



Application for Community Enhancement Projects

Applicant Information

Name: Kendall Kroesen, Tucson Audubon Society

Address: 300 E. University Blvd, #120 City: Tucson State: AZ Zip: 85705

Phone: 520-209-1806 Email: kkroesen@tucsonaudubon.org

Project Information

Project Title: Silverlake Park Urban Habitat Restoration Project

Project Location: Silverlake Park, Tucson

Site Ownership *(list landowners affected by the proposed project and include signed letter(s) of support from property owners)*: Tucson Parks and Recreation Department

Section 1: Project Description

1. What is the project site need and how will the proposed project address this need? If this site is a previous C2E grant recipient, please explain what the added benefit will be. (Word limit = 300)

Silverlake Park is a 53-acre regional park within the South Park Neighborhood. It is a focal point for many neighbors and its fields support regional ultimate Frisbee and soccer leagues. There is a diversity of trees, unusual for a city park, in the park's stormwater basin through which 18th Street Wash flows. This part of the park is engineered to collect and slow and detain storm water. The wash's course through the park goes southeast to northwest along the broad, rock-lined bottom of the basin. 18th Street Wash represents a semi-natural area where frequent bird activity has been seen. However, the wash is managed by Parks and Recreation to minimize vegetation for the safety of park users, avoid wildfire and make sure the storm water capacity of the basin is not diminished. In this vegetation management, native and invasive vegetation alike is removed, and the value of vegetation for birds and other wildlife is negatively affected—recently vegetation was removed completely from part of the wash. There is a need to restore native vegetation and to create a vegetation plan that emphasizes natives, removes invasives, supports wildlife and does not violate the intent of the basin's engineering. There is an opportunity for outreach to the neighborhood and a neighboring elementary school about managing stormwater, the positive value of riparian areas and about the wildlife they support.

2. Is the project site physically connected (or within 400 feet) of a designated Pima County urban wash or riparian area? Describe the connection and potential impact of the site to the surrounding area. What makes this site a priority for funding? (Word limit = 300) *(The following websites can be used to determine connections to your project site: <http://maps.tucsonaz.gov/stormwater/> or <http://qis.pima.gov/maps/mapguide/>)*



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The project site is located in the bed of 18th Street Wash, which is shown on Pima County's MapGuide site. Parts of 18th Street Wash immediately upstream are designated xeroriparian B and D. The project site is within a mile north of areas designated xeroriparian B and D that are experiencing significant loss of habitat as a result of blading and construction for the Bridges project. 18th Street Wash flows southeast to northwest from an area northwest of the Kino Environmental Restoration Project. It passes through a storm water detention basin immediately east of Kino Parkway and then into another broad, shallow storm water detention basin in the north part of Silverlake Park. A broad, reconstructed wash floodplain goes southeast to northwest through the park. An overflow culvert with limited capacity, located at the northwest corner of the park, slowly drains the basin if storm water builds up. The park is a location of significant visitation by the public, and the wash is accessible to visitors visually and physically. The riprap that thickly lines the broad wash floodplain, while slowing water, is a significant deterrent to good vegetation management. It makes roots of invasive plants impossible to reach and remove. We propose that instead of seasonal labor-intensive removal of almost all vegetation within the wash, a more nuanced approach be developed of identifying and removing invasive plant species while retaining and increasing native plants. Ultimately we believe this will be a more cost-effective and sustainable management approach for an important recreational and ecological resource within the city parks system. In addition, numerous community stakeholders have an interest in participating in this restoration project and are willing to commit to ongoing stewardship.

3. Tucson C2E is working to improve Tucson's quality of life, enhance ecosystems and increase biodiversity. What actions or outcomes do you anticipate this project will have on the surrounding ecosystem in support of the overall C2E program goals? *(Mark all that apply; see Additional Information document for details.)*

- ☒ Adding new native habitat
- ☐ Controlling erosion
- ☐ Controlling stormwater runoff
- ☐ Decreasing energy bills
- ☒ Enhancing existing habitat
- ☒ Enhancing neighborhood aesthetics
- ☐ Growing food
- ☐ Improving soil conservation

- ☒ Improving walkability
- ☒ Increasing shade cover
- ☒ Increasing soil moisture
- ☒ Mitigating urban heat island effects
- ☐ Reducing sewer & septic inputs
- ☒ Other: Education/Interpretation
- Reinvestment in very low income area
- Change Parks and Rec Management Strategies

Comments: _____



Section 2: Water Resources

4. Describe water conservation practices (e.g. preventing water waste, use of appropriate watering schedules, phasing out irrigation) that will be implemented during the construction of the project and after completion the scope of work is completed? If supplemental water is needed for the project, what type(s) of water will be used and where will it come from (needed infrastructure)? (*Types of water include potable, non-potable or reclaimed, harvested and grey water.*) (Word limit = 200)

Water conservation already occurs in this detention basin on a macro scale. To enhance that on a micro scale, some of the rock currently lining the wash through the basin will be rearranged into low, linear dikes running perpendicular to the direction of flow, extending part of the way through the wash, and emerging from alternating sides of the wash. This will induce additional meandering of low flows while not affecting high flows or the detention capacity of the basin. Other existing rock will be used to armor microbasins in areas where we plant native plants. The areas from which rock will be removed will have better infiltration and will allow enhanced management of invasive vegetation (their roots won't be below riprap). The biggest effect of this project will be to enhance and manage native riparian vegetation to maximize its wildlife value, while harvesting more water on a micro scale and working with the original water detention design. We will model good vegetation management and work with parks and rec to develop sustainable management practices that are good for birds while also working within the constraints of developed park lands for maintaining security and safety goals.

5. How does this project enhance the surrounding natural environment through improved use of onsite water resources (e.g. improved vegetation health and wildlife habitat through water capture, storage, or retention)? (Word limit = 100)

Onsite water resources are present in the wash, and there is potential for native vegetation that is very useful for wildlife. However, there are obstacles to realizing this. First, the growth of invasive vegetation contributes to fire danger and reduces sight-lines desirable for safety. The riprap clogging the bottom of the wash makes vegetation management difficult. This results in the use of brush cutters to remove vegetation. For the sake of efficiency, staff has been removing desirable vegetation as well as undesirable vegetation. We will develop a relationship between Parks and and Recreation Department, and the surrounding community, to achieve the best native riparian vegetation that can be achieved within Parks and Recreation constraints.

Section 3: Community Investment

6. Describe the organizational support for this project. Include a bulleted list of individuals and organizations with each partner's role and contribution to the project identified (e.g. matching funds, project design, volunteer hours, etc.). (Word limit = 200)

Trees for Tucson will provide trees and knowledge of local neighborhoods and school that can participate in the outreach portion of this project.



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Tucson Clean and Beautiful will mobilize the neighborhood that has adopted the park and provide logistical support and tools for volunteer work events. In addition, Tucson Clean and Beautiful will provide expertise and support for buffelgrass education and removal, through its shared staff position with Southern Arizona Buffelgrass Coordination Center. We will reach out to Arizona Native Plant Society for support and participation as well.

Tucson Parks and Recreation Department will partner to provide to develop best management practices to maximize native bird habitat while balancing goals of recreation, safety and security. Parks and Recreation will approve all aspects of the project and help oversight so that the project does not violate mandates for park safety and hydrological function.

Holladay Elementary School will assist with bird counts before and after to monitor impact of restoration. Native Plant Society will consult on restoration plant species,

7. Describe what kind of outreach will be conducted in cooperation with this project. This should include how your proposed project will encourage participation in the C2E program. *(Other outreach could include educating neighbors, providing volunteer opportunities, and making the project visible and accessible.)* (Word limit = 200)

Neighborhood groups that have adopted the park, local schools, and other local interest groups will participate “on the ground” removing invasive plants, changing the arrangement of rock along the wash, and planting native vegetation. Students and other community members will be given the opportunity to explore and learn about vegetation and wildlife along the portion of 18th Street Wash in Silverlake Park. We will look for opportunities to link work in the park to curriculum units about riparian areas and water conservation. Students and neighbors will be given the opportunity to participate in baseline bird counts and to take over ongoing data collection. We will encourage students and neighbors to enter into a stewardship relationship through the Adopt-A-Public-Spaces Program, administered by Tucson Clean and Beautiful. We will work with the Parks and Recreation Department to develop guidelines to manage the wash in a way that balances the needs of wildlife and riparian values within the constraints of a developed, managed park area. All students, neighbors and other participants will be taught about the direct connection that can be made—including through C2E—between water conservation and riparian maintenance and enhancement.

8. What is the plan for maintaining the site after C2E funding has ended (who, what, when, and how)? (Word limit = 100)

Tucson Audubon, park neighbors, and Parks and Recreation Department maintenance personnel will enter into a relationship as a team to manage this reach of 18th Street Wash. All will assist in the development of



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maintenance strategies that-maximize shade and wildlife value while remaining consistent with the park's design and mandates. We believe that through the Adopt-A-Park program students and neighbors will have an ongoing connection with the site creating a relationship that can extend beyond the term of the grant.

Section 4: Project Site Map and Design Diagram

9. The site map and/or design diagram can be submitted as one or more graphics. These graphics can be hand drawn or created with computer software (*see previous application examples*). *We strongly recommend you seek professional consultation with an earthworks or similar company to help with this process and ensure your design best fits your project site. This map/design must include:*

- Identification of the major crossroads and project boundaries (including property ownership)
- Proximity to adjacent wash(es) and/or riparian area(s), including distance (information can be found at: <http://maps.tucsonaz.gov/stormwater/> or <http://gis.pima.gov/maps/mapguide/>)
- Site accessibility information (public access points and project visibility)
- Site plan design diagram that clearly identifies primary proposed features (vegetation, earthworks, curbcuts, etc.)

C2E Agreement

If your project is awarded funding, your group agrees to carry out the following tasks...

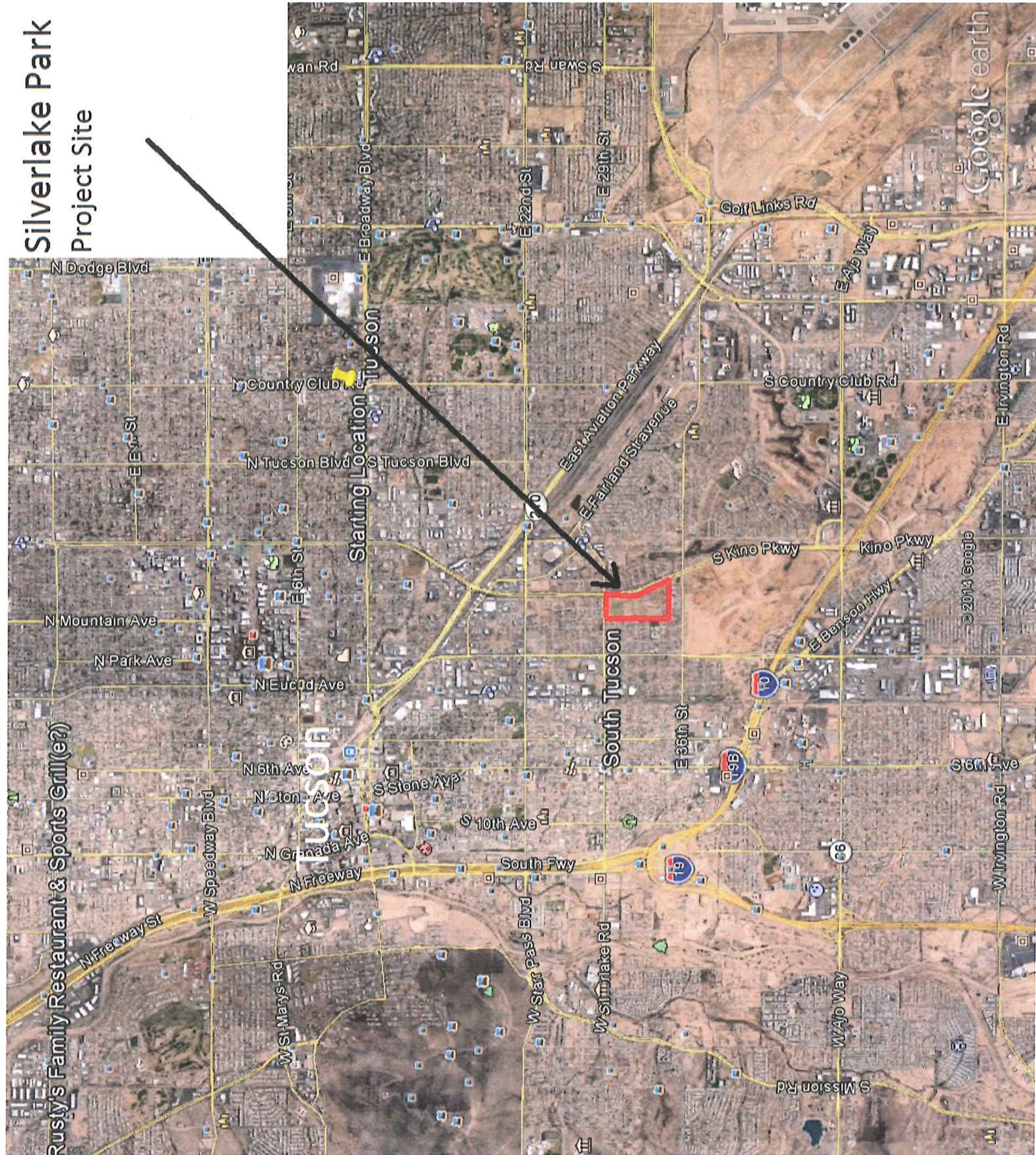
- Complete the proposed project within the time period laid out in the Application Timeline and Project Description.
- Assist C2E with creating and installing an interpretive project sign at the project site; funds for this sign will be provided by Tucson C2E and should not be included in your grant budget.
- Submit quarterly reports and follow reimbursement procedures as outlined by C2E.
- Provide site photo updates from a consistent photo point monitoring location.
- Submit a final reimbursement and annual report once all work is completed.
- Make your application package available for public review.

Signature

April 11, 2014

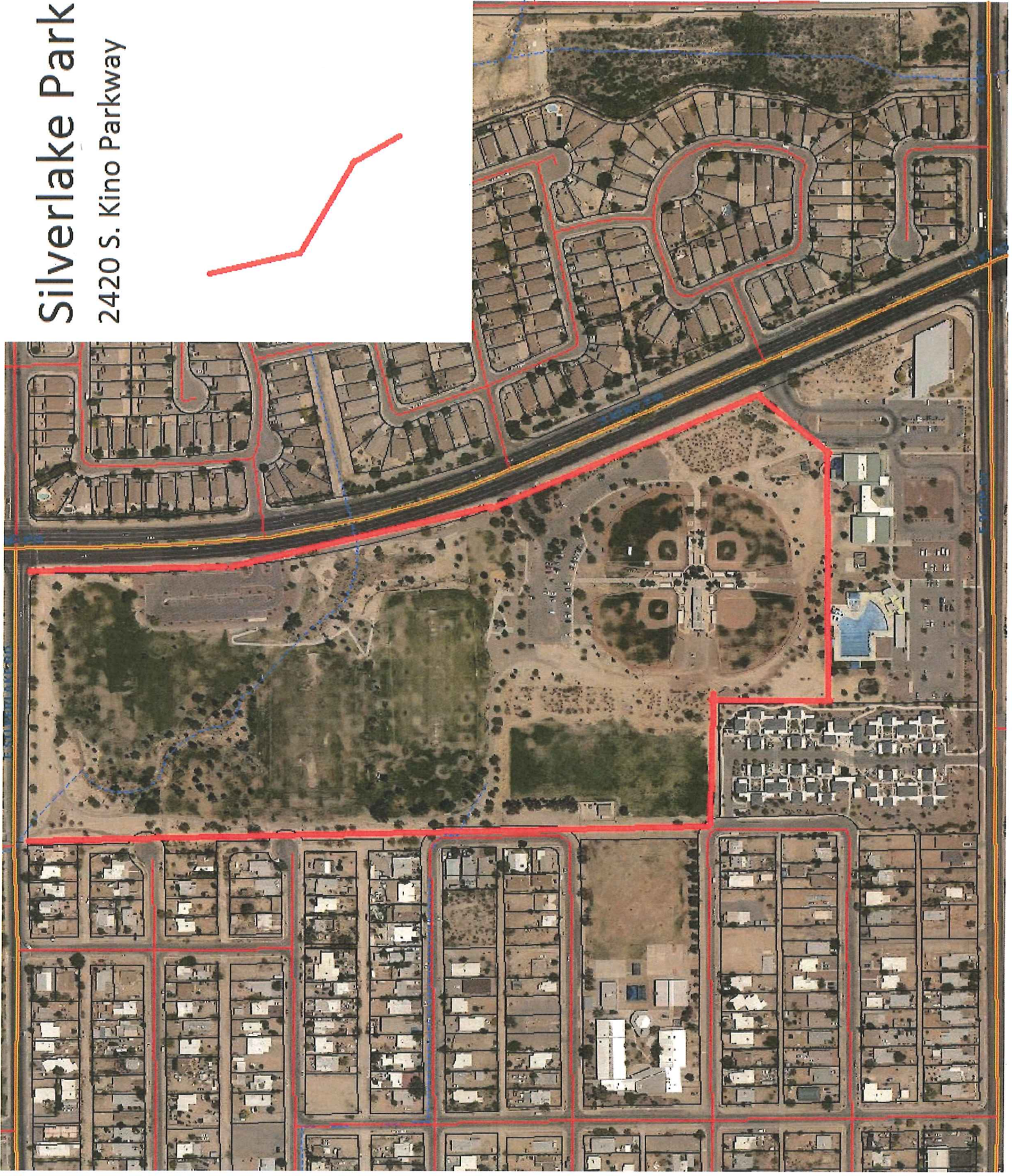
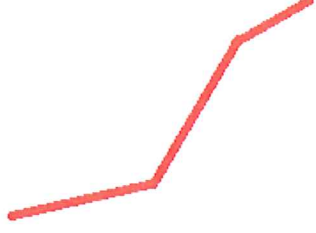
Date

Silverlake Park Project Site



Silverlake Park

2420 S. Kino Parkway



Silverlake Park

18th Street Wash



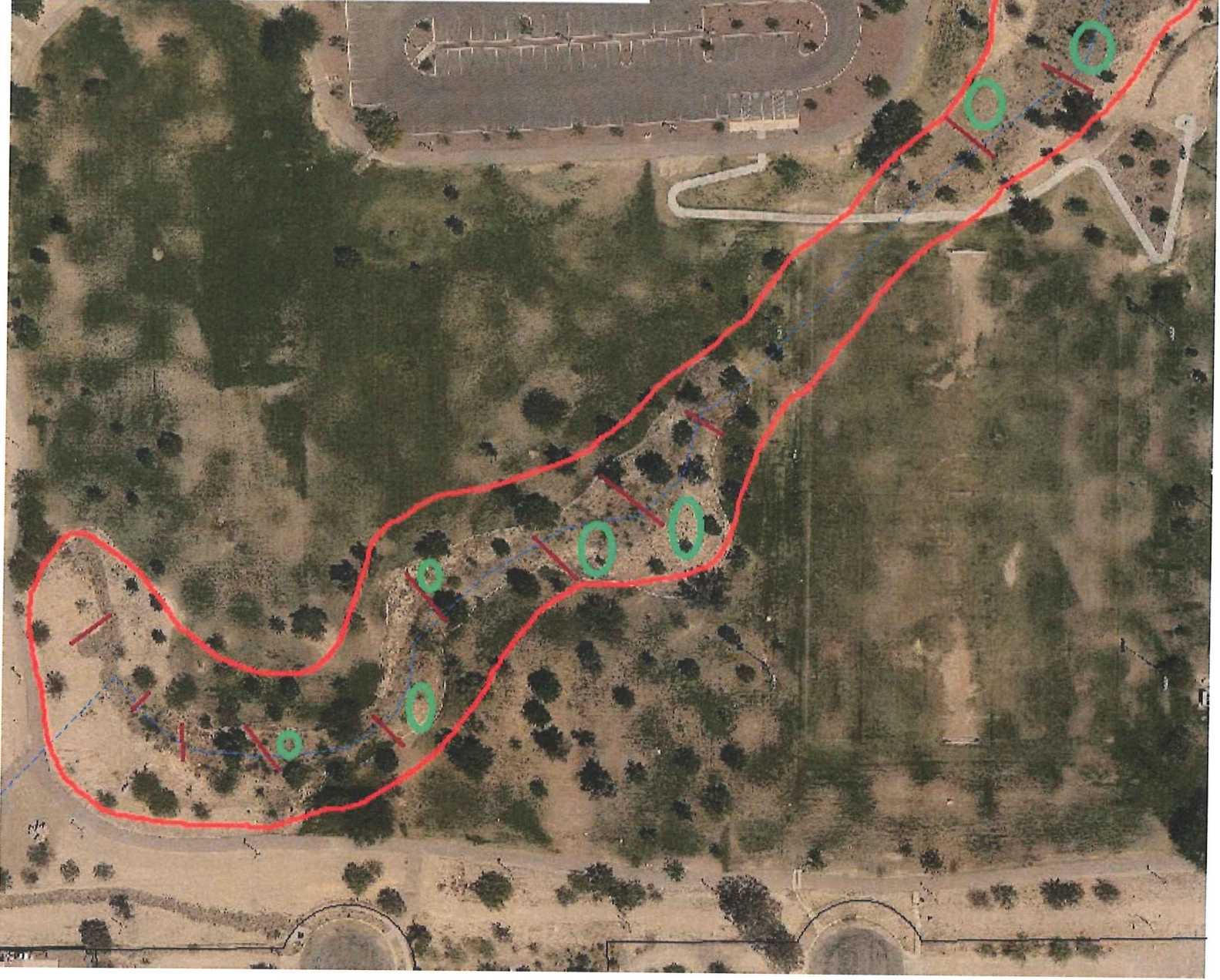
Project Area



Rock structures



Microbasins





Section 5: Project Budget Template

No additional funds will be granted to selected C2E projects once the project budget has been approved—please make sure all anticipated costs are accounted for in your budget template.

Selected C2E projects will only be allowed up to a 10% contingency within the approved budget. This 10% can be applied between the budget categories of (1) Direct Environmental Benefits, (2) Ancillary Project Needs, and (3) Outreach/Education (e.g. if the budget for Direct Environmental Benefits is \$1000, up to \$100 (10%) may be moved to or from the budget categories of Ancillary Project Needs and/or Outreach/education to cover misestimates).

Should your project come in under budget you have the option of returning unspent money to the Tucson C2E fund or you may submit a revised budget and scope of work to Tucson C2E to expand the original project. This does not guarantee that you will be able to use remaining funds to expand your project. The Tucson C2E board will review your amended proposal and, if approved, award some or all of the remaining funds for continued work.



Name of fiscal agent: Tucson Audubon Society Email: kkroesen@tucsonaudubon.org Phone: 520-209-1806

Revised 02/03/2014

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Section 6: Project Planning Timeline Template

Tasks	2014		2015		Date Completed
	July-Sept	Oct-Dec	Jan-March	April - June	
Finalize project design & have approved by C2E	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Project work day(s) scheduled	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Project implemented	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Quarterly report & reimbursable 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quarterly report & reimbursable 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quarterly report & reimbursable 3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Final report & reimbursable 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>C2E sign installation/dedication</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Standard project tasks have been included above. Please elaborate as necessary and add additional tasks that will be important to the success of the overall project timeline and goals.



CITY OF
TUCSON

PARKS AND RECREATION
DEPARTMENT

April 11, 2014

Conserve to Enhance
c/o Water Resources Research Center
350 N. Campbell Avenue
Tucson, AZ 85719

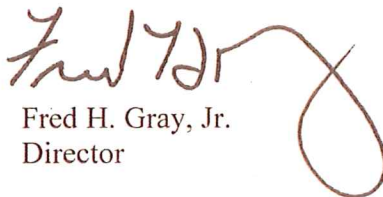
To Whom It May Concern:

I am writing to indicate my support for the Silverlake Park Urban Habitat Restoration Proposal being submitted to the 2014 Conserve to Enhance Community Enhancement Project Grant Program. The project applicants, Tucson Audubon Society, have informed me of the proposed project, including the goals and impacts to city property. I understand these impacts to city property include:

- Seeding or planting of native species by project team, to enhance habitat and comply with Parks and Recreation health and safety requirements (for example, native grasses and small shrubs in accordance with CPTD – Crime Prevention Through Design – principles).
- Rearrangement of rock cover to create mini-gabions that slow the flow of water and allow its infiltration.
- Create microbasins within the existing detention area that increase infiltration of storm water.
- Co-develop with Parks and Recreation staff maintenance guidelines for the long-term sustainable management of habitat in the area.

I support the proposed work for this project, and by signing this letter, I agree that Parks and Recreation will participate in this project and allow the proposed work to be done on city property.

Sincerely,



Fred H. Gray, Jr.
Director

FHG:dk



ADMINISTRATION

900 S. RANDOLPH WAY • TUCSON, AZ 85716
(520) 791-4225 • FAX (520) 791-4008 • TTY (520) 791-2639
www.tucsonaz.gov/parksandrec

South Park Neighborhood Association

April 10, 2014

Conserve to Enhance
c/o Water Resources Research Center
350 N. Campbell Avenue
Tucson, AZ 85719

RE: Silverlake Park Habitat Restoration proposal by Tucson Audubon

Dear C2E,

I am the contact person for the South Park Neighborhood group that has adopted the Silverlake Park. Our group does regular clean up and monitoring of the Park. We strongly support this proposal to create healthy habitat that attracts native songbirds and helps harvest water runoff to the benefit of the Parks trees and vegetation. We believe this will benefit the park and the surrounding community with higher quality park space offering users a greater variety of recreation uses and experiences. We appreciate that all of this can be accomplished while maintaining the safety and security of the park.

We welcome the opportunity to participate and learn more about creating good bird habitat in the park, in our yards, and in the neighborhood. We will also benefit from a greater understanding of invasive plant species and the identification and value of native desert plants.

We agree to participate and help get our community out for workshops in the park. Our neighborhood cherishes the park and uses it heavily. We like the idea of getting neighbors more personally involved in maintaining the health and beauty of the park. This also helps us get to know each other and feel a greater sense of community, which in turn, improves the safety of our community.

We strongly support this proposal and hope you vote to fund it.

Sincerely,

Reverend Glenn Davis

South Park Community Leader/Activist/Volunteer/Resident



HOLLADAY MAGNET SCHOOL

1110 E. 33RD STREET

TUCSON, AZ 85713

(520)225-1600/FAX (520) 225-1601



April 10, 2014

Conserve to Enhance
c/o Water Resources Research Center
350 N. Campbell Avenue
Tucson, AZ 85719

RE: Silverlake Park Habitat Restoration proposal by Tucson Audubon

Dear C2E,

We at Holladay K-5 Magnet School are delighted and excited to be a part of the "Silverlake Park Habitat Restoration" proposal. We are excited by the project itself and by the prospect of working with some of our community partners.

As we work on the project, we look forward to:

- learning about native birds and participating in Tucson Audubon's native bird count on an ongoing basis
- participating in invasive species removal and planting of native species
- adopting a section of the park to pick up litter

At Holladay Elementary School we make great efforts to connect our children to nature and pursue a variety of environmental education activities in the classroom. We try to instill an empathy for living things and a protective and respectful interest in nature during our extended day Outdoor Inquiry class. With this project, we look forward to connecting our students to nature beyond the confines of our campus and to expose them to stewardship of healthy urban habitat. We want very much to teach our students about the importance of native song birds and apply our math and science skills to Tucson Audubon's annual bird count. Opportunities for applied learning are very engaging for kids and we are excited to study the impact the restoration efforts will have on native song birds.

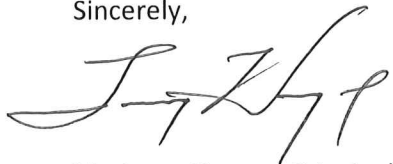
Additionally, with outside funding, we look forward to working with a local artist to develop a wild bird mural either at our school or at a heavily graffitied wall within the park.

Many of our children live within the South Park neighborhood and will benefit from a greater understanding of and connection to the natural and recreational amenities within their community. We have begun the process by planting our grounds, participating in neighborhood clean-ups and trying to

become more of a hub in the community. We look forward to this opportunity to both extend our students' reach and deepen their commitment to their community and the natural world.

Thank you for your support of this proposal.

Sincerely,

A stylized, handwritten signature in black ink, appearing to read 'L. Haynes'.

Mr. Larry Haynes, Principal

A handwritten signature in black ink, reading 'Elizabeth Putnam-Hidalgo'.

Elizabeth Putnam-Hidalgo, Teacher