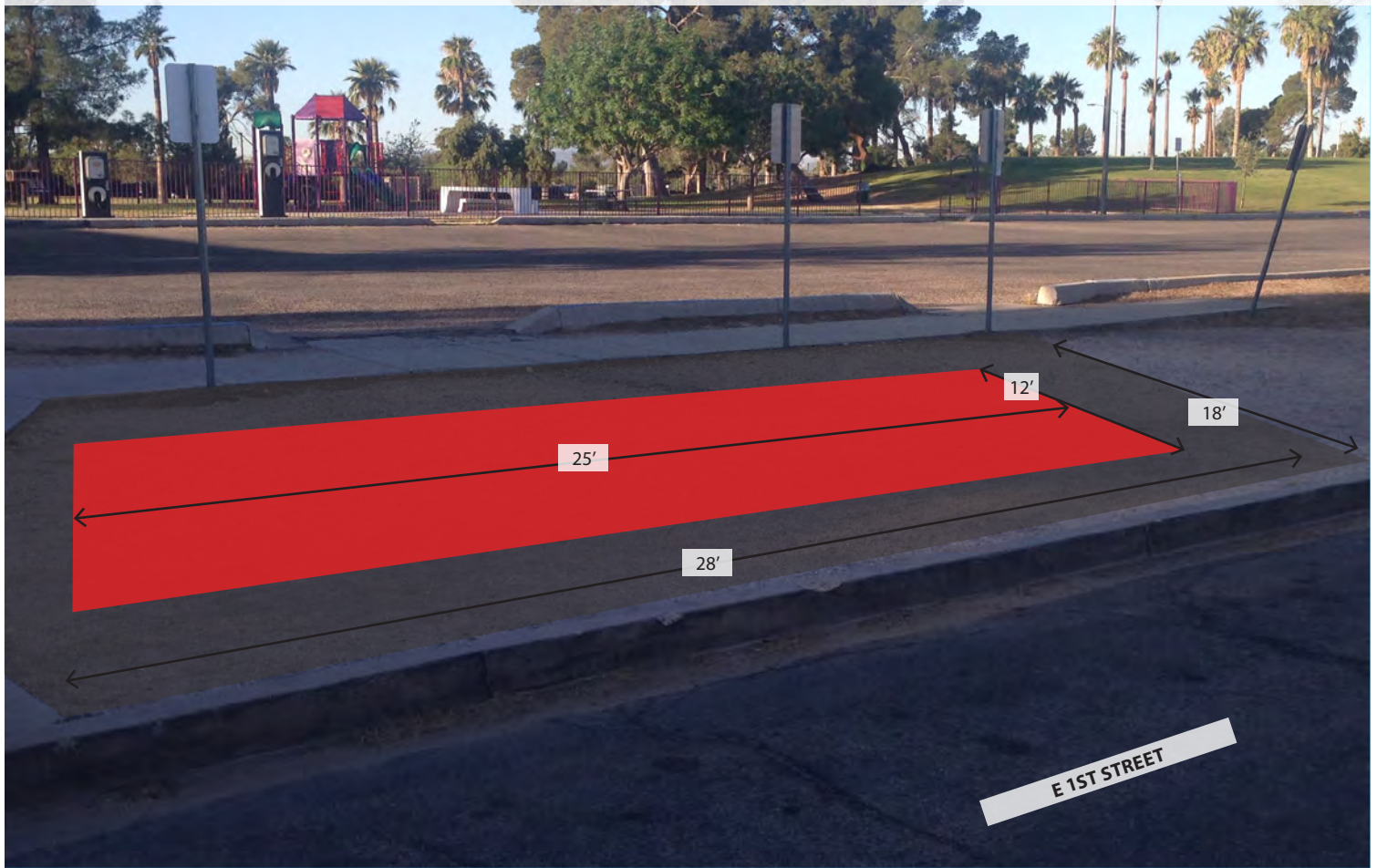
Orientation: Bikes pull towards street, kiosk faces sidewalk

Parking: Unrestricted

Notes: Located in Sam Hughes Residential Historic District



Off-street station on south side of E 1st Street, looking south from west of N Treat Avenue



Location: South side of E 1st Street, west of N Treat Avenue

Coordinates: -110.931968°, 32.234879°

Type: Off-street

Size: 19 docks, 1 kiosk

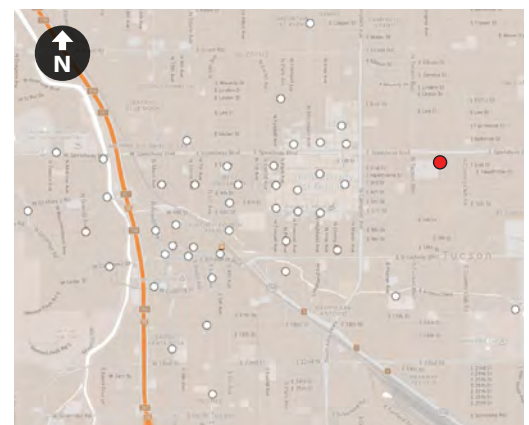
Station: Dual-sided station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards both sides of station, kiosk faces sidewalk

Notes: Concrete pad required prior to installation; signs to be relocated.
Located in Sam Hughes Residential Historic District



Sidewalk station on the west side of N Stone Avenue looking south towards W Speedway Boulevard



Location: West side of N Stone Avenue, north of W Speedway Boulevard

Coordinates: -110.971951°, 32.236277°

Type: Sidewalk

Size: 19 docks, 1 kiosk

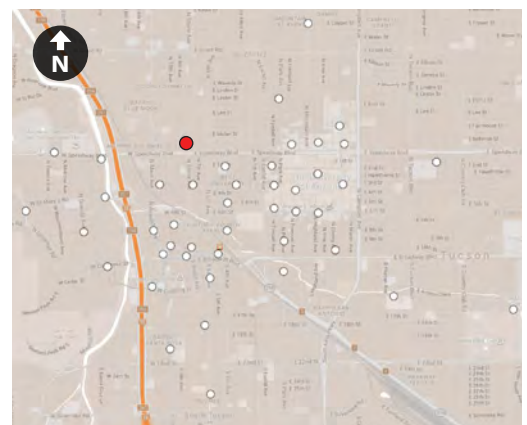
Station: Standard station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards sidewalk, kiosk faces sidewalk

Notes: Concrete pad required prior to installation





Location: North side of E 2nd street, west of N 4th Avenue

Coordinates: -110.965819°, 32.233035°

Type: Sidewalk

Size: 14 docks, 1 kiosk

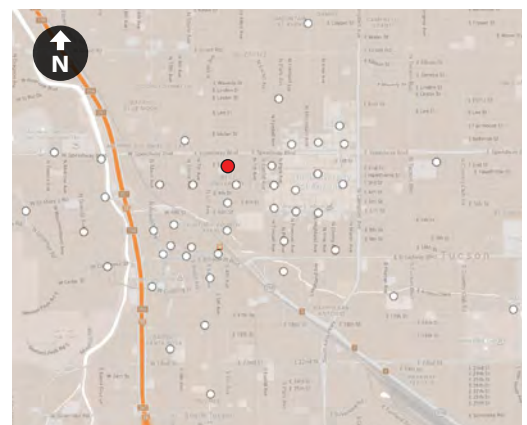
Station: Dual sided station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards both sides of station, kiosk faces sidewalk

Notes: Concrete pad required prior to installation;
sign to be relocated;
located in West University Historic District





Location: N side of E University Boulevard, east of N 9th Avenue

Coordinates: -110.973045 °, 32.231683 °

Type: On-street

Size: 16 docks, 1 kiosk

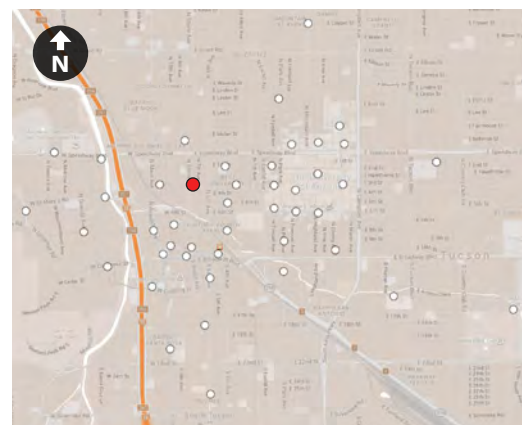
Station: Standard station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards street, kiosk faces street

Notes:



On-street station on N side of E University Boulevard, looking west towards N Stone Avenue



Location: N side of E University Boulevard, east of N Stone Avenue

Coordinates: -110.97116°, 32.23157°

Type: On-street

Size: 15 docks, 1 kiosk

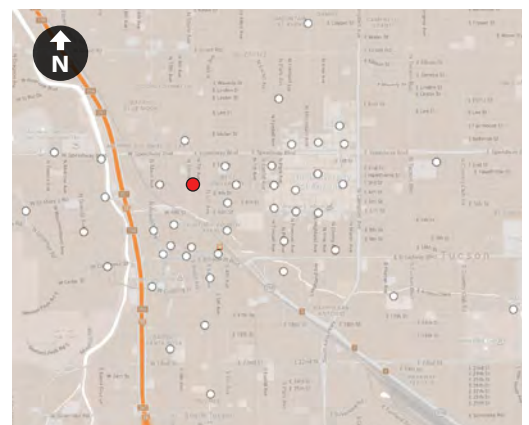
Station: Standard station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards street, kiosk faces sidewalk

Notes: Located in West University Historic District



On-street station on south side of E 5th Street, looking west towards N 4th Avenue



Location: South side of E 5th Street, east of N 4th Avenue

Coordinates: -110.96545 °, 32.22902 °

Type: On-street

Size: 25 docks, 1 kiosk

Station: Dual sided station with 90 degree docks

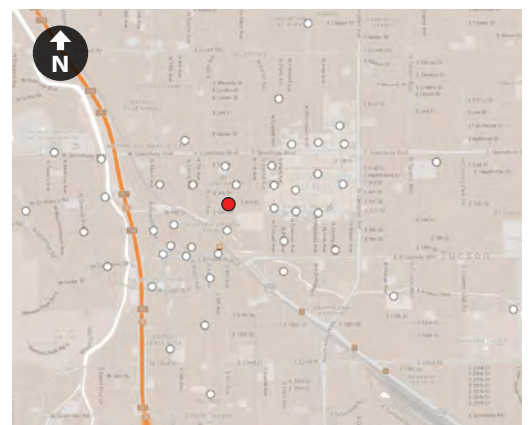
Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards both sides of the station, kiosk faces sidewalk

Parking: Metered back-in angled parking. 2 hour parking 9am -6pm Mon - Fri.
One metered disabled parking space.

Notes: Station to replace 3 metered parking spaces. Disabled parking space to be relocated to east side of property driveway.
Located in N 4th Avenue (pending historic district)



On-street station on the north side of E 5th Street, looking west towards N 4th Avenue



Location: north side of E 5th Street, east of N 4th Avenue

Coordinates: -110.9657, 32.2286

Type: on-street

Size: 25 docks, 1 kiosk

Station: standard station with 90-degree docks

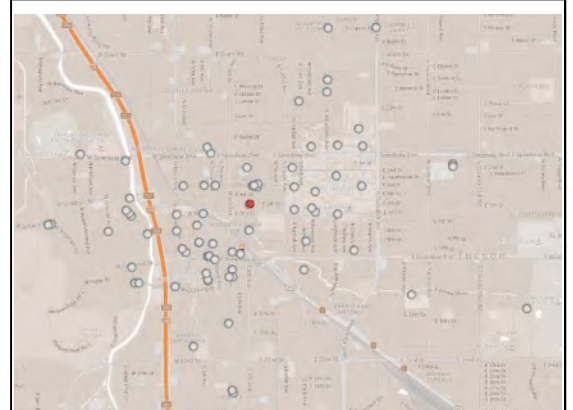
Owner: City of Tucson

Power: solar

Orientation: bikes pull towards street, kiosk faces sidewalk

Parking: 30-minute freight loading zone

Notes: Located in N 4th Avenue (pending historic district)



Tucson Bike Share

Date: 02/10/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

114B
5th Street & 4th Avenue

On-street station on the north side of E 5th Street, looking west from N 4th Avenue



Location: North side of E 5th Street, west of N 4th Avenue

Coordinates: -110.965893 °, 32.229105 °

Type: On-street

Size: 12 docks, 1 kiosk

Station: Standard station with 90 degree docks

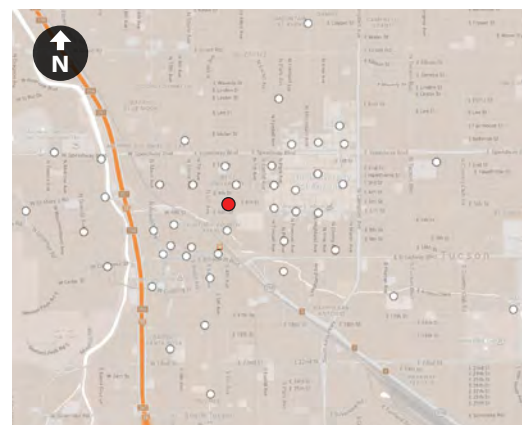
Owner: City of Tucson

Power: Solar

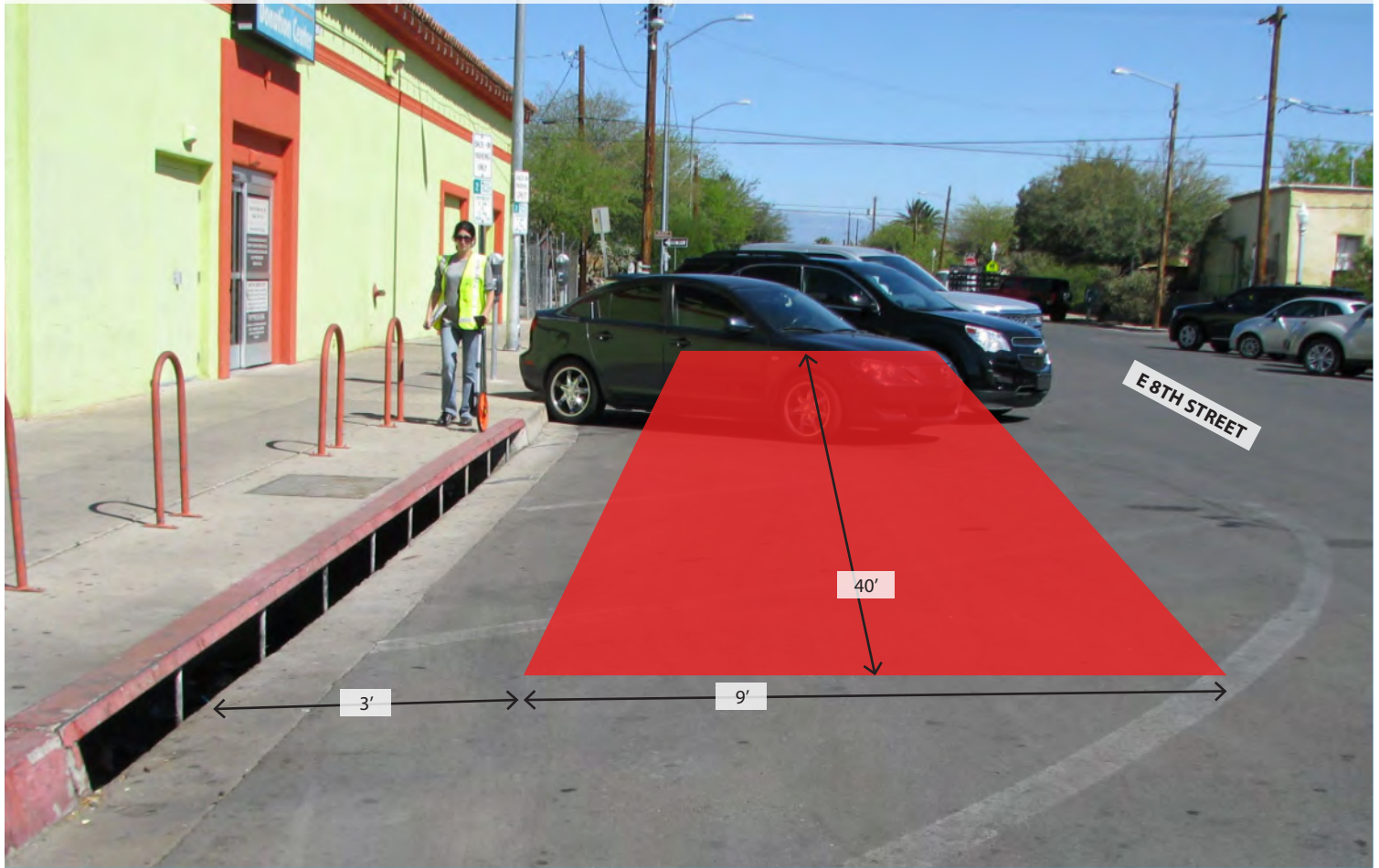
Orientation: Bikes pull towards the street, kiosk faces the street

Parking: Metered back-in angled parking. 2 hour parking 9am -6pm Mon - Fri.

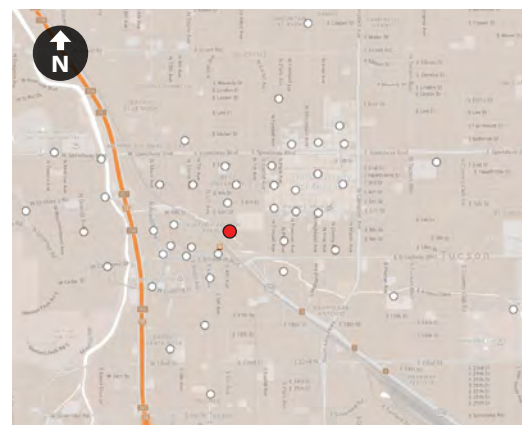
Notes: Station to replace 2 metered parking spaces.
City to install delineators to mark station boundaries.
Located in N 4th Avenue (pending historic district)



On-street station on north side of E 8th Street, looking east from N 4th Avenue



- Location:** North side of E 8th Street, east of N 4th Avenue
- Coordinates:** -110.965356°, 32.225181 °
- Type:** On-street
- Size:** 23 docks, 1 kiosk
- Station:** Dual sided station with 90 degree docks
- Owner:** City of Tucson
- Power:** Solar
- Orientation:** Bikes pull towards both sides of the station, kiosk faces sidewalk
- Parking:** 2 hour metered back-in angle parking, 9am - 6pm Mon - Fri
- Notes:** Station replaces 2 metered parking spaces.
City to install delineators to mark station boundaries.
Located in N 4th Avenue (pending historic district)



On-street station on east side of S Park Avenue, looking north from E Miles Street



Location: East side of S Park Avenue, north of E Miles Street

Coordinates: -110.9563 °, 32.21955 °

Type: On-street

Size: 17 docks, 1 kiosk

Station: Standard station with 90 degree docks

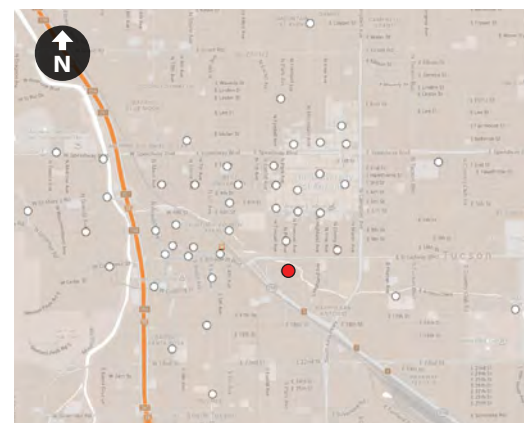
Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards street, kiosk faces street

Parking: Unrestricted

Notes:





Location: South side of E 15th Street, west of E Parkway Terrace

Coordinates: -110.93815 °, 32.21613 °

Type: On-street

Size: 15 docks, 1 kiosk

Station: Standard station with 90 degree docks

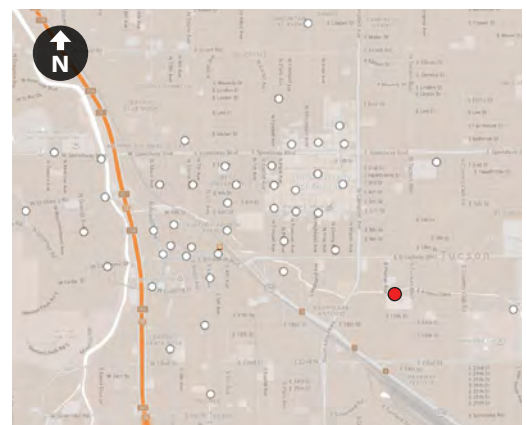
Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards street, kiosk faces sidewalk

Parking: Unrestricted

Notes: Near Arroyo Chico Greenway



On-street station on south side of E Camino Campestre, looking east towards Randolph Way



Location: South side of E Camino Campestre, west of Randolph Way

Coordinates: -110.91851 °, 32.21423 °

Type: On-street

Size: 26 docks, 1 kiosk

Station: Standard station with 90 degree docks

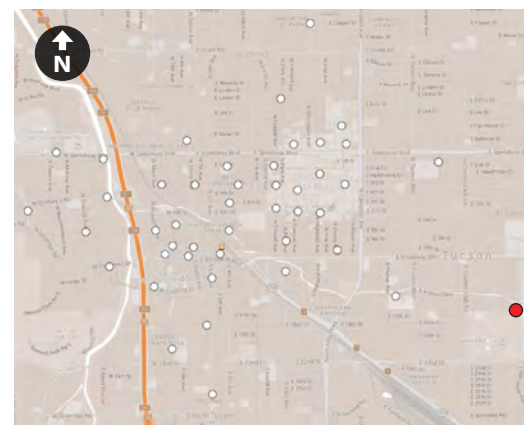
Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards street, kiosk faces street

Parking: Unrestricted

Notes:



Sidewalk station on east side of S 5th Avenue, looking south from E Congress Street



Location: East side of S 5th Avenue, south of E Congress Street

Coordinates: -110.96701 °, 32.22198 °

Type: Sidewalk

Size: 30 docks, 1 kiosk

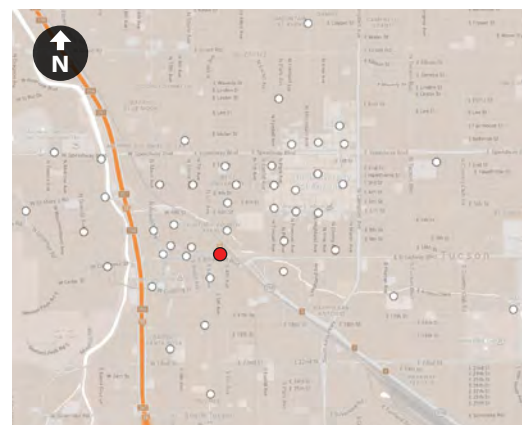
Station: Standard station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards sidewalk, kiosk faces sidewalk

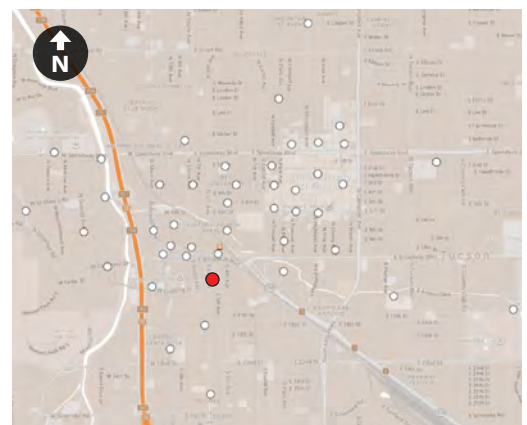
Notes: Located in Downtown Tucson Historic District (pending)



On-street station on north side of E 13th Street, looking north, from just east of S 6th Street



- Location:** North side of E 13th Street, east of S 6th Street
- Coordinates:** -110.96836 °, 32.21858 °
- Type:** On-street
- Size:** 23 docks, 1 kiosk
- Station:** Dual-sided station with 90 degree docks
- Owner:** City of Tucson
- Power:** Solar
- Orientation:** Bikes pull towards street and sidewalk, kiosk faces sidewalk
- Parking:** In place of four (4) metered diagonal parking spaces
- Notes:** Located in Armory Park Residential Historic District



Sidewalk station on east side of N Church Avenue, looking south from W Congress Street



Location: East side of N Church Avenue, south of W Congress Street

Coordinates: -110.97229°, 32.22166°

Type: Sidewalk

Size: 19 docks, 1 kiosk

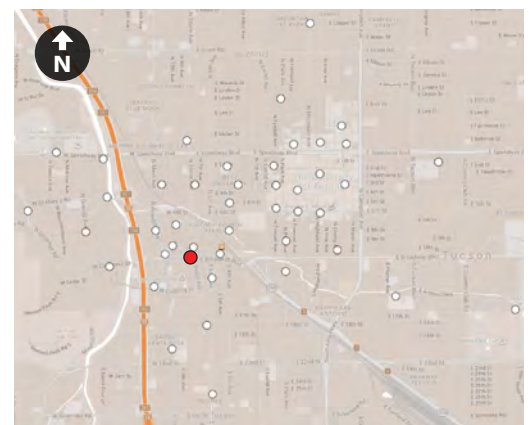
Station: Standard station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards street, kiosk faces street

Notes:



Sidewalk station on west side of N Stone Avenue, looking north from W Pennington-street



Location: West side of N Stone Avenue, north of W Pennington-street

Coordinates: -110.971588°, 32.223382°

Type: Sidewalk

Size: 27 docks, 1 kiosk

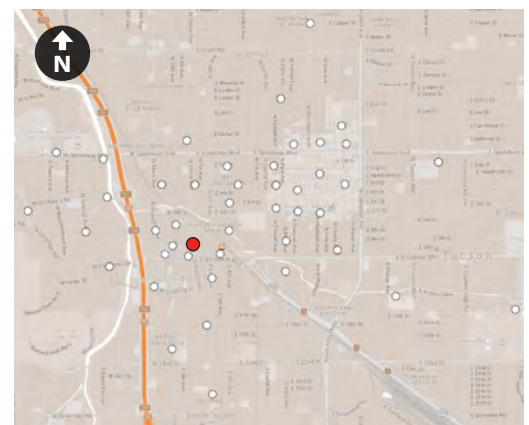
Station: Standard station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards plaza, kiosk faces plaza

Notes: Bike racks to be relocated;
located in Downtown Tucson Historic District (pending)



Sidewalk station on north side of W Alameda Street, looking west from N Court Avenue



Location: North side of W Alameda Street, west of N Court Avenue

Coordinates: -110.974020°, 32.223541°

Type: Sidewalk

Size: 13 docks, 1 kiosk

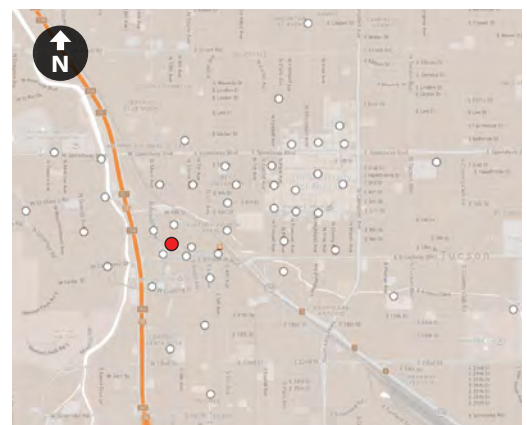
Station: Standard station with 90 degree docks

Owner: City of Tucson

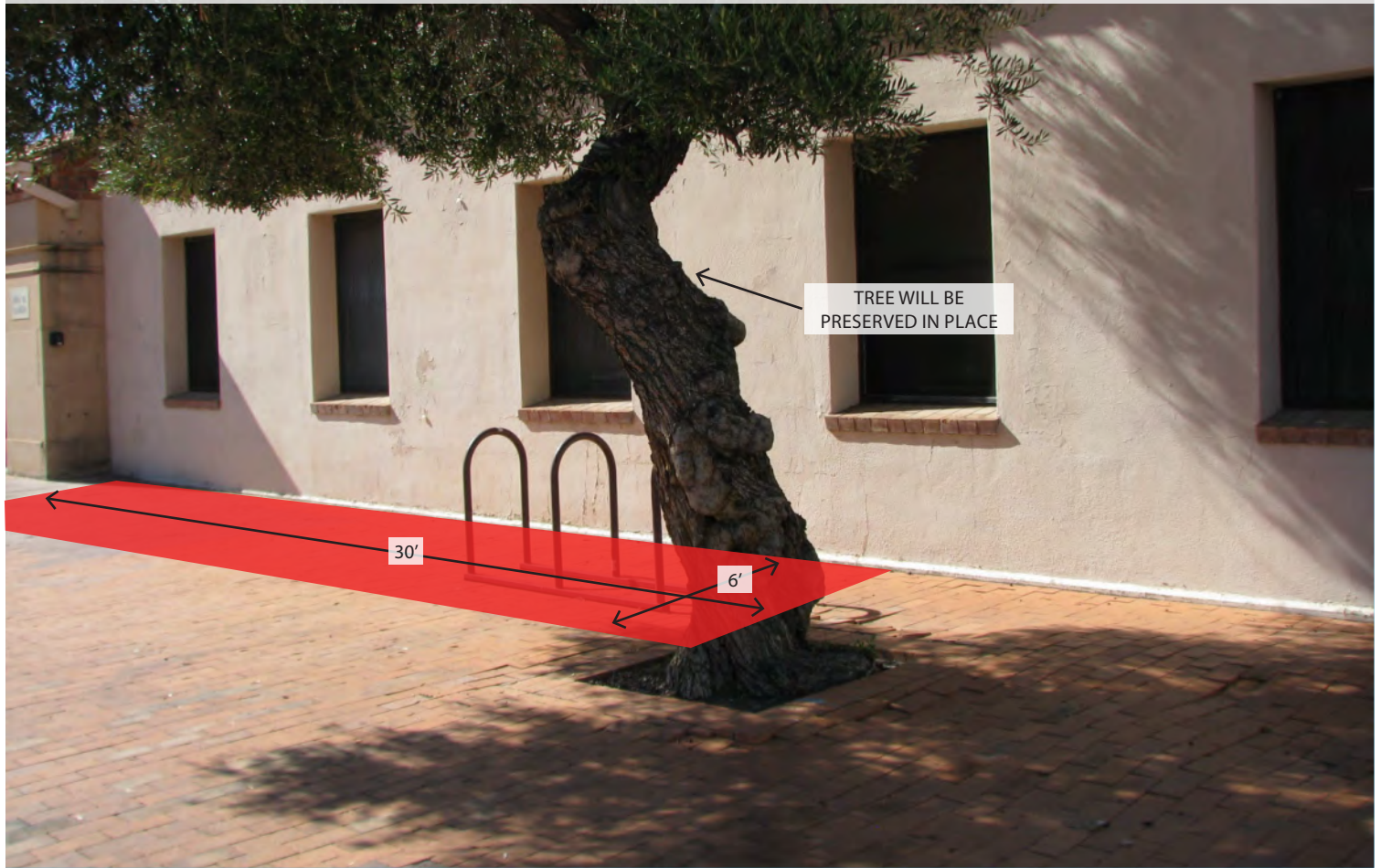
Power: Solar

Orientation: Bikes pull towards sidewalk, kiosk faces sidewalk

Notes: Located in El Presidio Historic District



Sidewalk station on north side of W Alameda Street against art museum, looking north from W Alameda Street



Location: North side of W Alameda Street against art museum, west of N Court Avenue

Coordinates: -110.973971 °, 32.223612°

Type: Sidewalk

Size: 11 docks, 1 kiosk

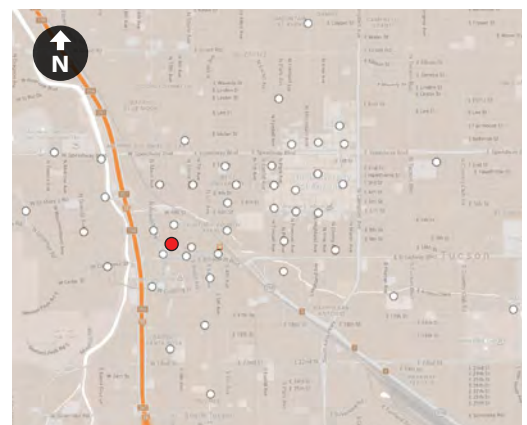
Station: Standard station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards sidewalk, kiosk faces sidewalk

Notes: Bike racks to be relocated.
Located in El Presidio Historic District



Sidewalk station on east side of S Avenida del Convento, looking east from south of W Congress Street



Location: East side of S Avenida del Convento, south of W Congress Street

Coordinates: -110.98527 °, 32.22018 °

Type: Sidewalk

Size: 15 docks, 1 kiosk

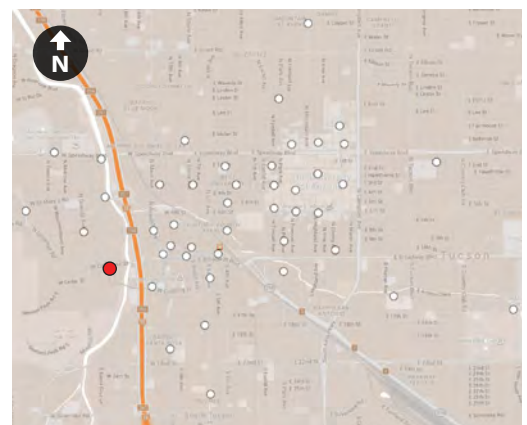
Station: Standard station with 90 degree docks

Owner: City of Tucson

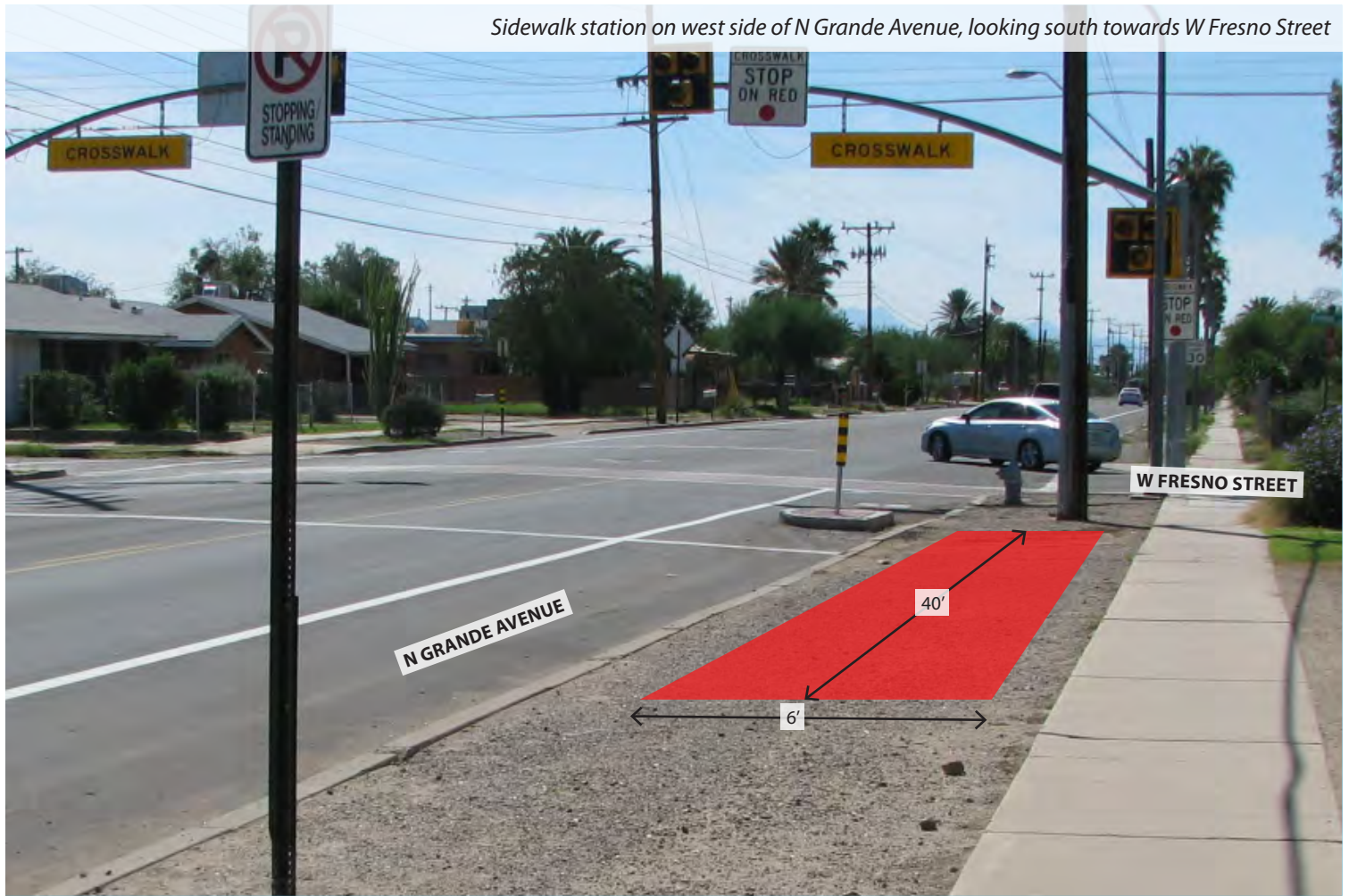
Power: Solar

Orientation: Bikes pull towards sidewalk, kiosk faces sidewalk

Notes:



Sidewalk station on west side of N Grande Avenue, looking south towards W Fresno Street



Location: West side of N Grande Avenue, north of W Fresno Street

Coordinates: -110.98914 °, 32.22503 °

Type: Sidewalk

Size: 15 docks, 1 kiosk

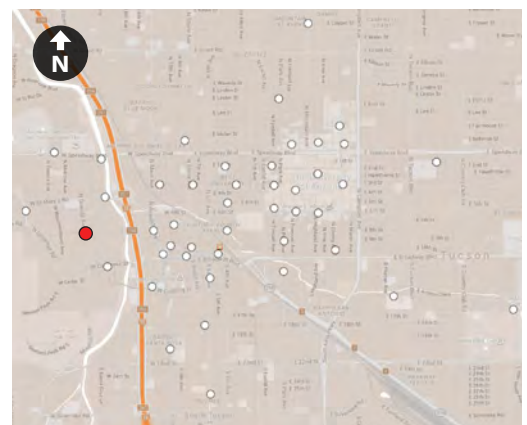
Station: Standard station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards sidewalk, kiosk faces sidewalk

Notes: Concrete pad required prior to installation;
located in Menlo Park Historic District



On-street station on the east side of N Bonita Avenue, opposite N Commerce Park Loop



Location: east side of N Bonita Avenue, opposite N Commerce Park Loop

Coordinates: -110.9828, 32.2251

Type: on-street

Size: 15 docks, 1 kiosk

Station: standard station with 90-degree docks

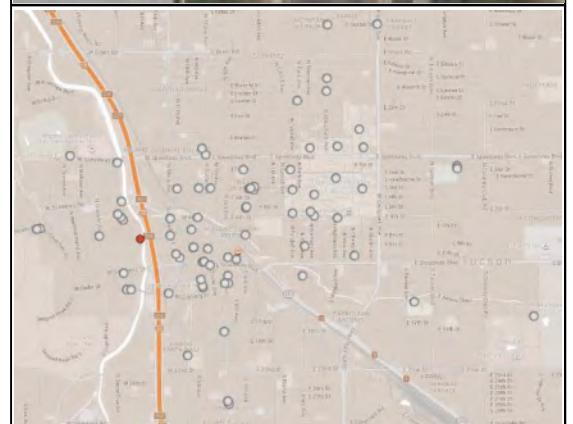
Owner: City of Tucson

Power: solar

Orientation: bikes pull towards street, kiosk faces sidewalk

Parking: 2-hour parking, 8 AM to 5PM

Notes:



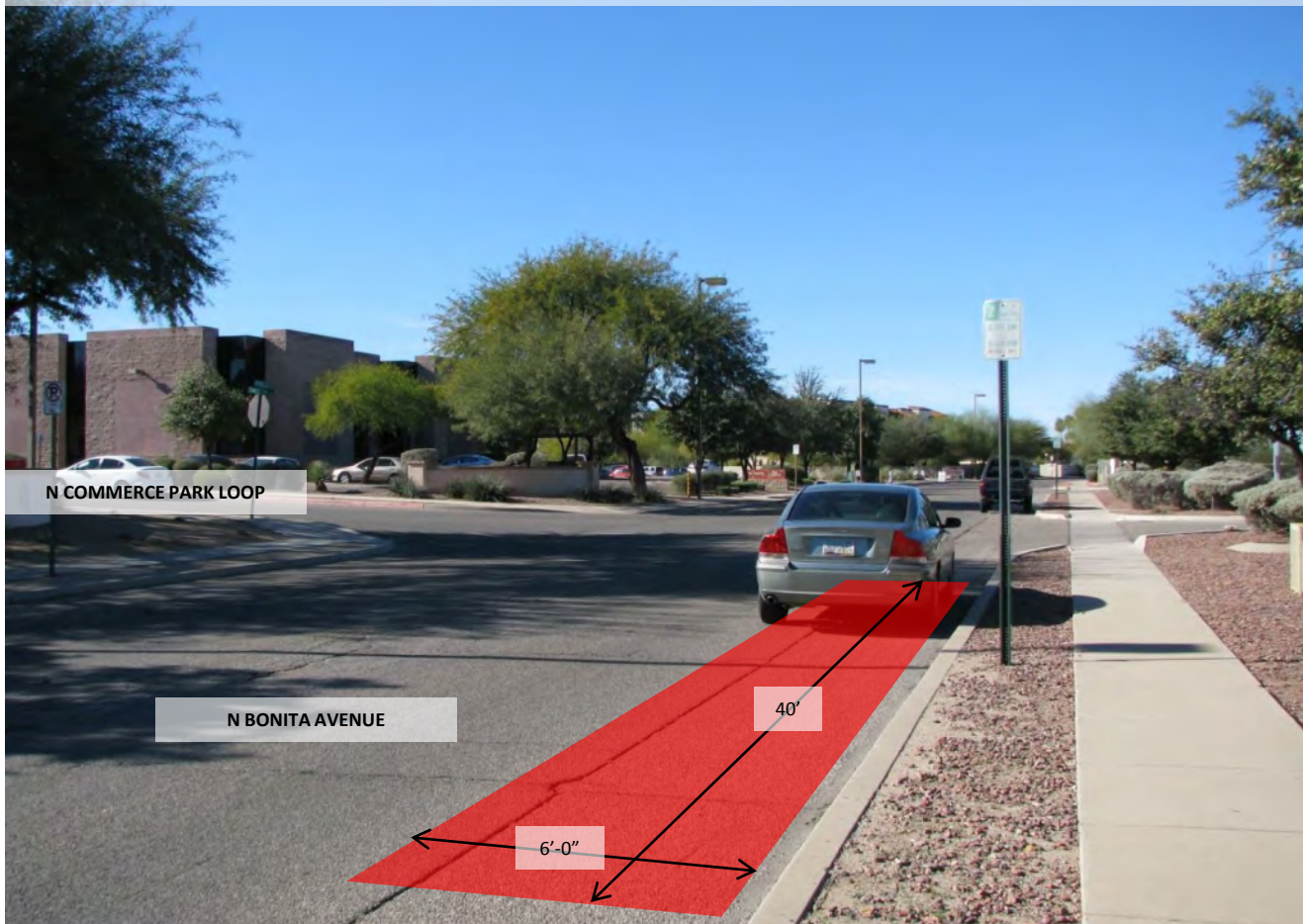
Tucson Bike Share

Date: 02/10/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

127A
N Bonita Ave & N Commerce Park Loop

On-street station on the east side of N Bonita Avenue, south of N Commerce Park Loop



Location: east side of N Bonita Avenue, south of N Commerce Park Loop

Coordinates: -110.9837, 32.2264

Type: on-street

Size: 15 docks, 1 kiosk

Station: standard station with 90-degree docks

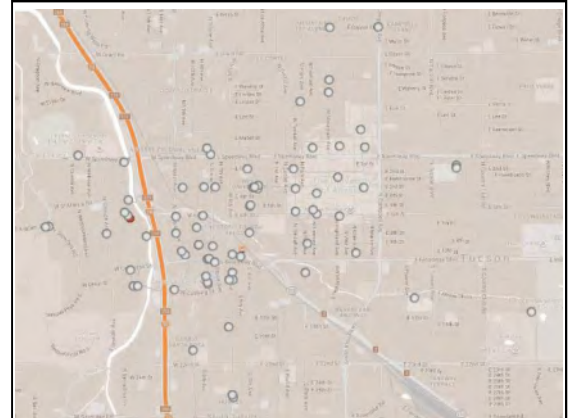
Owner: City of Tucson

Power: solar

Orientation: bikes pull towards street, kiosk faces sidewalk

Parking: 2-hour parking, 8 AM to 5PM

Notes:



Tucson Bike Share

Date: 02/10/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

127B
N Bonita Ave & N Commerce Park Loop

On-street station on the east side of N Bonita Avenue, north of N Commerce Park Loop



Location: east side of N Bonita Avenue, north of N Commerce Park Loop

Coordinates: -110.9837, 32.2264

Type: on-street

Size: 15 docks, 1 kiosk

Station: standard station with 90-degree docks

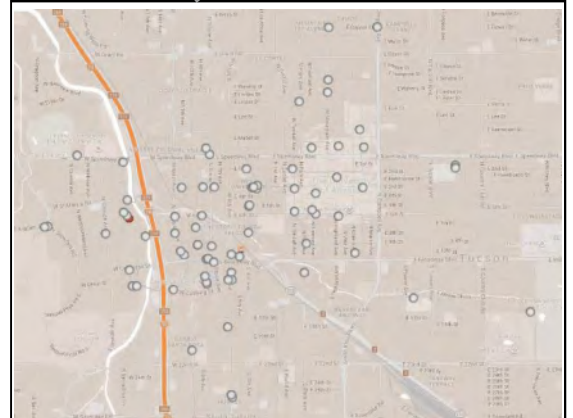
Owner: City of Tucson

Power: solar

Orientation: bikes pull towards street, kiosk faces sidewalk

Parking: 2-hour parking, 8 AM to 5PM

Notes:



Tucson Bike Share

Date: 02/10/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

127C
N Bonita Ave & N Commerce Park Loop

On-street station on the east side of N Bonita Avenue, north of N Commerce Park Loop



Location: east side of N Bonita Avenue, north of N Commerce Park Loop

Coordinates: -110.9851, 32.2277

Type: on-street

Size: 15 docks, 1 kiosk

Station: standard station with 90-degree docks

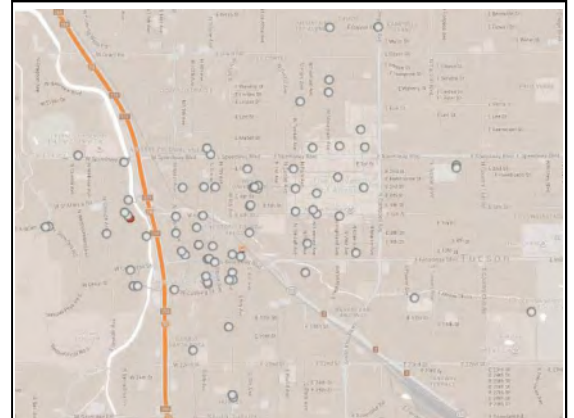
Owner: City of Tucson

Power: solar

Orientation: bikes pull towards street, kiosk faces sidewalk

Parking: 2-hour parking, 8 AM to 5PM

Notes:



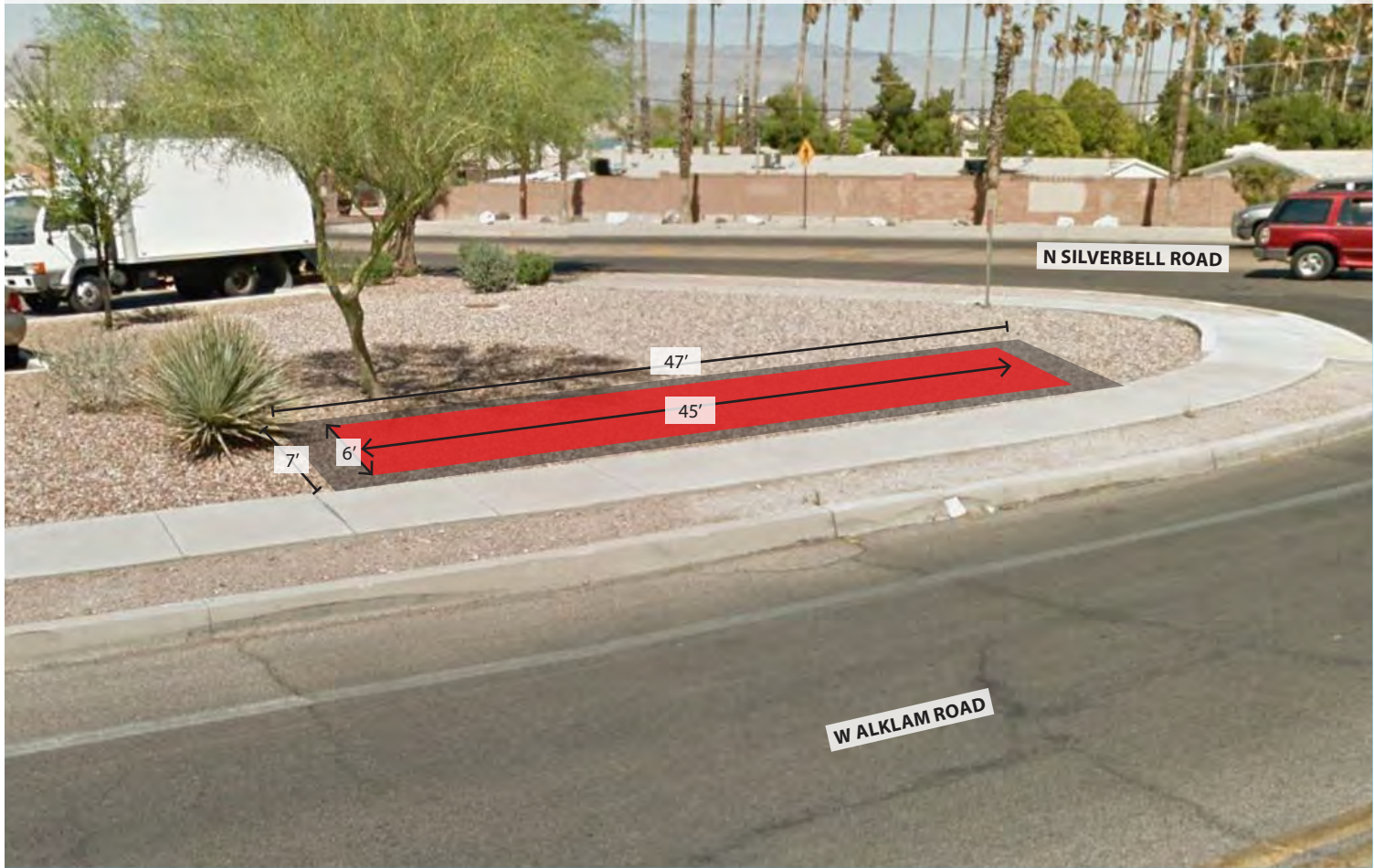
Tucson Bike Share

Date: 02/10/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

127D
N Bonita Ave & N Commerce Park Loop

Sidewalk station on north side of W Alklam Road, looking northeast towards N Silverbell Road



Location: North side of W Alklam Road, west of N Silverbell Road

Coordinates: -110.998776°, 32.226121°

Type: Sidewalk

Size: 17 docks, 1 kiosk

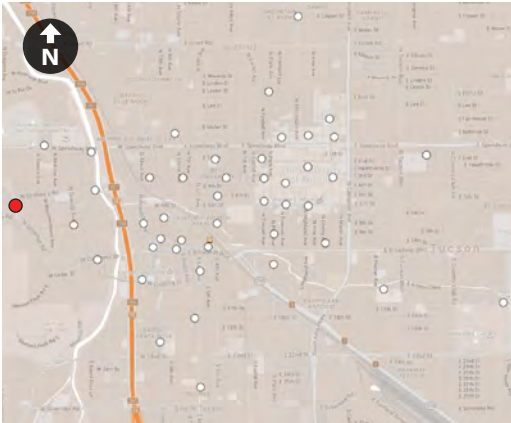
Station: Standard station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards sidewalk, kiosk faces sidewalk

Notes: Concrete pad required prior to installation



On-street station on the south side of W Alklam Road, looking west from N Hasman Drive



Location: south side of W Alklam Road, west of N Hasman Drive

Coordinates: -110.0004, 32.2269

Type: on-street

Size: 15 docks, 1 kiosk

Station: standard station with 90-degree docks

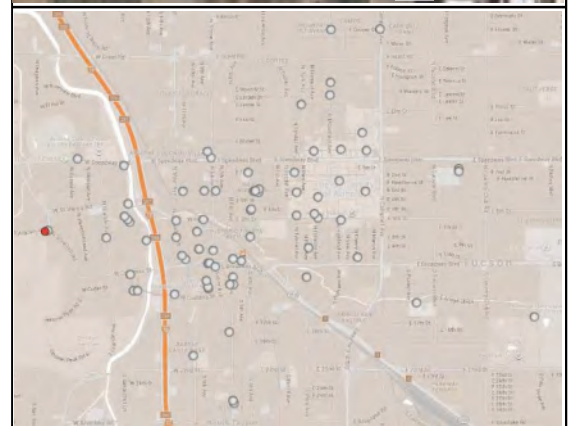
Owner: City of Tucson

Power: solar

Orientation: bikes pull towards street, kiosk faces sidewalk

Parking: no restrictions

Notes:

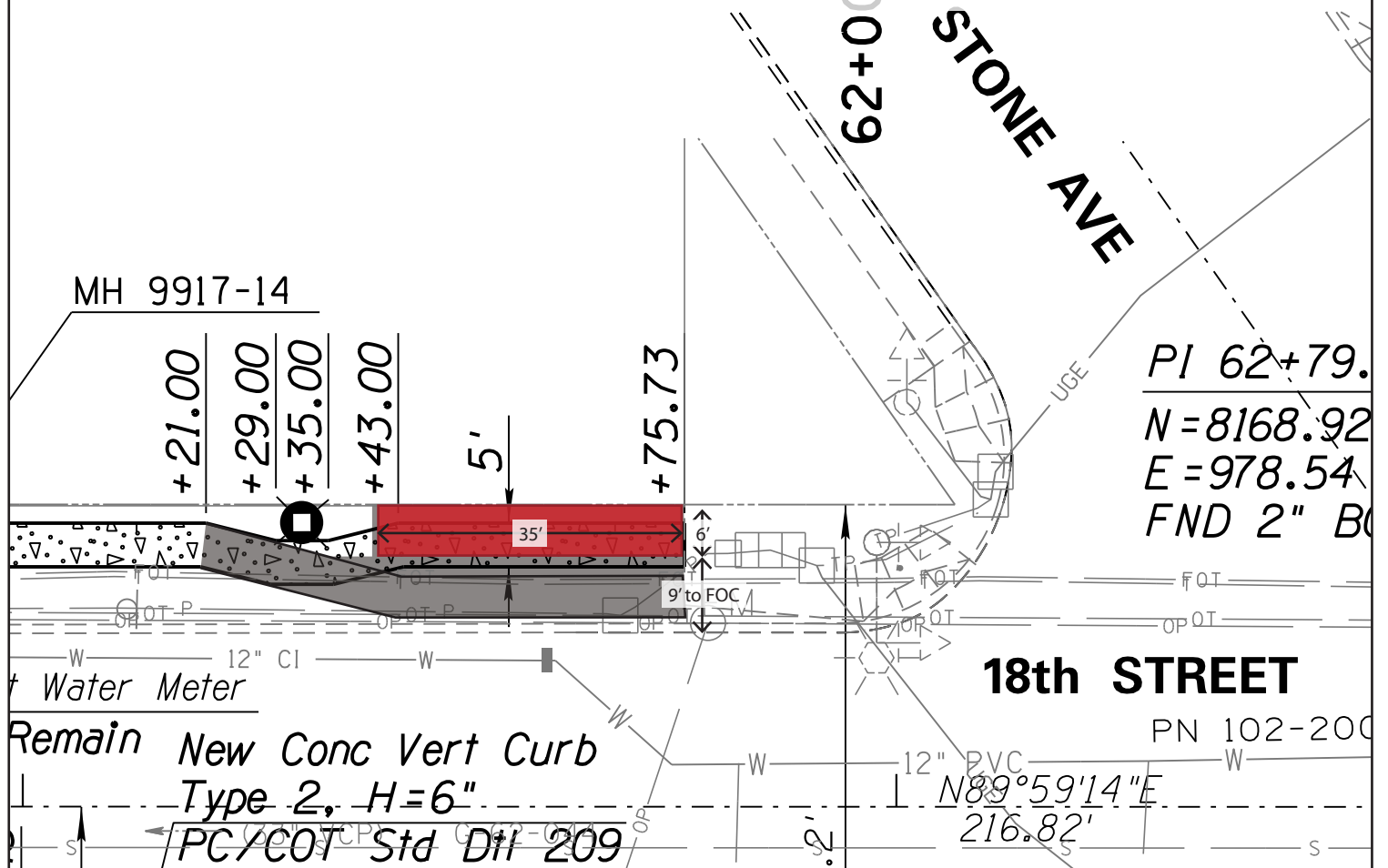


Tucson Bike Share

Date: 02/10/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

128B
St. Mary's Hospital



Location: North side of W 18th Street, west of S Stone Street

Coordinates: -110.9692 °, 32.21208 °

Type: Sidewalk

Size: 13 docks, 1 kiosk

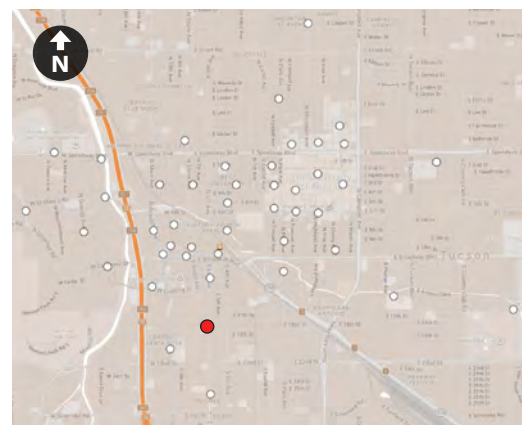
Station: Standard station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards sidewalk, kiosk faces sidewalk

Notes: Concrete pad required prior to installation;
located in Barrio Libre Historic District



On-street station on the north side of W 18th Street, looking east towards S Stone Avenue



Location: north side of W 18th Street, west of S Stone Avenue

Coordinates: -110.0004, 32.2269

Type: on-street

Size: 19 docks, 1 kiosk

Station: standard station with 90-degree docks

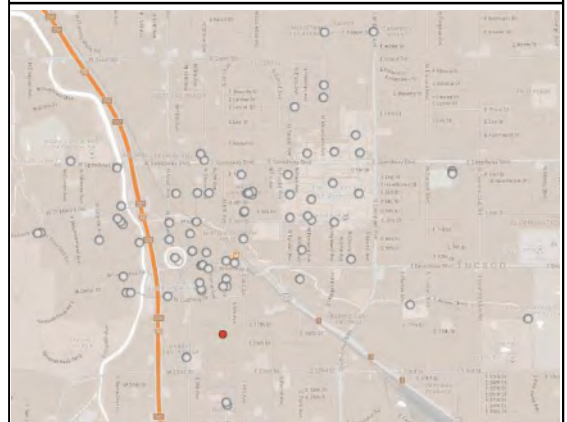
Owner: City of Tucson

Power: solar

Orientation: bikes pull towards street, kiosk faces sidewalk

Parking: no restrictions

Notes: Located in Barrio Libre Historic District



Tucson Bike Share

Date: 02/10/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

129B
Five Points

Off-street station in the plaza of the South Tucson Municipal Complex



Location: east side of S 6th Avenue, south of E 26th Street

Coordinates: -110.9687, 32.2024

Type: off-street

Size: 17 docks, 1 kiosk

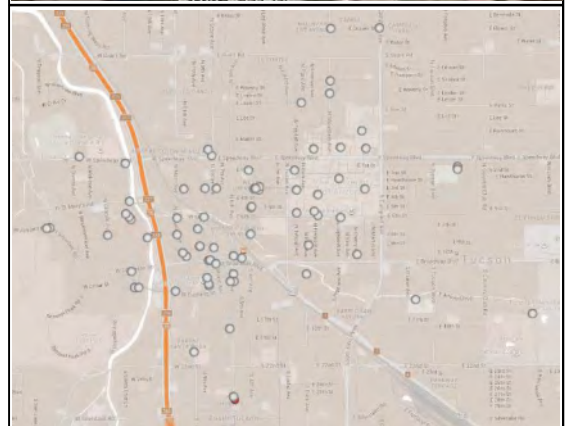
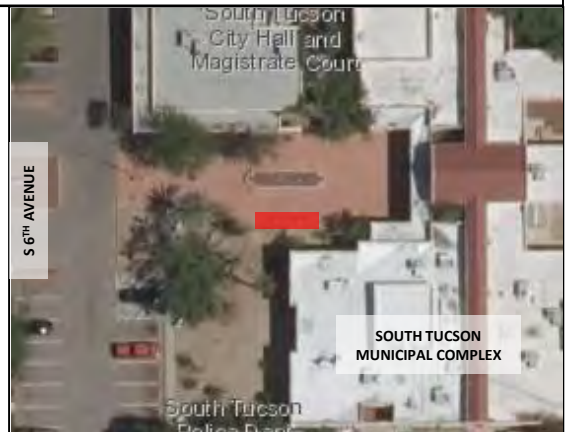
Station: standard station with 90-degree docks

Owner: City of Tucson

Power: solar

Orientation: bikes pull into plaza, kiosk faces into plaza

Notes:



Tucson Bike Share

Date: 02/10/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

130A
S 6th Avenue & 26th Street



Location: East side of S 6th Avenue, south of E 26th Street

Coordinates: -110.9683 °, 32.20254 °

Type: Off-street

Size: 15 docks, 1 kiosk

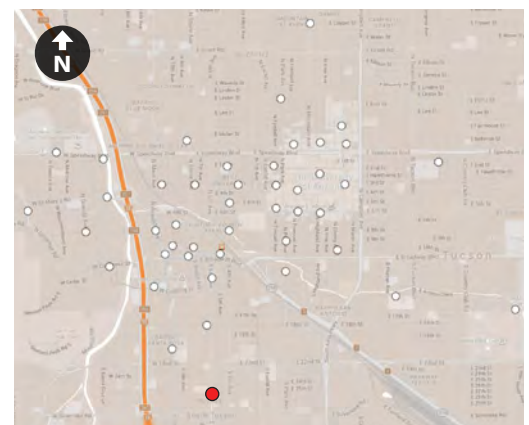
Station: Dual sided station with 90 degree docks

Owner: City of South Tucson

Power: Solar

Orientation: Bikes pull towards both sides of the station, kiosk faces sidewalk

Notes: Station to be installed in place of 3 parking spaces in front of the South Tucson Library. The adjacent disabled parking space will be maintained.



Bike share station on east side of N Warren Avenue, looking north from E Drachman Street



Location: East side of N Warren Avenue, north of E Drachman Street

Coordinates: -110.94728 °, 32.23971 °

Type: Off-street

Size: 19 docks, 1 kiosk

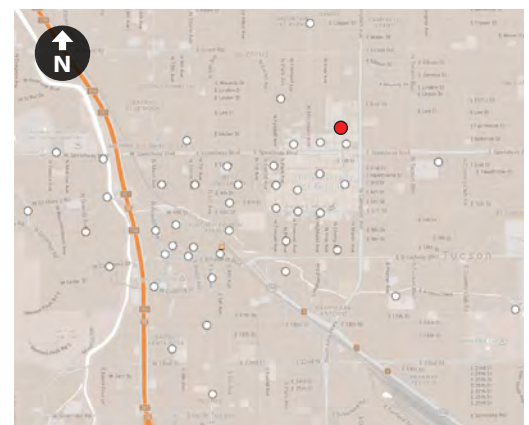
Station: Standard station with 90 degree docks

Owner: University of Arizona

Power: Solar

Orientation: Bikes pull towards plaza, kiosk faces plaza

Notes:



Sidewalk station on south side of E 1st Street, looking east towards N Tyndall Avenue



Location: South side of E 1st Street, west of N Tyndall Avenue

Coordinates: -110.95838 °, 32.23427 °

Type: Sidewalk

Size: 21 docks, 1 kiosk

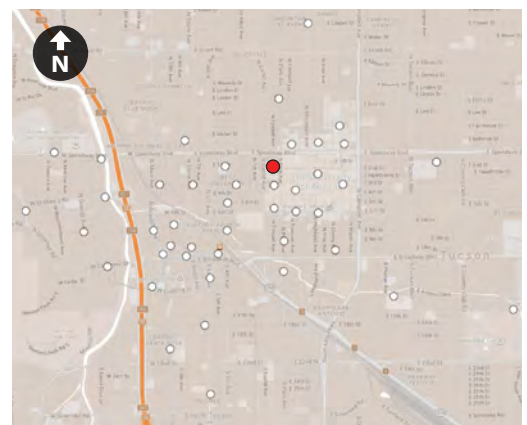
Station: Standard station with 90 degree docks

Owner: City of Tucson

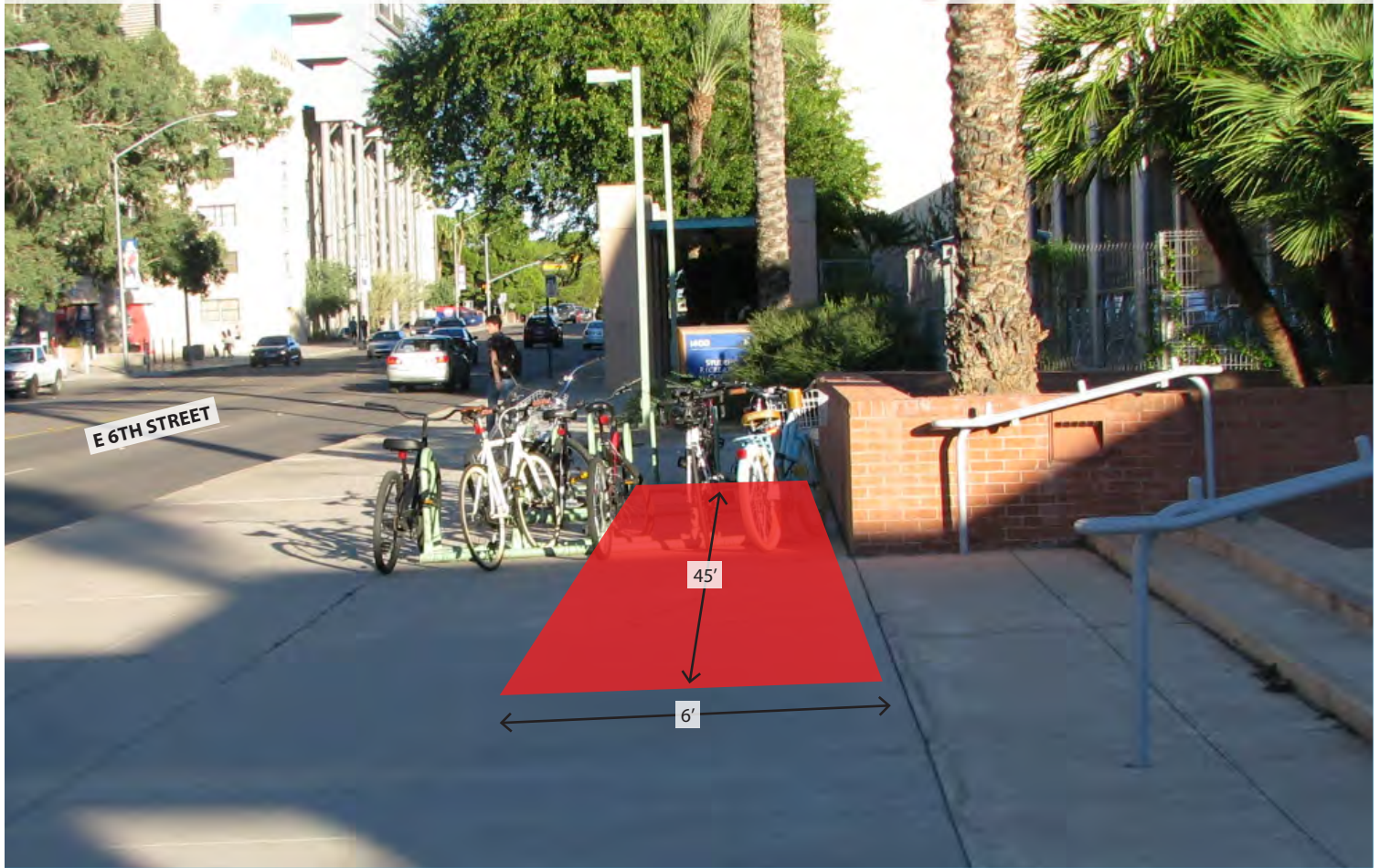
Power: Solar

Orientation: Bikes pull towards sidewalk, kiosk faces sidewalk

Notes: Concrete pad required prior to installation;
located in West University Historic District



Sidewalk station on south side of E 6th Street, looking east from N Highland Avenue



Location: South side of E 6th Street, east of N Highland Avenue

Coordinates: -110.95062 °, 32.22773°

Type: Sidewalk

Size: 17 docks, 1 kiosk

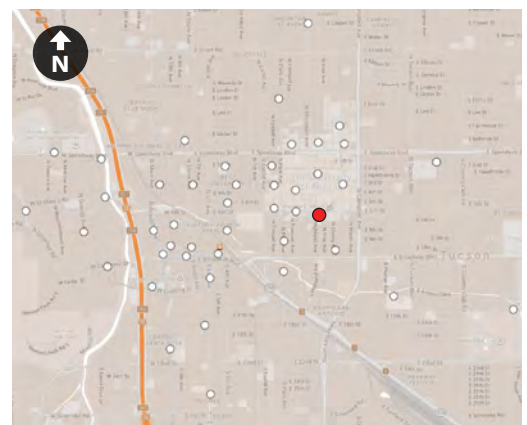
Station: Standard station with 90 degree docks

Owner: University of Arizona

Power: Solar

Orientation: Bikes pull towards sidewalk, kiosk faces sidewalk

Notes: Bike racks to be relocated



Sidewalk station on the north side of E 6th Street, looking east from N Tucson Boulevard



Location: North side of E 6th Street, east of N Tucson Boulevard

Coordinates: -110.935130 °, 32.228009 °

Type: Sidewalk

Size: 17 docks, 1 kiosk

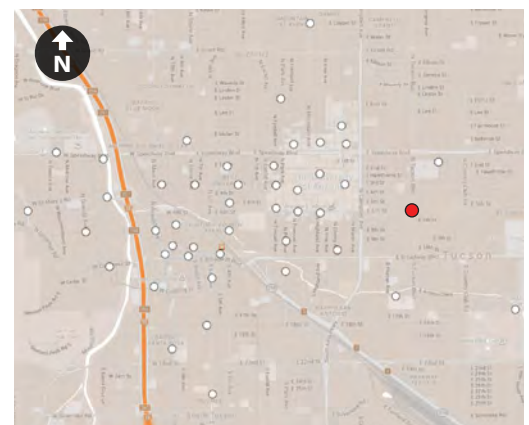
Station: Standard station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards both sides of station, kiosk faces sidewalk

Notes: Parking sign and planter to be relocated;
located in Sam Hughes Residential Historic District



On-street station on the east side of N 3rd Avenue, looking northeast from E University Boulevard



Location: east side of N 3rd Avenue, north of University Boulevard

Coordinates: -110.9644, 32.2315

Type: on-street

Size: 14 docks, 1 kiosk

Station: standard station with 90-degree docks

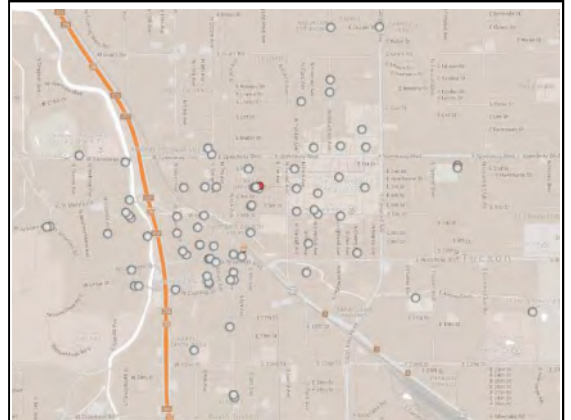
Owner: City of Tucson

Power: solar

Orientation: bikes pull towards street, kiosk faces sidewalk

Parking: unrestricted

Notes: Located in West University Historic District



Tucson Bike Share

Date: 02/10/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

208B
N 3rd Ave & E University Blvd

On-street station on the south side of E University Boulevard, looking east towards N 3rd Avenue



Location: south side of E University Boulevard, west of N 3rd Avenue

Coordinates: -110.9644, 32.2315

Type: on-street

Size: 23 docks, 1 kiosk

Station: standard station with 90-degree docks

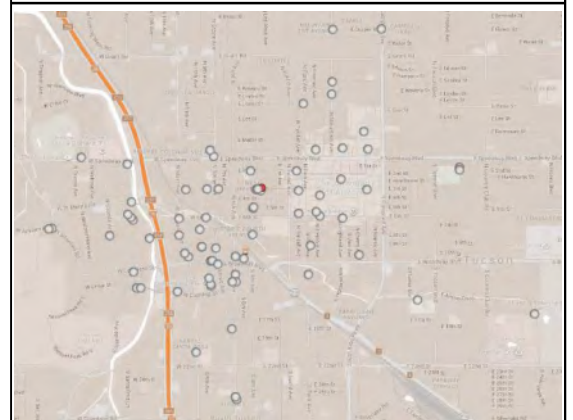
Owner: City of Tucson

Power: solar

Orientation: bikes pull towards street, kiosk faces sidewalk

Parking: 2-hour, metered parking

Notes: Located in West University Historic District



Tucson Bike Share

Date: 02/10/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

208C
E University Blvd & N 3rd Ave

Off-street station in W Granada Avenue median, looking north from just west of W Cushing Street



Location: W Granada Avenue median, southwest of W Cushing Street

Coordinates: -110.97791 °, 32.21741 °

Type: Off-street

Size: 19 docks, 1 kiosk

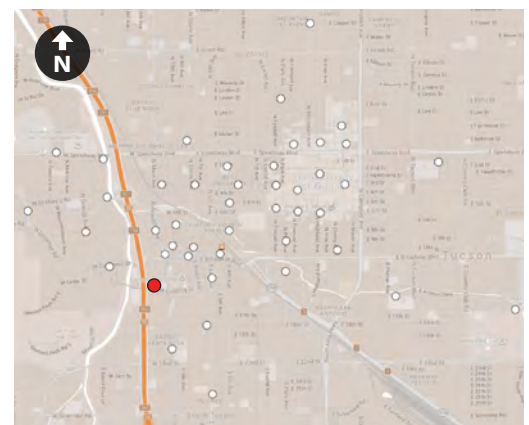
Station: Standard station with 90 degree docks

Owner: City of Tucson

Power: Solar

Orientation: Bikes pull south, kiosk faces south

Notes: Located in Barrio El Membrillo Historic District



On-street station on north side of W La Paz Street, looking east towards S 10th Avenue



Location: North side of W La Paz Street, west of S 10th Avenue

Coordinates: -110.97491 °, 32.20878 °

Type: On-street

Size: 21 docks, 1 kiosk

Station: Standard station with 90 degree docks

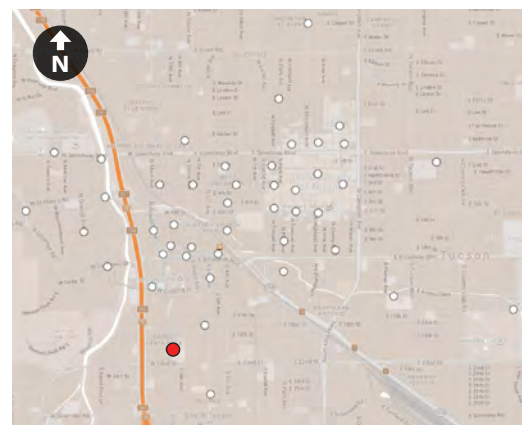
Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards street, kiosk faces street

Parking: Unrestricted

Notes:



On-street station on the north side of E Copper Street, looking east towards N Campbell Avenue



Location: north side of E Copper Street, west of N Campbell Avenue

Coordinates: -110.9446, 32.2536

Type: on-street

Size: 13 docks, 1 kiosk

Station: standard station with 90-degree docks

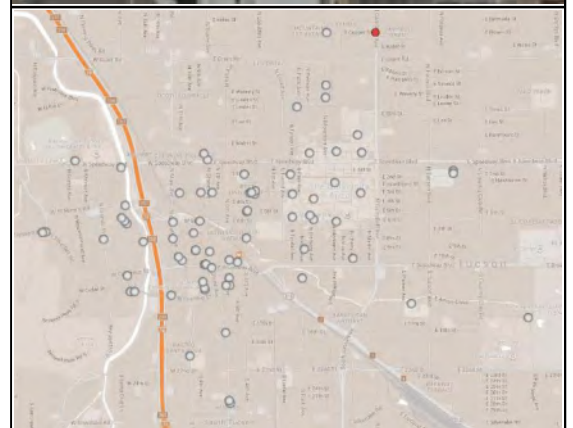
Owner: City of Tucson

Power: solar

Orientation: bikes pull into street, kiosk faces sidewalk

Parking: unrestricted

Notes:



Tucson Bike Share

Date: 02/10/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

216
E Copper St & N Campbell Ave

Sidewalk station on the north side of W Cushing Street, looking east towards S Linda Avenue



Location: north side of W Cushing Street, west of S Linda Avenue

Coordinates: -110.9837, 32.2175

Type: sidewalk

Size: 15 docks, 1 kiosk

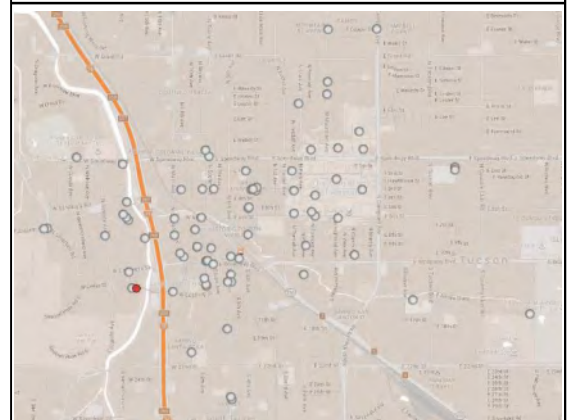
Station: standard station with 90-degree docks

Owner: City of Tucson

Power: solar

Orientation: bikes pull towards sidewalk, kiosk faces into sidewalk

Notes:



Tucson Bike Share

Date: 02/10/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

219B
Cushing Street Station

Sidewalk station on the west side of S Church Avenue, looking south from E McCormick Street



Location: west side of S Church Avenue, south of E McCormick Street

Coordinates: -110.9724, 32.2186

Type: sidewalk

Size: 17 docks, 1 kiosk

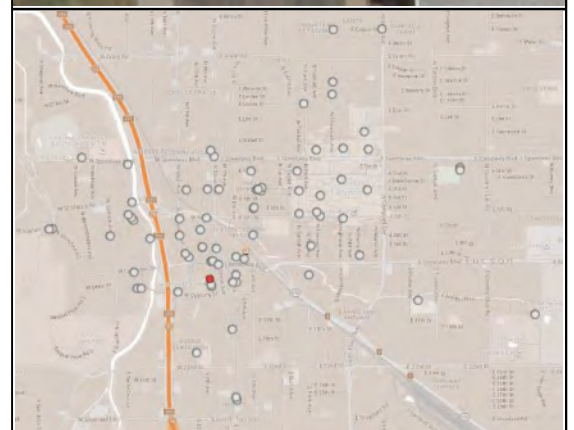
Station: standard station with 90-degree docks

Owner: City of Tucson

Power: solar

Orientation: bikes pull towards sidewalk, kiosk faces into sidewalk

Notes: Located in Tucson Community Center Historic Landscape



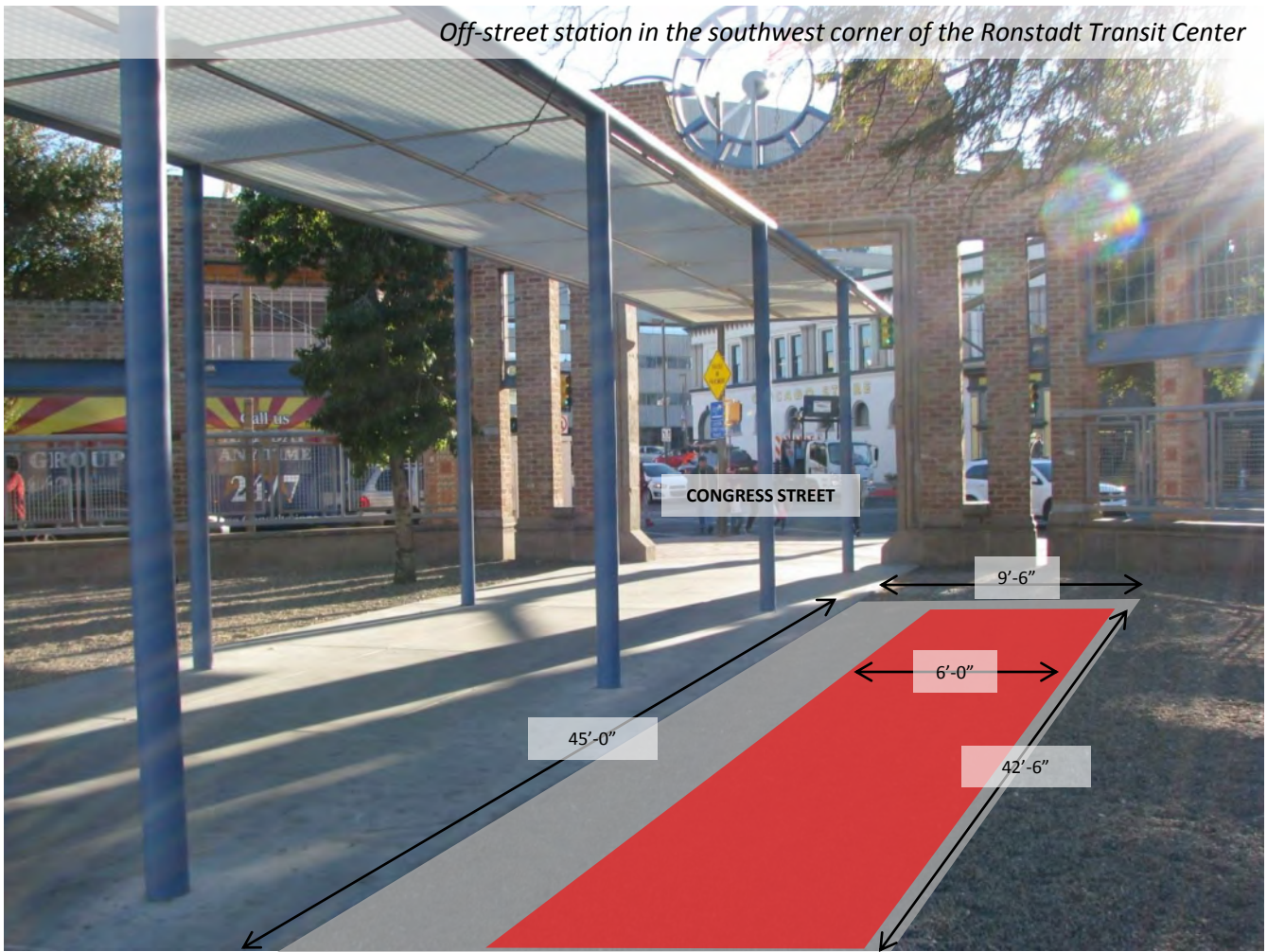
Tucson Bike Share

Date: 02/10/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

**222A
Convention Center**

Off-street station in the southwest corner of the Ronstadt Transit Center



Location: east side of N 6th Avenue, north of E Congress Street

Coordinates: -110.9661, 32.2222

Type: off-street

Size: 16 docks, 1 kiosk

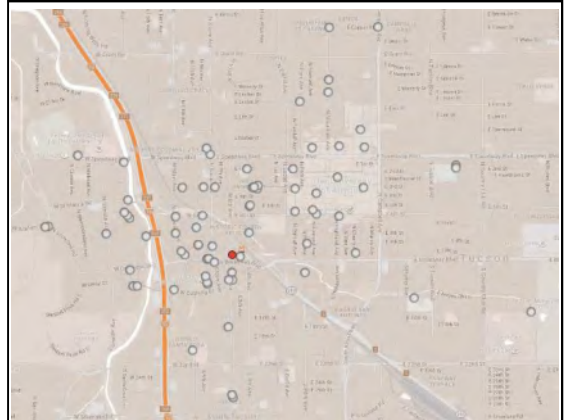
Station: standard station with 90-degree docks

Owner: City of Tucson

Power: solar

Orientation: bikes pull towards walkway, kiosk faces into walkway

Notes: requires concrete pad prior to installation



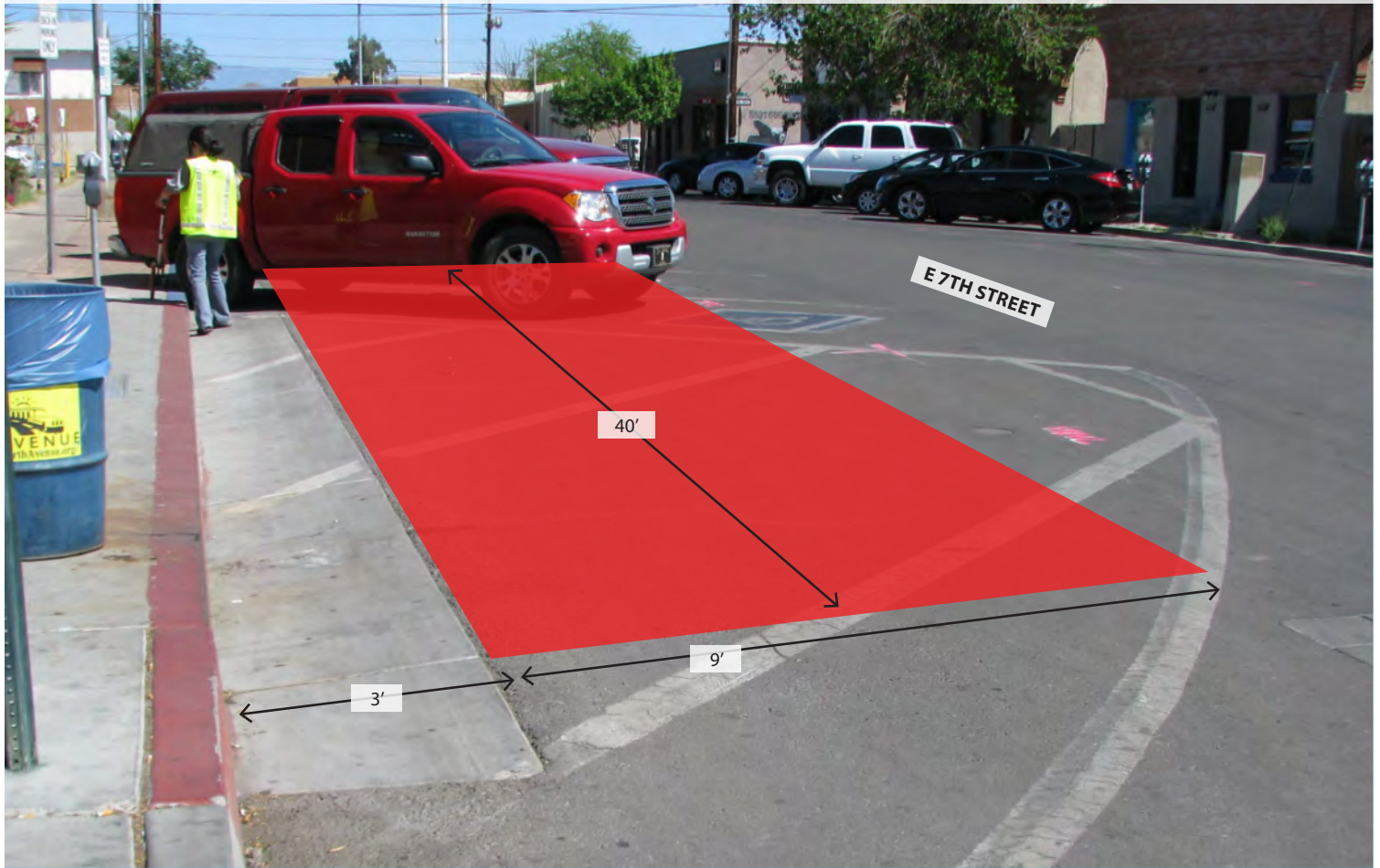
Tucson Bike Share

Date: 03/28/16
Version: 001

Designed: AW
Drawn: AW
Reviewed: AW

223
Ronstadt Transit Center

On-street station on north side of E 7th Street, looking east from N 4th Avenue



Location: North side of E 7th Street, east of N 4th Avenue

Coordinates: -110.965356°, 32.226487 °

Type: On-street

Size: 23 docks, 1 kiosk

Station: Dual sided station with 90 degree docks

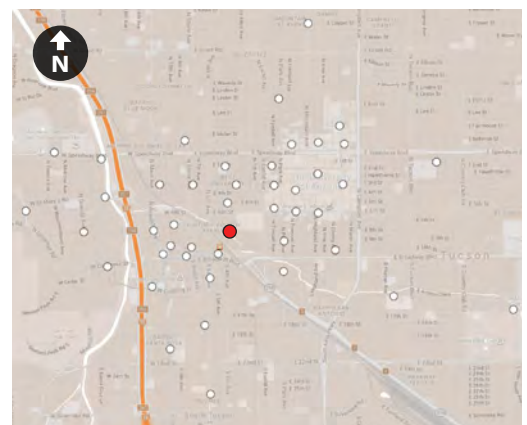
Owner: City of Tucson

Power: Solar

Orientation: Bikes pull towards both sides of the station, kiosk faces sidewalk

Parking: 2 hour metered back-in angle parking, 9am - 6pm Mon - Fri.
One metered disabled parking space.

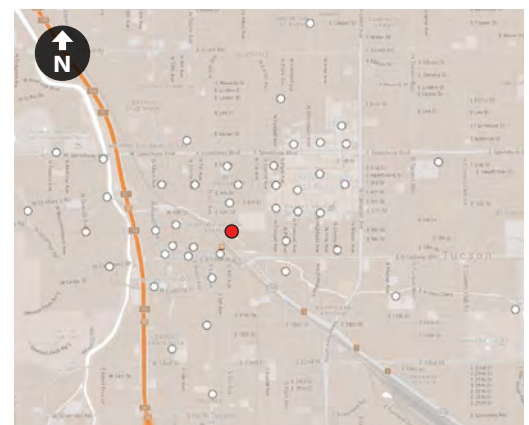
Notes: Station to replace 2 metered parking spaces. Disabled parking space to be relocated to 3rd space next to the station.
City to install delineators to mark station boundaries.
Located in N 4th Avenue (pending historic district)



On-street station on south side of E 9th Street, looking southwest towards N 4th Avenue

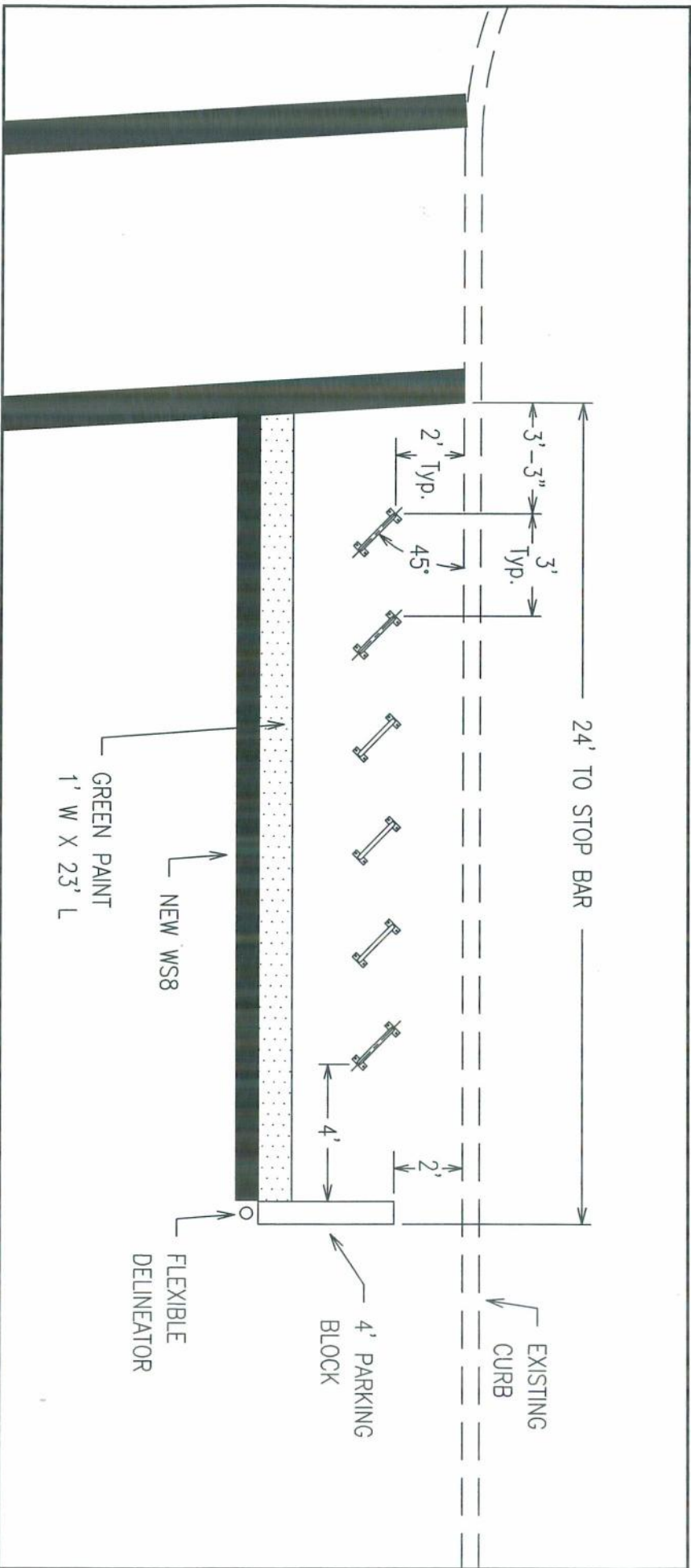


- Location:** South side of E 9th Street, east of N 4th Avenue
- Coordinates:** -32.223765 °, -110.965256 °
- Type:** On-street
- Size:** 23 docks, 1 kiosk
- Station:** Dual sided station with 90 degree docks
- Owner:** City of Tucson
- Power:** Solar
- Orientation:** Bikes pull towards both sides of the station, kiosk faces sidewalk
- Notes:** Bike share station to replace existing bike corral.
City to install delineators to mark station boundaries.
Located in Iron Horse Expansion Historic District.

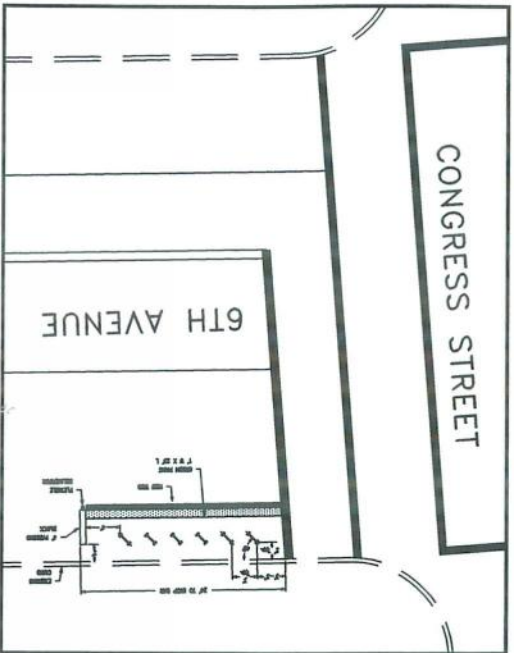


Appendix B

Bike Corral Design Example



PLAN VIEW



LOCATION MAP

BIKE PARKING CORRAL Gibson's Market 11 S. 6th Avenue			
CITY OF TUCSON	DRWN.	DSGN.	DATE
DEPARTMENT OF TRANSPORTATION	WEW	AHB	5/27/15



Appendix C

Local Historic Review of City of Tucson Bike Share Project Memorandum



MEMORANDUM

DATE: April 6, 2016

TO: Sarah Karasz
Senior Environmental Planner, ADOT

FROM: *Jonathan Mabry*
Jonathan Mabry
Historic Preservation Officer
City of Tucson

SUBJECT: Local Historic Review of City of Tucson Bike Share Project
Federal Project Number: STP-TUC-0(259)A
ADOT TRACS Number: 0000 PM TUC SZ128 01X

Dear Ms. Karasz:

The City of Tucson (COT) Bike Share Project is funded through a combination of federal Surface Transportation Program funds and Transportation Alternative Program funds, and local matching funds. The Federal Highway Administration (FHWA) serves as the lead federal agency with the Arizona Department of Transportation providing project administration and the City of Tucson providing project management. At ADOT's request, the COT Bike Share Project has been reviewed by the Plans Review Subcommittee of the Tucson-Pima County Historical Commission and interested Historic Preservation Zone Advisory Boards, following the regular steps in our Certified Local Government Historic Review Process. This MEMO summarizes the outcome of this review process and documents how COT staff has addressed all concerns about impacts to historic resources that were raised throughout the process.

Historic Review - Meetings Overview:

Date	Organization	Summary
January 13, 2016	Tucson-Pima County Historical Commission	Tucson Department of Transportation (TDOT) and Toole Design Group staff gave a general overview of the bicycle share project and requested that the Historical Commission review the project.
February 10, 2016	Tucson-Pima County Historical Commission	TDOT provided an update to the Historical Commission and laid out the plan to have the Plans Review Committee review the sites.
February 24, 2016	Tucson-Pima County Historical Commission Plans Review Subcommittee Meeting	TDOT handed out information for members to review (Attachments 1 and 2) and asked that a special meeting be set up to go over the station locations.

TO: Sarah Karasz
SUBJECT: COT Bike Share Project
Page 2

March 3, 2016	Tucson-Pima County Historical Commission Plans Review Subcommittee – Special Meeting	The Plans Review Subcommittee reviewed proposed station locations and provided comments. The Subcommittee requested that TDOT meet with the Historic Preservation Zone Advisory Boards and get their input prior to finalizing their review.
March 14, 2016	El Presidio Neighborhood Association	By request of the El Presidio Historic Preservation Zone Advisory Board, TDOT staff presented on bike share and went over locations in and around El Presidio neighborhood.
March 15, 2016	West University Historic Preservation Zone Advisory Board	TDOT staff presented on bike share and there was a discussion on proposed station locations within the West University area.
March 15, 2016	Armory Park Historic Preservation Zone Advisory Board	TDOT staff presented on bike share and there was a discussion on the location of a proposed station location in Armory Park.
March 24, 2016	Plans Review Subcommittee of the Historical Commission	TDOT staff updated the Plans Review Subcommittee on the outcomes of the Historic Preservation Zone meetings and finalized the Historical Commission input.

*TDOT staff reached out to both Barrio Historico and El Presidio Historic Preservation Zone Advisory Boards. The chairs indicated that consultations with their Historic Preservation Zone Advisory Boards were not needed for the station sitings in their Historic Preservation Zones.

Plans Review Subcommittee Special Meeting – March 3

The Plans Review Subcommittee of the Tucson-Pima County Historical Commission was provided materials and information on all proposed bike share station locations. TDOT staff presented on every station that was proposed to be located in a National Register historic district, including a handout citing references in the National Register Forms related to historic streetscapes and parks where stations were proposed to be located, and the review committee provided input.

Attachment 3 is the Legal Action Report from the March 3, Plans Review Subcommittee meeting. The Legal Action Report shows that the Plans Review Subcommittee made the following motion:

It was moved by Commissioner Sauer, duly seconded by Commissioner Stables to:

(1) commend the City for proposing locations where the vast majority were found to have no historic concerns;

(2) note that our recommendations are contingent on the review and approval of these locations by the relevant Historic Zone Advisory Boards; we understand that Neighborhood Associations will be asked for input as part of the Section 106 process that is required for this project;

(3) note that our recommendations are made with the understanding that the BikeShare station design(s) will be brought back to the TPCHC-PRS for review;

(4) note that our review of the locations resulted in:

- two locations that were not listed in table form in the presentation were reviewed with no historic concerns identified: 124 (6th & Granada) and 218 (Franklin & Granada)

- one location listed in table form was not available to be reviewed: 121A (Church & Congress). 121B was reviewed and no historic concerns were identified, but 121A will be brought back to the subcommittee for review as needed

- eight locations were identified with historic concerns, largely concerns that the proposed bikeshare station in that location would be an intrusion in a historic park or landscape: 120A, 120C, 115, 110B, 222B, 222C, 112, and 224A.

- for the majority of locations with historic concerns, nearby alternatives were identified that did not raise any historic concerns:

120A: do not select 120A; either select 120B, or relocate by relocating this station into the parking area on 12th

120C: do not select 120C; 120B is the alternative

115: do not select 115; no alternatives identified (however, there is a streetcar stop nearby; suggestion to consider locating with stop)

110B: do not select 110B; 110A is the alternative

222B: do not select 222B; 222A is the alternative

222C: do not select 222C; 222A is the alternative

112: do not select 112; no alternatives identified, but it was noted that the area between the curb and sidewalk is wider at the south side of Catalina Park, possibly allowing for a bikeshare station that does not impact the ability to reintroduce street trees

224A: do not select 224A; 224B is the alternative

Motion carried. Voice Vote 5-0.

Historic Preservation Zone Advisory Board Reviews

The Plans Review Subcommittee motion included an item that their recommendations were contingent on the review and approval by the relevant Historic Preservation Zone Advisory Boards. As a result, City of Tucson reached out to the four Historic Preservation Zone Advisory Boards that have bike share stations proposed within their zone boundaries. Below summarizes the results of reaching out the Historic Preservation Zone Advisory Boards.

Historic Preservation Zone	Summary of Review Outcome	Documentation
Armory Park	TDOT staff presented to the Advisory Board on March 15.	Attachment 4 – March 15 Armory Park Historic Preservation Zone meeting notes related to bike share.
Barrio Historico	The Advisory Board indicated they did not feel it was necessary to review the one site.	Attachment 5 – Email documentation indicating Barrio Historico did not feel a review by them was needed.
El Presidio	<ul style="list-style-type: none">• The Advisory Board indicated they did not feel it was necessary for them to review bike share at this time; however, they asked that instead, the El Presidio Neighborhood Association provide input.• TDOT staff presented to the Neighborhood Association on March	Attachment 6 – Email documentation indicating the Historic Preservation Advisory Board did not feel a review by them was needed but instead, a request that the neighborhood association provide input at this time. Attachment 7 – March 14 El Presidio Neighborhood Association meeting notes related to bike share.
West University	TDOT staff presented to the Advisory Board on March 15.	Attachment 8 – March 15 West University Historic Preservation Zone Advisory Board meeting notes related to bike share.

Plans Review Subcommittee Meeting – March 24

During the March 24 meeting, TDOT staff updated the Subcommittee on the review by the Historic Preservation Zone Advisory Boards and handed out a document that included the meeting notes from the related meetings (Attachment 9). Also included in the packet and

TO: Sarah Karasz
SUBJECT: COT Bike Share Project
Page 5

included in the presentation was a discussion of alternative sites and a few new sites that had been identified by staff since the last meeting. There were no concerns raised about the new sites.

Attachment 10 is the Legal Action Report from the March 24, Tucson-Pima County Historical Commission Plans Review Subcommittee meeting. The Legal Action Report shows that the Subcommittee made the following motion:

It was moved by Commissioner Sauer, duly seconded by Commissioner Erickson to:

(1) Commend the City for all hard trying to balance so many stakeholders' interests;

(2) Note that the input from relevant HPZAB resulted in:

-5 locations have been removed from consideration 106B, 120C, 222B, 222C, and 224A.

-No concerns with, 106A, 222A, 224B, 114A, 114B, 114C, 209B, 207, 126, relocated 112, the four proposed options along 4th Ave at 7th, 8th (115), and 9th streets, 120B and 110A;

-Concerns for 2 locations that have not been withdrawn;

-Concerns with 110B in Himmel Park. 110A is acceptable and if needed, recommend identifying an alternate location in the parking lot along 1st St. west of the library.

-Concerns with 120A in Armory Park. 120B is acceptable and if needed, recommend exploring other options closer to the senior center.

(3) recommend approval as presented.

Motion carried. Voice Vote 6-0.

Historic Review Process:

There were some proposed station locations about which concerns were raised during the local historic review process. For some of these sites, the concern was not about impacts to historic resources, but is still documented in the table below because this input was received as part of the historic review process. The table below summarizes the bike share stations for which concerns

about impacts to historic resources were raised, and shows how the project team has addressed the concerns.

Station Number	Station Name	Historic Concern	Additional Stakeholder Input	Outcome of Concern being raised
106 B	ENR2		<p>1. From Historic Commissioner via email: ENR2 is the new LEED building based on a slot canyon. It has a serpentine walkway on the Sixth Street side with landscaping, reflective of its undulating facade. More appropriate would be the Sixth Street Garage to the east, or the parking lot across the street to the south, both have bus stops.</p> <p>2. UA staff indicated they did not support 106 B.</p>	106 B has been removed from consideration.
108 C	Seneca St and Mountain Ave		West University Historic Preservation Zone Advisory Board: Concern about locating stations in front of single-family residences.	108 C has been removed consideration.
110 B	Himmel Park Library	Tucson-Pima County Historical Commission Plans Review Subcommittee: Location would be an intrusion in a historic park or landscape		110 B has been removed from consideration. Tucson-Pima County Historical Commission Plans Review Subcommittee recommended identifying an

				alternative location along 1 st Street west of the library. 110 C has been identified as another option at Himmel Park Library.
112	Catalina Park	<p>Tucson-Pima County Historical Commission Plans Review Subcommittee: Originally proposed location would be an intrusion in a historic park or landscape.</p> <p>West University Historic Preservation Zone Advisory Board:</p> <ul style="list-style-type: none"> - Southside, middle of the block would be an acceptable alternative. - Shifting to closer to 4th Avenue would be out of line of sight from houses viewing the park and might be better. 		<p>Original location proposed for site 112 Catalina Park has been removed from consideration.</p> <p>After input from the Historic Preservation Zone Advisory Board in the area, an alternative site was presented to the Tucson-Pima County Historical Commission Plans Review Subcommittee on March 24. The alternative site was approved by the subcommittee.</p>
115	4 th Ave and 8 th St Goodwill	<p>Tucson-Pima County Historical Commission Plans Review Subcommittee: Do not select 115. Concerns about the bike share station blocking the view shed of this historic building.</p>		<p>Original location proposed for site 115 4th Ave and 8th St has been removed from consideration.</p> <p>Three alternative locations (8th St near 4th Ave; 7th St near 4th Ave; 9th St near 4th Ave were presented to the Tucson-Pima</p>

				County Historic Commission Plans Review Subcommittee on March 24. All three alternative sites were approved by the subcommittee.
120 A	Armory Park	Tucson-Pima County Historical Commission Plans Review Subcommittee: Location would be an intrusion in a historic park or landscape		120 A has been removed from consideration.
120 C	Armory Park	Tucson-Pima County Historical Commission Plans Review Subcommittee: Location would be an intrusion in a historic park or landscape		120 C has been removed from consideration.
207	Cherry Ave and 10 th St (original) Rincon Market (new)		<ol style="list-style-type: none"> 1. West University Historic Preservation Zone Advisory Board: Concern about locating stations in front of single-family residences. 2. The Technical Advisory Committee suggested adding a station at Rincon Market. 	<p>Original location proposed for site 207 Cherry Ave and 10th St has been removed from consideration.</p> <p>An alternative site at Rincon Market was presented to the Tucson-Pima County Historical Commission Plans Review Subcommittee on March 24. The alternative site was approved by the subcommittee.</p>
208 A	3 rd Ave and University		1. Internal City of Tucson staff review	208 A has been removed from

	Blvd.		suggested losing that much parking in that location would be challenging. 2. West University Historic Preservation Zone Advisory Committee agreed.	consideration.
208 D	3 rd Ave and University Blvd.		West University Historic Preservation Zone Advisory Committee: Already a lot going on at that location and having a station in the center would be problematic.	208 D has been removed from consideration.
209	Franklin St and Court Ave		El Presidio Neighborhood Association: Concern over loss of car parking especially when the lot is developed.	Original location proposed for 209 has been removed from consideration. An alternative site around the corner on Court Ave was presented to the Tucson-Pima County Historical Commission Plans Review Subcommittee on March 24. The alternative site was approved by the subcommittee.
210 A	Granada Ave and Alameda St		Site not taken to the El Presidio Neighborhood Association for input.	City of Tucson staff removed this site from consideration.
210 B	Granada Ave and Alameda St		Site not taken to the El Presidio Neighborhood Association for input.	City of Tucson staff removed this site from consideration.

TO: Sarah Karasz
SUBJECT: COT Bike Share Project
Page 10

218	Franklin St and Granada Ave		Site not taken to the El Presidio Neighborhood Association for input.	City of Tucson staff removed this site from consideration.
219 A	Cushing Street Station		Gadsden company indicated they preferred site 219 B	City of Tucson staff removed this site from consideration.
222 B	Convention Center	Tucson-Pima County Historical Commission Plans Review Subcommittee: Location would be an intrusion in a historic park or landscape		222 B has been removed from consideration.
222 C	Convention Center	Tucson-Pima County Historical Commission Plans Review Subcommittee: Location would be an intrusion in a historic park or landscape		222 C has been removed from consideration.
224 A	Church Ave and Ochoa St	Tucson-Pima County Historical Commission Plans Review Subcommittee: Location would be an intrusion in a historic park or landscape		224 A has been removed from consideration.

Summary:

The City of Tucson Public Bike Share Project has successfully completed our Certified Local Government Historic Review Process, including reviews by the Plans Review Subcommittee of the Tucson-Pima County Historical Commission and by interested Historic Preservation Zone Advisory Boards and Neighborhood Associations. All concerns raised through this process have been documented in this MEMO. For proposed station locations that raised concerns about impacts to historic resources, the bike share program team identified alternative locations. The alternative locations have been approved by the Tucson-Pima County Historical Commission Plans Review Subcommittee. Below is chart summarizing all the sites that were vetted through the local Historic Review Process and that the City of Tucson would like to move forward for cultural resource clearance.

TO: Sarah Karasz
SUBJECT: COT Bike Share Project
Page 11

	Station Number	Station Name	Notes
1	101	Warren Ave and Helen St	
2	102	Park Ave Garage	
3	103 – 1	Student Union and 2 nd St Garage	
4	103 – 2	Student Union and 2 nd St Garage	
5	104	University Transit Hub	
6	105	Main Gate Village	
7	106 A	6 th Street Parking Garage	Changed name from ENR2
8	107	Copper St and Mountain Ave	
9	108 A	Lester St and Park Ave	
10	109	9 th St and Park Ave	
11	110 A	Himmel Park Library	
12	110 C	Himmel Park Library	New site plan developed based on historic review.
13	111	PCC – Downtown Campus	
14	112 B	Catalina Park	Revised site location
15	113 A	University Bl and 9 th Ave	
16	113 B	University Bl and Stone Ave	
17	114 A	5 th St and 4 th Ave	
18	114 B	5 th St and 4 th Ave	
19	114 C	5 th St and 4 th Ave	Location approved by historic review – new site plan created.
20	115 B	8 th St and 4 th Ave	Location approved by historic review – new site plan created.
21	116	Lost Barrio	
22	117	Rincon Vista Sports Complex	
23	118	Reid Park	
24	119	5 th Ave and Congress St	
25	120 B	Armory Park	
26	121	Church Ave and Congress St	
27	122	Pima County Main Library	
28	123 A	Presidio Park	
29	123 B	Presidio Park	
30	124	6 th St and Granada Ave	
31	125	Mercado	
32	126	Menlo Park	
33	127 A	N Bonita Ave and N Commerce Park Loop	
34	127 B	N Bonita Ave and N Commerce	

TO: Sarah Karasz
SUBJECT: COT Bike Share Project
Page 12

		Park Loop	
35	127 C	N Bonita Ave and N Commerce Park Loop	
36	127 D	N Bonita Ave and N Commerce Park Loop	
37	128 A	St. Mary's Hospital	
38	128 B	St. Mary's Hospital	
39	129 A	Five Points	
40	129 B	Five Points	
41	130 A	S 6 th Ave and 26 th St	
42	130 B	S 6 th Ave and 26 th St	
43	201	Banner University Medical Center	
44	202	Highland Garage	
45	203	Centennial Hall	
46	204	1 st St and Tyndall Ave	
47	205	Tyndall Ave and 6 th St	
48	206	University Rec Center	
49	207 B	Rincon Market	Revised site location
50	208 B	N 3 rd Ave and E University Bl	
51	208 C	E University Bl and N 3 rd Ave	
52	209 B	Franklin St and Court Ave	Revised site location
53	211	Granada Ave and Cushing St	
54	212	The Loop at Speedway Bl	
55	213	El Rio	
56	214	Santa Rosa Park	
57	215	University Bl and 11 th Ave	
58	216	E Copper St and N Campbell Ave	
59	217	Stone Ave and Broadway	
60	219 B	Cushing Street Station	
61	220	The Loop at St. Mary's Rd	
62	222 A	Convention Center	
63	223	Ronstadt Transit Center	
64	224 B	Church Ave and Ochoa St	
65	225	Mountain Ave and Linden St	
66	226	7 th St and 4 th Ave	Location approved by historic review – new site plan created.
67	227	9 th St and 4 th Ave	Location approved by historic review – new site plan created.

TO: Sarah Karasz
SUBJECT: COT Bike Share Project
Page 13

FINDING AND RECOMMENDATION:

Based on the public input received and staff responses during our Certified Local Government Historic Review Process, **it is my finding that there are No Adverse Effects of this project on any historic properties for these proposed Bike Share station locations.** I recommend that ADOT concur with this finding when it submits this documentation and other program materials to FHWA so that agency can lead the consultation process with the Arizona State Historic Preservation Office in compliance with Section 106 implementing regulations for the National Historic Preservation Act of 1966, as amended. Please contact me if you have any questions about this finding or information in this MEMO.

C: Corrine Garey, Project Manager, ADOT
Ann Chanecka, Project Manager, City of Tucson
Andy McGovern, Engineering Administrator, City of Tucson
Robin Raine, Deputy Director, City of Tucson
Adrian Witte, Project Manager, Toole Design Group

Attachments-

- Attachment 1: Tucson-Pima County Historical Commission Plans Review Subcommittee Packet of Information, February 24
- Attachment 2: National Register Forms Relevant to Proposed Bike Share Station Locations (Provided to the Plans Review Subcommittee)
- Attachment 3: March 3 Tucson-Pima County Historical Commission Plans Review Subcommittee Special Meeting Legal Action Report
- Attachment 4: Armory Park Historic Preservation Zone Advisory Board – meeting notes related to bike share
- Attachment 5: Email from Barrio Historico Historic Preservation Zone Advisory Board
- Attachment 6: Email from El Presidio Historic Preservation Zone Advisory Board
- Attachment 7: El Presidio Neighborhood Association – meeting notes related to bike share
- Attachment 8: West University Historic Preservation Zone Advisory Board – meeting notes related to bike share
- Attachment 9: Tucson-Pima County Historical Commission Plans Review Subcommittee Packet of Information, March 24
- Attachment 10: March 24 Tucson-Pima County Historical Commission Plans Review Subcommittee Meeting Legal Action Report