

AN ORDINANCE 2017-12-14-1019

**AUTHORIZING FUNDING AGREEMENTS WITH THE UNIVERSITY OF TEXAS AT SAN ANTONIO IN AN AMOUNT NOT TO EXCEED \$1,057,401.00, AND SOUTHWEST RESEARCH INSTITUTE IN AN AMOUNT NOT TO EXCEED \$530,398.00, FOR WATER QUALITY DEMONSTRATION PROJECTS UNDER THE PROPOSITION 1 EDWARDS AQUIFER PROTECTION PROGRAM.**

\* \* \* \*

**WHEREAS**, in May 2015, voters renewed for the third time the Proposition 1 Edwards Aquifer Protection Program, funded through a portion of a 1/8-cent sales tax in the amount of \$100 million; and

**WHEREAS**, previous elections set the initiative at \$90 million and included Edwards Aquifer protection efforts beyond Bexar County; and

**WHEREAS**, the current voter-approved program includes \$10 million dedicated for aquifer water quality projects within urbanized areas of Bexar County over the Recharge and Contributing Zones of the Edwards Aquifer; and

**WHEREAS**, these projects have come to be known as “demonstration projects” which the City is pioneering in coordination with San Antonio River Authority, Edwards Aquifer Authority and San Antonio Water System; and

**WHEREAS**, a solicitation ran from April through September 2017 and yielded ten (10) demonstration project submissions; and

**WHEREAS**, two projects are recommended for consideration under two categories: New Construction/Retrofit (University of Texas at San Antonio) and Research/Data (Southwest Research Institute) and were endorsed for recommendation to City Council by the Conservation Advisory Board on November 29, 2017; and

**WHEREAS**, the University of Texas at San Antonio (UTSA) demonstration project was selected for the New Construction/Retrofit category; and

**WHEREAS**, UTSA will retrofit 2.73 acres of rooftops and 7.97 acres of parking, roadway, and sidewalks at the UTSA Main Campus through diversion of stormwater runoff into a newly constructed suite of connected projects including cisterns, pervious pavement, a vegetated bioswale and forebay, a rain garden, and a bioretention and sand filtration area; and

**WHEREAS**, through the capture of an estimated two million gallons of rooftop runoff on an annual basis, this project will monitor the efficacy of Low Impact Development (LID) features and their ability to remove solids and pollutants, reduce heat, and provide aesthetic alternative stormwater treatments; and

**WHEREAS**, additionally, the project will develop a cost analysis of Best Management Practices (BMPs) and offer educational opportunities in an outdoor LID classroom setting that will last many years beyond the term of the funding agreement; and

**WHEREAS**, the UTSA agreement will be executed in compliance with the Small Business Economic Advocacy (SBEDA) Program, which requires contracts be reviewed by a Goal Setting Committee to establish a requirement and/or incentive unique to the particular contract in an effort to maximize the amount of small minority, and women-owned business participation on the contract; and

**WHEREAS**, the Goal Setting Committee set a 26% Minority/Women Business Enterprise (M/WBE) subcontracting goal to the UTSA contract; and

**WHEREAS**, UTSA has committed a 26% Minority, Women-Owned Business Enterprise (M/WBE) subcontractor participation; and

**WHEREAS**, the Southwest Research Institute (SwRI) demonstration project was selected for the New Research/Data category; and

**WHEREAS**, this project will develop a coupled surface water/groundwater model which will accurately simulate solute transport from on-site sewage facilities (OSSF) or Texas Land Application Permit (TLAP) wastewater disposal facilities in the Edwards Aquifer Recharge and Contributing Zones and that quantifies the impact of solute transport on recharge to the aquifer; and

**WHEREAS**, this study will also: A) more accurately quantify the impact of development on the Recharge and Contributing Zones; B) address specific threats including the impact of development occurring too close to rivers in the Recharge and Contributing Zones; and C) allow for accurate assessment of minimum distances from rivers and from the Recharge Zone that OSSF or TLAP facilities would be deemed to not pose a threat to the quality and quantity of water recharging into the aquifer; and

**WHEREAS**, the Small Business Economic Development Advocacy (SBEDA) Ordinance requirements for SwRI were waived due to the lack of small, minority, and/or women businesses available to provide these goods and services; and

**WHEREAS**, in April 2016, the City entered into an interlocal agreement (ILA) with the San Antonio River Authority (SARA) to serve as project manager for the \$10 million "demonstration project" component of the Edwards Aquifer Protection Program; and



**WHEREAS**, as project manager, SARA convened stakeholder meetings to assess demonstration project needs and define its scope; and

**WHEREAS**, through this process SARA created a Technical Advisory Committee (TAC), comprised of key industry experts, City staff, and representatives from both the development and conservation communities; and

**WHEREAS**, once convened, the TAC created the scoring tool used to assess project submissions; and **WHEREAS**, an eligible project includes those projects that address and improve water quality in developed areas that do not meet current Texas Commission on Environmental Quality (TCEQ) standards; and

**WHEREAS**, funding for projects will cover only the cost of implementing BMPs for storm water analysis that exceeds minimum TCEQ permit requirements; and

**WHEREAS**, projects must accommodate collection of pre- and post-construction storm water monitoring (SWM) data; and

**WHEREAS**, projects may also be research based and should assess major threats to groundwater quality; develop specific BMP long-term performance and life cycle costs; forecast regional impacts of urban development on groundwater quality; and/or evaluate the effectiveness of BMP innovations in preventing pollution of groundwater; **NOW THEREFORE:**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SAN ANTONIO:**

**SECTION 1.** The City Manager or her designee or the Director of the Parks and Recreation Department or his designee, is authorized to execute Funding Agreements with (1) the University of Texas at San Antonio in an amount not to exceed \$1,057,401.00, and (2) Southwest Research Institute in an amount not to exceed \$530,398.00 for water quality demonstration projects under the proposition 1 Edwards aquifer protection program. A copy of the Funding Agreements in substantially final form are attached hereto and incorporated herein for all purposes as **Attachments I and II.**


**SECTION 2.** Payment in the amount not to exceed \$1,057,401.00 in SAP Fund 40099000, Other Capital Projects, SAP Project Definition 26-00638, Edwards Aquifer Protection Program, is authorized to be encumbered and made payable to University of Texas at San Antonio (UTSA), for water quality demonstration projects.

**SECTION 3.** Payment in the amount not to exceed \$530,398.00 in SAP Fund 40099000, Other Capital Projects, SAP Project Definition 26-00638, Edwards Aquifer Protection Program, is authorized to be encumbered and made payable to Southwest Research Institute (SwRI), for water quality demonstration projects.

**SECTION 4.** The financial allocations in this Ordinance are subject to approval by the Director of Finance, City of San Antonio. The Director of Finance, may, subject to concurrence by the City Manager or the City Manager's designee, correct allocations to specific SAP Fund Numbers, SAP Project Definitions, SAP WBS Elements, SAP Internal Orders, SAP Fund Centers, SAP Cost Centers, SAP Functional Areas, SAP Funds Reservation Document Numbers, and SAP GL Accounts as necessary to carry out the purpose of this Ordinance.

**SECTION 5.** This Ordinance is effective immediately upon the receipt of eight affirmative votes; otherwise, it is effective ten days after passage.

**PASSED AND APPROVED** this 14<sup>th</sup> day of December, 2017.

  
**M A Y O R**  
Ron Nirenberg

**ATTEST:**

  
\_\_\_\_\_  
Leticia M. Vacek, City Clerk

**APPROVED AS TO FORM:**

  
\_\_\_\_\_  
Andrew Segovia, City Attorney

<b>Agenda Item:</b>	38 ( in consent vote: 4, 6, 7, 9, 10, 11, 12, 16, 18A, 18B, 18C, 19, 20, 23, 25, 26, 27, 28, 29, 30, 32, 33, 35, 38, 39, 40 )						
<b>Date:</b>	12/14/2017						
<b>Time:</b>	09:20:27 AM						
<b>Vote Type:</b>	Motion to Approve						
<b>Description:</b>	An Ordinance authorizing funding agreements with the University of Texas at San Antonio in an amount not to exceed \$1,057,401.00, and Southwest Research Institute in an amount not to exceed \$530,398.00, for water quality demonstration projects under the Proposition 1 Edwards Aquifer Protection Program. [María Villagómez, Assistant City Manager; Xavier D. Urrutia, Director, Parks and Recreation]						
<b>Result:</b>	Passed						
<b>Voter</b>	<b>Group</b>	<b>Not Present</b>	<b>Yea</b>	<b>Nay</b>	<b>Abstain</b>	<b>Motion</b>	<b>Second</b>
Ron Nirenberg	Mayor		x				
Roberto C. Treviño	District 1		x				
William Cruz Shaw	District 2		x			x	
Rebecca Viagran	District 3		x				x
Rey Saldaña	District 4		x				
Shirley Gonzales	District 5		x				
Greg Brockhouse	District 6		x				
Ana E. Sandoval	District 7		x				
Manny Pelaez	District 8		x				
John Courage	District 9		x				
Clayton H. Perry	District 10		x				

SW  
12/14/17  
Item No. 38

# ATTACHMENT I



**Funding Agreement for Proposal for  
Roof Top Harvesting and Stormwater Disbursement over the  
Edwards Aquifer Recharge Zone: A Retrofit for Previously Untreated Impervious Cover  
under the  
Proposition 1 Edwards Aquifer Protection Projects within Urbanized Areas of Bexar  
County's Recharge and Contributing Zones Program**

This Proposition 1 Edwards Aquifer Protection Projects within Urbanized Areas of Bexar County's Recharge and Contributing Zones Funding Agreement (Funding Agreement) is between the City of San Antonio (City), the San Antonio River Authority (River Authority), and the University of Texas at San Antonio (Funding Recipient), collectively the "Parties." The Parties understand and agree that this Funding Agreement documents the roles and responsibilities of each of the Parties in the City's Proposition 1 Edwards Aquifer Protection Projects within Urbanized Areas of Bexar County's Recharge and Contributing Zones Program (Program). The Parties agree to comply with the terms of this Funding Agreement (Agreement).

**Background**

Proposition 1, the Edwards Aquifer Protection Venue Project, authorizes the City to continue the voter-approved watershed and preservation project initiated in 2000 and continued in 2005, 2010, and 2015. A 1/8 cent sales tax is projected to collect \$100 million for this project. Of the \$100 million projected to be collected pursuant to the 2015 authorization, \$90 million will continue to be used toward the purchase of conservation easements and acquisition of real estate interests over the sensitive recharge and contributing zones of the aquifer. The remaining \$10 million is dedicated for Program-funded projects that will protect and improve Edwards Aquifer water quality. The Funding Recipient's Implementation of Proposal for Stormwater Retrofit and Research Project (Project) has received both Conservation Advisory Committee (CAB) and City of San Antonio City Council (Council) funding approval and is the subject of this Agreement. The primary project goal is to retrofit 9.571 acres of rooftops, parking lots, roadway, and sidewalks at UTSA Main Campus through diversion of stormwater runoff into a newly constructed a suite of connected projects including cisterns, pervious pavement, a vegetated bioswale and forebay, a rain garden, and a bioretention and sand filtration area.

**Funding**

The City has authorized and will contribute \$1,057,401 for the Project. The funding amount is documented by the detailed information in Exhibit A. All Parties acknowledge and agree that \$1,057,401 is the full amount authorized by this Funding Agreement, and no additional funds will be claimed by the Funding Recipient, unless this amount is modified through an amendment executed by all of the Parties.

### **Agreement Term**

This Agreement shall be effective as of March 1, 2018 (the "Effective Date") through and including February 28, 2021 (the "Term"). The Parties may extend this Agreement for a mutually agreeable period.

### **Limitation (\*for construction projects only\*)**

A potential limiting factor for the Project would be the identification of karst features at the location where the Project's stormwater control measures are to be installed. The Texas Commission on Environmental Quality (TCEQ) requires that construction activity cease in the event that karst features are identified at the Project location to allow TCEQ evaluation. In the event that TCEQ ceases this Project as proposed, the Parties will work together in good faith to revise the scope of the Project in such a way so as to achieve the Project objectives and will revise the budget accordingly. The revised scope and budget will require approval of all the Parties. If the revised scope and budget are not approved by all of the Parties, any of the Parties may elect to terminate this Agreement, and the Parties shall have no further obligations to each other, except for those rights and obligations accrued by the Parties prior to the termination.

Another potential limiting factor would be drought conditions preventing collection of qualifying pre- or post-construction stormwater samples within the Project timeline. If such were to occur, the Parties will work together in good faith to revise the scope of the Project in such a way as to achieve Project objectives and, if there are budget implications, will revise the budget accordingly.

### **Other Limiting Factors identified by Funding Recipient:**

Funding Recipient's construction season is typically during summer when school is in low attendance. The more disruptive construction projects are reserved for the summer and holiday breaks. These can delay start of a project for a few weeks due to an overloaded schedule of projects. Additionally, at the beginning of the semester several seasonal events are held on the grounds where the bioretention basin is proposed. Lastly, this sponsored project will necessitate the establishment of a number of construction related contracts and we will need to factor in possible delays with the procurement process. Funding Recipient will keep City and SARA informed of any potential delays with this process and coordinate to adjust the Project timeline as needed.

### **City of San Antonio Acknowledges and Agrees**

1. Funding Recipient will be responsible for the work to be conducted under the Program.
2. River Authority will serve as project manager and administrator of the Program.
3. Funding Recipient will submit invoices for payment directly to City, with a copy sent concurrently to River Authority, to the following addresses:



<p><b>City of San Antonio</b>  Phillip Covington  Special Projects Manager  Edwards Aquifer Protection Program  Parks and Recreation Department  PO Box 839966  San Antonio, TX 78283  (210) 207-3003  phillip.covington@sanantonio.gov</p>	<p><b>San Antonio River Authority</b>  Karen Bishop  Senior Supervisor  Environmental Sciences Department  PO Box 839980  San Antonio, Texas 78283  (210) 302-3642  kbishop@sara-tx.org</p>
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- Funding shall be paid directly to the Funding Recipient after River Authority verification of satisfactory performance of work in accordance with the payment schedule attached as Exhibit B and the completion of Funding Recipient's project milestones and deliverable dates, attached as Exhibit C.

Payment referencing Principal Investigator, Dr. Brian Laub, and the Research Program Title will be made to the following address:

The University of Texas at San Antonio  
Grants and Contracts Financial Services (GCFS)  
One UTSA Circle, San Antonio, Texas 78249

### **River Authority Acknowledges and Agrees**

1. River Authority will serve as project manager and administrator of the Program.
2. River Authority is responsible to the City to ensure quality and timely implementation of Project components and future monitoring of aquifer protection and improvement projects funded through the Program.
3. River Authority will coordinate payment to the Funding Recipient in a timely manner per Exhibits A and B.

### **Funding Recipient Acknowledges and Agrees**

1. Work to be conducted by Funding Recipient will be under the direct supervision of Principal Investigator, Dr. Brian Laub, an employee of the Funding Recipient.
2. Funding for construction/retrofit projects will cover only the cost of SCMs that go above minimum TCEQ permit requirements and the cost of any research/study components associated with the stormwater control measures (SCMs). Funding will not cover any base project costs or the cost of installing minimum SCMs. Exceptions may be made for projects that were grandfathered from meeting TCEQ Edwards Protection Standards (Standards) or were developed before the Standards were implemented and that will utilize funding to bring the development to current TCEQ permitting standards.
3. Construction/retrofit projects must accommodate collection of pre- and post-construction stormwater monitoring (SWM) data. Depending on site characteristics and construction footprint, SWM data may be conducted in undisturbed areas of the site concurrent with construction within the development footprint.
4. Pre-construction SWM data must be collected on the Project for a minimum of 5 events per sample location. Post-construction SWM data must be collected on the Project for a minimum of 5 events per sample location after Project construction completion.
5. A SWC performance report incorporating pre- and post-construction SCM data must be provided to River Authority within three months following the end of the Project. Said report must assess SCM performance toward protecting and/or improving Edwards Aquifer water quality.
6. Funding Recipient's performance report, which will be based on SCM's surface water, will evaluate the effectiveness of SCM innovations in mitigating water pollution.
7. Funding Recipient shall coordinate construction/retrofit of Project SCMs using licensed landscape and/or engineering professionals. It is preferred that said professionals have acquired the Bexar County/San Antonio River Authority LID Design and Construction Inspection Registration.
8. The University of Texas at San Antonio and its partners will conform to guidelines defined in the Edwards Aquifer Technical Guidance on Best Management Practices or the San Antonio River Basin: Low Impact Development Technical Guidance Manual. Any exceptions are noted in Exhibit D.
9. SCM construction details and SCM locations must be approved by the River Authority in writing prior to start of construction. SCMs will be sited outside the boundaries of existing



easements and potentially conflicting property interests to the extent reasonably practicable.

10. All funded as-built alterations to SCM design and material substitutions must be approved by the River Authority in writing.
11. Any alterations to SCM design, location, or material substitutions not approved by the River Authority in writing may result in funding being delayed until corrected and approved in writing by the River Authority or being rescinded completely.
12. SCMs must comply with TCEQ guidelines or secure authorization from TCEQ prior to receiving funding from City.
13. The Project shall produce the following deliverables:
  - a. Pre- and post-construction stormwater monitoring data (5 pre and 5 post-construction qualifying samples per monitoring location). Sampled constituents include; Total Metals (7) – As-Ba-Cd-Cr-Pb-Se-Ag, Mercury, Total Petroleum Hydrocarbons (TPH), Ortho-phosphate, Total Organic Carbon, Hardness, Total Nitrogen, TSS, *E.coli*, Conductivity, pH, Zinc, Copper, and Pesticides.
  - b. Retrofit stormwater control measure to bring the following campus features up to current TCEQ standards: rooftops and parking, roadway, and sidewalks at UTSA Main Campus through diversion of stormwater runoff into a newly constructed a suite of connected, highly visible, LID projects including cisterns, pervious pavement, a vegetated bioswale and forebay, a rain garden, and a bioretention and sand filtration area.
  - c. LID BMP Maintenance Plan including a cost analysis
  - d. Permanent on-site highly visible educational/interpretive signage
  - e. BMP business plan that can be adopted for other entities
  - f. Final report
  - g. Outdoor LID classroom/lab and highly visible educational signage
  - h. The potential capture of 1.9 million gallons of Edwards water on-site annually from rooftops and through the removal of potable irrigation.
14. The Project shall answer the following questions:
  - a. Does rooftop harvesting and linked stormwater treatment over pervious cover improve water quality relative to untreated stormwater routing to stream channels and relative centralized, non-linked stormwater routing over a sand filter basin.
  - b. What is the efficacy of LID BMPs' ability to remove solids and pollutants, reduce temperatures in stormwater effluent and provide aesthetic alternative treatments for stormwater?
  - c. What are the viability and benefits of incorporating LID BMPs into the UT System construction standards?
15. The Project's major milestones include:
  - a. Surveying, site investigation, infiltration testing, soil testing, and environmental due diligence.

- b. Installation of pre-construction equipment to collect rainfall amounts, to sample stormflow, and to assess pollutant load of several constituents.
- c. Pre-construction monitoring of water quality
- d. Civil Engineering: feasibility study, design/construction
- e. Structural Engineering: feasibility study, design/construction of pad for cistern, bypass structure, overflow structures
- f. MEP Engineering: feasibility study, design/construction of plumbing, electrical
- g. Architect/Landscape Architect: feasibility study, plant selection and placement, irrigation design
- h. Data/Telecom Consultant: design/installation of security cameras, if required.
- i. Geotechnical & Testing Consultant: geotechnical work, geological response to subsurface expressions should they be found, TCEQ submittal.
- j. Irrigation Consultant: feasibility study, design/construction
  
- k. Design meetings to finalize drainage area, determine existing utilities in the vicinity, begin sizing stormwater control measures (cisterns, pervious pavement, a vegetated bioswale and forebay, a rain garden, and a bioretention and sand filtration area )
- l. Revise and finalize stormwater control measure design
- m. The Quality Assurance Plan
- n. Equipment purchase
- o. Completion of Construction of Documents
- p. Delivery of required construction plan, disturbance area, temporary BMP sheets, and grading sheets, stamped by a civil engineer, to TCEQ for approval prior to start of construction related activities over the Edwards Aquifer.
- q. Bid construction project
- r. Construction Begins
- s. Construct stormwater control measure facility (cisterns, pervious pavement, a vegetated bioswale and forebay, a rain garden, and a bioretention and sand filtration area
- t. Landscaping work completed
- u. Electrical work completed
- v. Plumbing work completed
- w. Completion of pre-construction SWM (grab sampling)
- x. Post-construction: flow monitor installation and post-construction monitoring completed
- y. Construction Completed



- z. Analysis and presentation of water quality
  - aa. Development of maintenance schedule
  - bb. The Paseo is a highly-trafficked area leading to the Convocation Center and the UC events venue housing ballrooms, meeting spaces, and food vendors. Maintenance of the BMPs will reflect its importance.
  - cc. BMP business plan that can be adopted for other entities
  - dd. Installation of on-site interpretive signage
  - ee. Housekeeping: project and final cleaning
16. The Project's major phases are as follows:
- a. Phase 1: Pre-construction monitoring
  - b. Phase 2: Site assessment: Surveying, site investigation, infiltration and soil testing, Environmental Site Assessment (ESA), determination of drainage area and existing utilities within the project area, and sizing of the stormwater control measures
  - c. Phase 3: Development of stormwater control measure design and review of design
  - d. Phase 4: Finalize design and bid project
  - e. Phase 5: Project Construction
  - f. Phase 6: Post-construction activities: SWM, education, and interpretive signage
  - g. Phase 7: Post-Construction monitoring and reporting, analysis and presentation of water quality, maintenance schedule, and BMP business plan.
17. The City may rescind the funding in whole or in part if milestones are missed without providing City with appropriate notice and justification, and alternative plans and timeline or the project falls significantly behind schedule, except in cases of force majeure.
18. Funding Recipient has a sixty calendar-day grace period from agreed Project end date to complete SCMs, subject to force majeure.
19. Funding Recipient may request an extension in writing up to fifteen business days before the original project end date.
20. Any decisions regarding the extension to the project end date shall be made by the River Authority in coordination with the City.
21. During SCM construction, the Funding Recipient's contractor must protect soil from compaction and repair any damage done thereto to ensure proper SCM function.
22. Construction shall be inspected and approved in writing by the River Authority and Funding Recipient prior to final payment.
23. Construction is planned to be completed within approximately twelve months to one year and eight months. Funding Recipient will communicate to SARA any anticipated delays on a quarterly basis, in accordance with the Project Timeline, Exhibit C.

24. Funding Recipient shall develop an operations and maintenance manual satisfactory to the River Authority for all SCMs covered by the Funding Agreement.
25. Funding Recipient shall perform all actions outlined in the operations and maintenance manual at Funding Recipient's expense for a period of three years from project end date.
26. It is preferred but not required that persons performing the operations and maintenance have obtained the Bexar County/River Authority LID Annual Inspection and Maintenance Certification.
27. Funding Recipient is aware that presentations may be requested by the River Authority, the City, the CAB, San Antonio City Council, or other governing or advisory bodies associated with the Program.
28. Funding Recipient agrees to be available for presentations to the best of its ability.
29. Funding Recipient shall acknowledge the City in any signage placed at project site, or in any news releases or other publications relating to the work performed under this Funding Agreement. News releases or other publications must be sent to the River Authority for review before they are sent to any outside party. Failure to send any news or publication release to the River Authority for review shall not result in a breach of this Funding Agreement.
30. Funding Recipient is aware that media interviews may be requested and/or coordinated by the City or the River Authority as a result of this project.
31. Funding Recipient agrees to be available for interviews to the best of its ability.
32. Funding Recipient grants the City and the River Authority, their representatives and employees the right to take photographs, videos, and other forms of media of the awarded Project.
33. Funding Recipient authorizes the City and the River Authority, their assigns and transferees to copyright, use and publish photographs, videos, and other forms of media in print and/or electronically that are produced by the City and/or the River Authority for this Project.
34. Funding Recipient agrees to transfer the operations and maintenance agreement if the property is sold or transferred.
35. If any of the SCM features compliant with the San Antonio River Basin: Low Impact Development Technical Guidance Manual fails to perform as designed during the three-year operation and maintenance period, the Funding Recipient shall either repair the SCM to functional status to the satisfaction of the River Authority or refund the City the amount funded for that SCM.
36. Funding shall be paid by the City to the Funding Recipient by the City after the River Authority verification of satisfactory performance of work in accordance with the payment schedule attached as Exhibit B and the completion of the Funding Recipient's project milestones and deliverable dates, attached as Exhibit C.
37. Funding Recipient warrants and represents that it will comply with all Federal, State and Local laws and regulations applicable to Funding Recipient's use of City Funds for this project. To the extent applicable, Funding Recipient agrees to abide by the following laws in its expenditures of City Funds:



- a. Chapter 252 of the Texas Local Government Code, or other competitive contracting processes allowed for as express exceptions to Chapter 252.
  - b. Government Code chapter 2258 and Ordinance No. 71312 regarding Prevailing Wage Rate regulations required for certain contracts, including ensuring that its construction contractor shall collect and monitor weekly certified payrolls and perform site visits to ensure the prevailing wage is being paid to all workmen. City has the right to audit certified payroll records as necessary in accordance with this Agreement. Upon audit of the records and certified payrolls under this section, should the City or its auditors find any violations, Funding Recipient shall cause its contractor to forfeit as a penalty to the City \$60.00 for each laborer, workman, or mechanic employed, for each calendar day, or portion thereof, that such laborer, workman or mechanic is paid less than the said stipulated rates for any work done under said contract, by the contractor or any subcontractor. The establishment of prevailing wage rates in accordance with Chapter 2258, Texas Government Code shall not be construed to relieve Funding Recipient from its obligation under any federal or state law regarding the wages to be paid to or hours worked by laborers, workmen or mechanics insofar as applicable to the work to be performed under this Agreement.
38. For the term of this Agreement, at any time during normal business hours and as often as City may deem necessary, upon three-days written notice, Funding Recipient shall make all of its records pertaining to this Agreement available to City or any of its authorized representatives, and shall permit City or any of its authorized representatives to audit, examine, and make excerpts and/or copies of same.
  39. Funding Recipient agrees and represents that it will cooperate with City and River Authority, at no charge to the City or River Authority, to satisfy, to the extent required by law, any and all requests for information received by City or River Authority under the Texas Public Information Act or related laws pertaining to this Agreement.
  40. Funding Recipient shall not transfer, pledge or otherwise assign this Agreement, any interest in and to same, or any claim arising thereunder, without first procuring the written approval of City. Any attempt at transfer, pledge or other assignment shall be void ab initio and shall confer no rights upon any third person.
  41. Beginning the month after the project's commencement, Funding Recipient shall provide status reports to the City through the River Authority on the first Friday monthly. Said status report shall include project activity toward milestones in the prior month and shall note any changes to the schedule of deliverables, if any.

#### **No Third Party Rights**

- A. This Agreement is not intended, nor shall it be construed, to create any third party beneficiary rights in any person who is not a party hereto, unless otherwise expressly herein provided.

- B. Nothing in this Agreement shall be deemed or construed by the Parties hereto, or any third party, to create the relationship of principal and agent, partners, joint venturers or any other similar such relationship between the parties hereto. It is understood and agreed that no provision contained herein, nor any acts of the Parties hereto, creates a relationship other than the relationship of independent contracting entities.

#### **Publication and Academic Rights**

Funding Recipient's Principal Investigator has the right to publish or otherwise publicly disclose information gained in the course of the project under this Agreement. Funding Recipient will, however, submit any prepublication material to City for review and comment at least sixty (60) days prior to planned submission for publication. City will notify Funding Recipient of any objections within thirty (30) days of receipt. Funding Recipient shall have final authority to determine the scope and content of any publications, subject to any objections for the protection of confidential information. Funding Recipient shall acknowledge the City's contribution and describe in any publications, the scope and nature of City's contribution accurately and appropriately.

#### **Ownership of Materials and Documents**

Any and all drawings, documents or information in whatsoever form and character produced by Funding Recipient pursuant to the provisions of this Agreement is the joint property of Funding Recipient and City and either Party shall be allowed to make use of such material without requiring the approval of the other Party. Funding Recipient understands and acknowledges that as the joint owner of any and all writings, documents and information, City has the right to use all such writings, documents and information as the City desires, without restriction.

#### **Equipment**

Funding Recipient shall retain title to all equipment and structures purchased and/or fabricated by it with funds provided under this Agreement.

#### **Liability**

As government entities, River Authority and City hereby expressly acknowledge that they are governed by the Texas Tort Claims Act, which is located in Chapter 101 of the Texas Civil Practice and Remedies Code, and nothing in this Agreement shall be construed as a waiver by either of the Parties of any of the immunities and protections from liability included therein.

#### **Insurance**

Funding Recipient, at its own expense, shall provide and maintain, during the term of this Agreement, either insurance, with or without retention, or a self-insurance program. This insurance or self-insurance shall cover liability for property damage and personal injury associated with Funding Recipient's performance of work under this Agreement.



**Notices**

Any notice required by this Agreement shall be given by prepaid, first class, certified mail, return receipt requested, or by a recognized overnight courier, address as follows:

<b><u>In the case of City:</u></b> Phillip Covington Special Project Manager Edwards Aquifer Protection Program Parks and Recreation Department PO Box 839966 San Antonio, Texas 78283 (210) 207-3003 phillip.covington@sanantonio.gov	<b><u>In the case of River Authority:</u></b> Karen Bishop Senior Supervisor Environmental Sciences Department PO Box 839980 San Antonio, Texas 78283 (210) 302-3642 kbishop@sara-tx.org	<b><u>In the case of Funding Recipient:</u></b> Santos Garza, RSC Director The University of Texas at San Antonio, Office of Sponsored Project Administration One UTSA Circle San Antonio, Texas 78249 (210) 458-8785 Santos.garza@utsa.edu
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**COMPLIANCE WITH SMALL, MINORITY AND WOMAN-OWNED BUSINESS  
ENTERPRISES POLICY, NON-DISCRIMINATION AND EQUAL EMPLOYMENT  
OPPORTUNITY POLICY**

Funding Recipient is hereby advised that it is the policy of the City of San Antonio that Small, Minority or Woman-owned Business Enterprises (SMWBE) shall have the maximum practical opportunity to participate in the performance of public contracts. In all events, Funding Recipient shall comply with the CITY's Small Business Economic Development Advocacy Program, contained in San Antonio Ordinance No. 2007-04-12-0396, and the amendments thereto in connection with the award of the construction contract(s). Said ordinances are incorporated herein for all purposes, as if fully set forth herein. Funding Recipient further agrees that Funding Recipient will abide by all applicable terms and provisions of CITY's Non-Discrimination Policy, CITY's Small, Business Economic Development Advocacy (SBEDA) Policy and CITY's Equal Opportunity Affirmative Action Policy, these policies being available in CITY's Department of Economic Development, Division of Internal Review and the City Clerk's Office in connection with the Parking Facility.

Funding Recipient agrees to comply with all SBEDA goals assigned to this Agreement as outlined in Exhibit E.

Funding Recipient agrees that if material deficiencies in any aspect of its SMWBE utilization plan as set out in its project are found or if Funding Recipient does not meet the SMWBE goals as specified by the CITY's Department of Economic Development, whichever is less, as a result of a review or investigation conducted by CITY's Department of Economic Development, Funding Recipient will be required to submit a written report to CITY's Department of Economic Development. Funding Recipient will also be required to submit a supplemental Good Faith Effort Plan (GFEP) indicating efforts to resolve any deficiencies.

**Termination**

The Parties, with or without cause, may elect to terminate this Agreement by providing sixty (60) days written notice to the other Parties. Termination of this Agreement shall not affect the rights and obligations of the Parties accrued prior to the termination. Upon termination, City shall pay Funding Recipient for all reasonable expenses incurred or committed to be expended as of the effective termination date. Any provisions of this Agreement which by their nature extend beyond termination shall survive such termination; such provisions include but may not be limited to subsections 5, 25 and 35 of the section entitled "**Funding Recipient Acknowledges and Agrees**" herein.


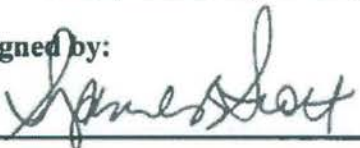

**Amendment**

This Funding Agreement supersedes all prior agreements and understandings between the Parties regarding the Program and may only be changed by written amendment signed by all three of the Parties.

This Agreement shall be governed by, construed and enforced in accordance with the internal laws of the State of Texas.

*[Remainder of Page Intentionally Left Blank. Signatures on Following Page.]*



<b>University of Texas at San Antonio</b>	<b>City of San Antonio</b>
Date: <u>11/20/2017</u>	Date: _____
Signed by: 	Signed by: _____
<b>Can Saygin,</b> Associate Vice President for Sponsored Project Administration	<b>Xavier D. Urrutia, Director</b> <b>Parks &amp; Recreation Department</b>  Attest:  _____ <b>City Clerk</b>  Approved as to form:  _____ <b>City Attorney</b>
<b>San Antonio River Authority</b>	
Date: <u>11-20-17</u>	
Signed by: 	
<b>Suzanne Scott, General Manager</b> <b>San Antonio River Authority</b>	
Date: _____	
Approved as to form: 	
<b>Director of Legal Services</b>	

**Exhibit A  
Project Budget**

The University of Texas at San Antonio  
Proposal Budget Template



Sponsor:	San Antonio River Authority	Summary Page
PI/PPD:	Laub/Bush	
Title:	Retrofit Rain Catchment	

	Period 1	Period 2	Period 3	Period 4	Period 5	All
	5/1/2018	5/1/2019	5/1/2020			5/1/2018
	4/30/2019	4/30/2020	4/30/2021			4/30/2021
<b>Personnel</b>	Subtotal \$ 18,843	\$ 19,185	\$ 31,533	\$ -	\$ -	\$ 69,361
G4010 G5010 Salaries	\$ 16,130	\$ 16,614	\$ 26,597	\$ -	\$ -	\$ 59,341
G4020 G5030 Fringe Benefits	\$ 2,513	\$ 2,571	\$ 4,936	\$ -	\$ -	\$ 10,020
<b>Travel</b>	Subtotal \$ 2,000	\$ -	\$ -	\$ -	\$ -	\$ 2,000
G4110 G5130 Travel - Domestic	\$ 2,000	\$ -	\$ -	\$ -	\$ -	\$ 2,000
G4120 G5140 Travel - Foreign	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Capital Expense</b>	Subtotal \$ 721,000	\$ -	\$ -	\$ -	\$ -	\$ 721,000
G4030 G5040 Construction	\$ 700,000	\$ -	\$ -	\$ -	\$ -	\$ 700,000
G4040 G5050 Equipment Fabrication	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G4050 G5060 Equipment Capital	\$ 21,000	\$ -	\$ -	\$ -	\$ -	\$ 21,000
<b>Other Direct</b>	Subtotal \$ 30,000	\$ 30,000	\$ 80,000	\$ -	\$ -	\$ 150,000
X G5070 Curation (L5 Only)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G4070 G5080 Consultants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
X G5090 Office Services (L5 Only)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G4090 G5110 Materials and Supplies	\$ 30,000	\$ 30,000	\$ 80,000	\$ -	\$ -	\$ 150,000
G4090 G5110 Publication Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G4090 G5110 Computer Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G4090 G5110 User Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
? ? Other (F&A Included)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
? ? Other (F&A Excluded)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G4090 G5116 Workshop-Seminar Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
X G5115 Mileage Expense (L5 Only)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G4100 G5120 Rentals & Leases	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G4105 G5125 Rental Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G4150 G5170 NSF G.6 Other Tuition & Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Student and Participant Support</b>	Subtotal \$ 4,000	\$ 7,000	\$ -	\$ -	\$ -	\$ 11,000
G4130 G5150 Participant Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G4130 G5155 Participant Travel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G4140 G5160 Scholarships & Fellowships	\$ -	\$ 3,000	\$ -	\$ -	\$ -	\$ 3,000
G4150 G5170 Tuition & Fees	\$ 4,000	\$ 4,000	\$ -	\$ -	\$ -	\$ 8,000
<b>Subawards</b>	Subtotal \$ -	\$ -	\$ -	\$ -	\$ -	\$ -
0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Sponsor Costs</b>	<b>\$ 799,445</b>	<b>\$ 79,302</b>	<b>\$ 178,654</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,057,401</b>
UTSA Direct Costs	\$ 775,643	\$ 56,185	\$ 121,533	\$ -	\$ -	\$ 953,361
G4180 G5200 UTSA Indirect Costs	\$ 23,802	\$ 23,117	\$ 57,121	\$ -	\$ -	\$ 104,040
UTSA F&A Base	\$ 50,643	\$ 49,185	\$ 121,533	\$ -	\$ -	\$ 221,361
Cost Share Commitment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cost Share %	0%	0%	0%	-	-	-
Direct Cost - Consortium F&A	\$ 775,643	\$ 56,185	\$ 121,533	\$ -	\$ -	\$ 953,361
Consortium F&A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Award Costs</b>	<b>\$ 799,445</b>	<b>\$ 79,302</b>	<b>\$ 178,654</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,057,401</b>



**Exhibit B**  
**Funding Schedule**

Category	Itemized		Direct	Indirect	Total	Time
<b>Personnel \$69,361</b>						Month
Laub, Brian*	Y1, M5 = \$7,973; Y2, M17 = \$8,195; Y3, M29 = \$8,423		\$24,591	\$11,558	\$36,149	5,17,29
Bush, JK*	Y-3, M-29 = \$11,789		\$11,789	\$5,541	\$17,330	29
Laboratory Assistant*	Y1-Y3 = \$32,981/36 = \$916		\$32,981	\$15,501	\$48,482	1-36
<b>Travel, \$2,000*</b>						Month
	Domestic Travel		\$2,000	\$940	\$2,940	1-12
<b>Materials and Supplies \$150,000*</b>						Month
	Rain Gauge and Temperature Sensor		\$1,000	\$470	\$1,470	1-12
	Water Sampling		\$29,000	\$13,630	\$42,630	1-12
	Water Sampling		\$30,000	\$14,100	\$44,100	13-24
	Water Sampling		\$90,000	\$42,300	\$132,300	25-36
<b>Equipment \$21,000</b>						Month
	ISCO Flow Bubbler Flow Meters and Water Samplers		\$21,000	\$0	\$21,000	1
<b>Design Phase \$200,000</b>						Month
	Schematic 50% Docs	5%	\$10,000.00	\$0	\$10,000.00	1-2
	Schematic 100% Docs	10%	\$20,000.00	\$0	\$20,000.00	2-3
	Design 50% Docs	25%	\$50,000.00	\$0	\$50,000.00	3-4
	Design 100% Docs	20%	\$40,000.00	\$0	\$40,000.00	4-5
	Construction 50% Docs	20%	\$40,000.00	\$0	\$40,000.00	5
	Construction 100% Docs	20%	\$40,000.00	\$0	\$40,000.00	5-6
<b>Construction Phase \$500,000</b>						Month
	Bidding and Negotiation	15%	\$75,000.00	\$0	\$75,000.00	7-9
	Construction Admin	40%	\$200,000.00	\$0	\$200,000.00	8-15
	As Built	30%	\$150,000.00	\$0	\$150,000.00	16
	Close out	15%	\$75,000.00	\$0	\$75,000.00	17-18
<b>Scholarship &amp; Fellowships \$3,000</b>						Month
	Y2 = \$3,000		\$3,000	\$0	\$3,000	18-21
<b>Tuition &amp; Fees \$8,000</b>						Month
	Y1 = \$4,000; Y2=\$4,000		\$8,000	\$0	\$8,000	6-9, 18-21
<b>Grand Total</b>			<b>\$953,361</b>	<b>\$104,040</b>	<b>\$1,057,401</b>	

\*These items will be billed in the quarter and year in which they are incurred.





**Exhibit D**

Exceptions to San Antonio River Basin LID Technical Guidance Manual Usage.

None anticipated.

## **Exhibit E**

### **SBEDA Ordinance Compliance Provisions**

#### **A. SBEDA Program**

The CITY has adopted a Small Business Economic Development Advocacy Ordinance (Ordinance No. 2010-06-17-0531 and as amended, also referred to as "SBEDA" or "the SBEDA Program"), which is posted on the City's Economic Development (EDD) website page and is also available in hard copy form upon request to the CITY. The SBEDA Ordinance Compliance Provisions contained in this section of the Agreement are governed by the terms of this Ordinance, as well as by the terms of the SBEDA Ordinance Policy & Procedure Manual established by the CITY pursuant to this Ordinance, and any subsequent amendments to this referenced SBEDA Ordinance and SBEDA Policy & Procedure Manual that are effective as of the date of the execution of this Agreement. Unless defined in a contrary manner herein, terms used in this section of the Agreement shall be subject to the same expanded definitions and meanings as given those terms in the SBEDA Ordinance and as further interpreted in the SBEDA Policy & Procedure Manual.

#### **B. Contract Requirements and Commitment**

FUNDING RECIPIENT understands and agrees that the following provisions shall be requirements of this contract, and by its execution, Funding Recipient commits to comply with these requirements. In the absence of a waiver granted by the SBO, failure of Funding Recipient to commit, through fully-documented and signed SBO-promulgated Subcontractor/Supplier Utilization Plan form, to satisfying the SBE and M/WBE subcontracting goals shall constitute default.

**Waiver Request** - Funding Recipient may request, for good cause, a full or partial Waiver of a **specified subcontracting goal** included in this contract by submitting the *Vendor Subcontracting Waiver Request* form (which is available at <http://www.sanantonio.gov/SBO/Forms.aspx>). The Funding Recipient's Waiver request must fully document subcontractor unavailability despite the Funding Recipient's good faith efforts to comply with the goals. Such documentation shall include all good faith efforts made by Funding Recipient including, but not limited to, which subcontractors were contacted (with phone numbers, e-mail addresses and mailing addresses, as applicable) and the method of contact.

#### **C. Definitions**

**Affirmative Procurement Initiatives (API)** – Refers to various Small Business Enterprise, Minority Business Enterprise, and/or Women Business Enterprise ("S/M/WBE") Program tools and Solicitation Incentives that are used to encourage greater Prime and subcontract participation by S/M/WBE firms, including bonding assistance, evaluation preferences, subcontracting goals and joint venture incentives. (For full descriptions of these and other S/M/WBE program tools, see Section III. D. of Attachment A to the SBEDA Ordinance.)



**Centralized Vendor Registration System (CVR)** – a mandatory electronic system wherein the City requires all prospective Respondents and Subcontractors that are ready, willing and able to sell goods or services to the City to register. The CVR system assigns a unique identifier to each registrant that is then required for the purpose of submitting solicitation responses and invoices, and for receiving payments from the City. The CVR-assigned identifiers are also used by the Goal Setting Committee for measuring relative availability and tracking utilization of SBE and M/WBE firms by Industry or commodity codes, and for establishing Annual Aspirational Goals and Contract-by-Contract Subcontracting Goals.

**Certification or “Certified”**– the process by which the Small Business Office (SBO) staff determines a firm to be a bona-fide small, minority-, women-owned, or emerging small business enterprise. Emerging Small Business Enterprises (ESBEs) are automatically eligible for Certification as SBEs. Any firm may apply for multiple Certifications that cover each and every status category (e.g., SBE, ESBE, MBE, or WBE) for which it is able to satisfy eligibility standards. The SBO staff may contract these services to a regional Certification agency or other entity. For purposes of Certification, the City accepts any firm that is certified by local government entities and other organizations identified herein that have adopted Certification standards and procedures similar to those followed by the SBO, provided the prospective firm satisfies eligibility requirements set forth in this Ordinance in Section III.E.6 of Attachment A.

**Commercially Useful Function** – an S/M/WBE firm performs a Commercially Useful Function when it is responsible for execution of a distinct element of the work of the contract and is carrying out its responsibilities by actually performing, staffing, managing and supervising the work involved. To perform a Commercially Useful Function, the S/M/WBE firm must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quantity and quality, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether an S/M/WBE firm is performing a Commercially Useful Function, an evaluation must be performed of the amount of work subcontracted, normal industry practices, whether the amount the S/M/WBE firm is to be paid under the contract is commensurate with the work it is actually performing and the S/M/WBE credit claimed for its performance of the work, and other relevant factors. Specifically, an S/M/WBE firm does not perform a Commercially Useful Function if its role is limited to that of an extra participant in a transaction, contract or project through which funds are passed in order to obtain the appearance of meaningful and useful S/M/WBE participation, when in similar transactions in which S/M/WBE firms do not participate, there is no such role performed. The use of S/M/WBE firms by Funding Recipient to perform such “pass-through” or “conduit” functions that are not commercially useful shall be viewed by the CITY as fraudulent if Funding Recipient attempts to obtain credit for such S/M/WBE participation towards the satisfaction of S/M/WBE participation goals or other API participation requirements. As such, under such circumstances where a commercially useful function is not actually performed by the S/M/WBE firm, the Funding Recipient shall not be given credit for the participation of its S/M/WBE subcontractor or joint venture partner towards attainment of S/M/WBE utilization goals, and the Funding Recipient



and S/M/WBE firm may be subject to sanctions and penalties in accordance with the SBEDA Ordinance.

**Good Faith Efforts** – documentation of the Funding Recipient's or Respondent's intent to comply with S/M/WBE Program Goals and procedures including, but not limited to, the following: (1) documentation within a solicitation response reflecting the Respondent's commitment to comply with SBE or M/WBE Program Goals as established by the GSC for a particular contract; or (2) documentation of efforts made toward achieving the SBE or M/WBE Program Goals (e.g., timely advertisements in appropriate trade publications and publications of wide general circulation; timely posting of SBE or M/WBE subcontract opportunities on the City of San Antonio website; solicitations of bids/proposals/qualification statements from all qualified SBE or M/WBE firms listed in the Small Business Office's directory of certified SBE or M/WBE firms; correspondence from qualified SBE or M/WBE firms documenting their unavailability to perform SBE or M/WBE contracts; documentation of efforts to subdivide work into smaller quantities for subcontracting purposes to enhance opportunities for SBE or M/WBE firms; documentation of a Prime Contractor's posting of a bond covering the work of SBE or M/WBE Subcontractors; documentation of efforts to assist SBE or M/WBE firms with obtaining financing, bonding or insurance required by the Respondent; and documentation of consultations with trade associations and consultants that represent the interests of SBE and/or M/WBEs in order to identify qualified and available SBE or M/WBE Subcontractors.) The appropriate form and content of Funding Recipient's Good Faith Efforts documentation shall be in accordance with the SBEDA Ordinance as interpreted in the SBEDA Policy & Procedure Manual.

**HUBZone Firm** – a business that has been certified by U.S. Small Business Administration for participation in the federal HUBZone Program, as established under the 1997 Small Business Reauthorization Act. To qualify as a HUBZone firm, a small business must meet the following criteria: (1) it must be owned and Controlled by U.S. citizens; (2) at least 35 percent of its employees must reside in a HUBZone; and (3) its Principal Place of Business must be located in a HUBZone within the San Antonio Metropolitan Statistical Area. [See 13 C.F.R. 126.200 (1999).]

**Independently Owned and Operated** – ownership of an SBE firm must be direct, independent and by Individuals only. Ownership of an M/WBE firm may be by Individuals and/or by other businesses provided the ownership interests in the M/WBE firm can satisfy the M/WBE eligibility requirements for ownership and Control as specified herein in Section III.E.6. The M/WBE firm must also be Independently Owned and Operated in the sense that it cannot be the subsidiary of another firm that does not itself (and in combination with the certified M/WBE firm) satisfy the eligibility requirements for M/WBE Certification.

**Individual** – an adult person that is of legal majority age.

**Industry Categories** – procurement groupings for the City of San Antonio inclusive of Construction, Architectural & Engineering (A&E), Professional Services, Other Services, and



Goods & Supplies (i.e., manufacturing, wholesale and retail distribution of commodities). This term may sometimes be referred to as “business categories.”

**Minority/Women Business Enterprise (M/WBE)** – firm that is certified as a Small Business Enterprise and also as either a Minority Business Enterprise or as a Women Business Enterprise, and which is at least fifty-one percent (51%) owned, managed and Controlled by one or more Minority Group Members and/or women, and that is ready, willing and able to sell goods or services that are purchased by the City of San Antonio.

**M/WBE Directory** – a listing of minority- and women-owned businesses that have been certified for participation in the City’s M/WBE Program APIs.

**Minority Business Enterprise (MBE)** – any legal entity, except a joint venture, that is organized to engage in for-profit transactions, which is certified a Small Business Enterprise and also as being at least fifty-one percent (51%) owned, managed and controlled by one or more Minority Group Members, and that is ready, willing and able to sell goods or services that are purchased by the CITY. To qualify as an MBE, the enterprise shall meet the Significant Business Presence requirement as defined herein. Unless otherwise stated, the term “MBE” as used in this Ordinance is not inclusive of women-owned business enterprises (WBEs).

**Minority Group Members** – African-Americans, Hispanic Americans, Asian Americans and Native Americans legally residing in, or that are citizens of, the United States or its territories, as defined below:

African-Americans: Persons having origins in any of the black racial groups of Africa as well as those identified as Jamaican, Trinidadian, or West Indian.

Hispanic-Americans: Persons of Mexican, Puerto Rican, Cuban, Spanish or Central and South American origin.

Asian-Americans: Persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent or the Pacific Islands.

Native Americans: Persons having no less than 1/16<sup>th</sup> percentage origin in any of the Native American Tribes, as recognized by the U.S. Department of the Interior, Bureau of Indian Affairs and as demonstrated by possession of personal tribal role documents.

**Originating Department** – the CITY department or authorized representative of the CITY which issues solicitations or for which a solicitation is issued.

**Payment** – dollars actually paid to Funding Recipient and/or Subcontractors and vendors for CITY contracted goods and/or services.

**Prime Contractor** – the vendor or contractor to whom a purchase order or contract is issued by the City of San Antonio for purposes of providing goods or services for the City. For purposes of this Agreement, this term refers to the Funding Recipient.

**Relevant Marketplace** – the geographic market area affecting the S/M/WBE Program as determined for purposes of collecting data for the MGT Studies, and for determining eligibility for participation under various programs established by the SBEDA Ordinance, is defined as the San Antonio Metropolitan Statistical Area (SAMSA), currently including the counties of Atascosa, Bandera, Bexar, Comal, Guadalupe, Kendall, Medina and Wilson.

**Respondent** – a vendor submitting a bid, statement of qualifications, or proposal in response to a solicitation issued by the City. For purposes of this Agreement, Funding Recipient is the Respondent.

**Responsible** – a firm which is capable in all respects to fully perform the contract requirements and has the integrity and reliability which will assure good faith performance of contract specifications.

**Responsive** – a firm's submittal (bid, response or proposal) conforms in all material respects to the solicitation (Invitation for Bid, Request for Qualifications, or Request for Proposal) and shall include compliance with S/M/WBE Program requirements.

**San Antonio Metropolitan Statistical Area (SAMSA)** – also known as the Relevant Marketplace, the geographic market area from which the CITY's MGT Studies analyzed contract utilization and availability data for disparity (currently including the counties of Atascosa, Bandera, Bexar, Comal, Guadalupe, Kendall, Medina and Wilson).

**SBE Directory** - a listing of small businesses that have been certified for participation in the City's SBE Program APIs

**SBE Subcontracting Program** – an API in which Prime Contractors or vendors are required to make Good Faith Efforts to subcontract a specified percentage of the value of prime contract dollars to certified SBE firms. Such subcontracting goals may be set and applied by the GSC on a contract-by-contract basis to those types of contracts that provide subcontract opportunities for performing Commercially Useful Functions wherein there have been ongoing disparities in the utilization of available SBE Subcontractors.

When specified by the GSC, the SBE Subcontracting Plan or Good Faith Efforts plan submitted by Funding Recipient may also be required to reflect Good Faith Efforts that a Prime Contractor or vendor has taken (or commits to taking in the case of solicitations that do not include a detailed scope of work or those in which price cannot be considered a factor in evaluation), toward attainment of subcontracting goals for SBE firms.

**Significant Business Presence** – to qualify for this Program, a S/M/WBE must be headquartered or have a *significant business presence* for at least one year within the Relevant Marketplace,



defined as: an established place of business in one or more of the eight counties that make up the San Antonio Metropolitan Statistical Area (SAMSA), from which 20% of its full-time, part-time and contract employees are regularly based, and from which a substantial role in the S/M/WBE's performance of a Commercially Useful Function is conducted. A location utilized solely as a post office box, mail drop or telephone message center or any combination thereof, with no other substantial work function, shall not be construed to constitute a significant business presence.

**Small Business Enterprise (SBE)** – a corporation, partnership, sole proprietorship or other legal entity for the purpose of making a profit, which is Independently Owned and Operated by Individuals legally residing in, or that are citizens of, the United States or its territories, and which meets the U.S. Small Business Administration (SBA) size standard for a small business in its particular industry(ies) and meets the Significant Business Presence requirements as defined herein.

**Small Business Office (SBO)** – the office within the Economic Development Department (EDD) of the CITY that is primarily responsible for general oversight and administration of the S/M/WBE Program.

**Small Business Office Manager** – the Assistant Director of the EDD of the CITY that is responsible for the management of the SBO and ultimately responsible for oversight, tracking, monitoring, administration, implementation and reporting of the S/M/WBE Program. The SBO Manager is also responsible for enforcement of contractor and vendor compliance with contract participation requirements, and ensuring that overall Program goals and objectives are met.

**Small Minority Women Business Enterprise Program (S/M/WBE Program)** – the combination of SBE Program and M/WBE Program features contained in the SBEDA Ordinance.

**Subcontractor** – any vendor or contractor that is providing goods or services to a Prime Contractor or Funding Recipient in furtherance of the Prime Contractor's performance under a contract or purchase order with the City. A copy of each binding agreement and any subsequent agreement modifications between the Funding Recipient and its subcontractors shall be submitted to the CITY and River Authority following execution.

**Suspension** – the temporary stoppage of the SBE or M/WBE firm's beneficial participation in the CITY's S/M/WBE Program for a finite period of time due to cumulative contract payments the S/M/WBE firm received during a fiscal year that exceed a certain dollar threshold as set forth in Section III.E.7 of Attachment A to the SBEDA Ordinance, or the temporary stoppage of Funding Recipient's and/or S/M/WBE firm's performance and payment under CITY contracts due to the CITY's imposition of Penalties and Sanctions set forth in Section III.E.13 of Attachment A to the SBEDA Ordinance.

**Subcontractor/Supplier Utilization Plan** – a binding part of this contract Agreement which states the Funding Recipient's commitment for the use of Joint Venture Partners and / or Subcontractors/Suppliers in the performance of this contract Agreement, and states the name, scope of work, and dollar value of work to be performed by each of Funding Recipient's Joint Venture partners and Subcontractors/Suppliers in the course of the performance of this contract,



specifying the S/M/WBE Certification category for each Joint Venture partner and Subcontractor/Supplier, as approved by the SBO Manager. Additions, deletions or modifications of the Joint Venture partner or Subcontractor/Supplier names, scopes of work, of dollar values of work to be performed requires an amendment to this Agreement to be approved by the EDD Director or designee.

**Women Business Enterprises (WBEs)** - any legal entity, except a joint venture, that is organized to engage in for-profit transactions, that is certified for purposes of the SBEDA Ordinance as being a Small Business Enterprise and that is at least fifty-one percent (51%) owned, managed and Controlled by one or more non-minority women Individuals that are lawfully residing in, or are citizens of, the United States or its territories, that is ready, willing and able to sell goods or services that are purchased by the City and that meets the Significant Business Presence requirements as defined herein. Unless otherwise stated, the term "WBE" as used in this Agreement is not inclusive of MBEs.

#### D. SBEDA Program Compliance – General Provisions

As Funding Recipient acknowledges that the terms of the CITY's SBEDA Ordinance, as amended, together with all requirements, guidelines, and procedures set forth in the CITY's SBEDA Policy & Procedure Manual are in furtherance of the CITY's efforts at economic inclusion and, moreover, that such terms are part of Funding Recipient's scope of work as referenced in the CITY's formal solicitation that formed the basis for contract award and subsequent execution of this Agreement, these SBEDA Ordinance requirements, guidelines and procedures are hereby incorporated by reference into this Agreement, and are considered by the Parties to this Agreement to be material terms. Funding Recipient voluntarily agrees to fully comply with these SBEDA program terms as a condition for being awarded this contract by the CITY. Without limitation, Funding Recipient further agrees to the following terms as part of its contract compliance responsibilities under the SBEDA Program:

1. Funding Recipient shall cooperate fully with the Small Business Office and other CITY departments in their data collection and monitoring efforts regarding Funding Recipient's utilization and payment of Subcontractors, S/M/WBE firms, and HUBZone firms, as applicable, for their performance of Commercially Useful Functions on this contract including, but not limited to, the timely submission of completed forms and/or documentation promulgated by SBO, through the Originating Department, pursuant to the SBEDA Policy & Procedure Manual, timely entry of data into monitoring systems, and ensuring the timely compliance of its Subcontractors with this term;
2. Funding Recipient shall cooperate fully with any CITY or SBO investigation (and shall also respond truthfully and promptly to any CITY or SBO inquiry) regarding possible non-compliance with SBEDA requirements on the part of Funding Recipient or its Subcontractors or suppliers;
3. Funding Recipient shall permit the SBO, upon reasonable notice, to undertake



inspections as necessary including, but not limited to, contract-related correspondence, records, documents, payroll records, daily logs, invoices, bills, cancelled checks, and work product, and to interview Subcontractors and workers to determine whether there has been a violation of the terms of this Agreement;

4. Funding Recipient shall immediately notify the SBO, in writing on the Change to Utilization Plan form, through the Originating Department, of any proposed changes to Funding Recipient's Subcontractor / Supplier Utilization Plan for this contract, with an explanation of the necessity for such proposed changes, including documentation of Good Faith Efforts made by Funding Recipient to replace the Subcontractor / Supplier in accordance with the applicable Affirmative Procurement Initiative. All proposed changes to the Subcontractor /Supplier Utilization Plan including, but not limited to, proposed self-performance of work by Funding Recipient of work previously designated for performance by Subcontractor or supplier, substitutions of new Subcontractors, terminations of previously designated Subcontractors, or reductions in the scope of work and value of work awarded to Subcontractors or suppliers, shall be subject to advanced written approval by the Originating Department and the SBO.
5. Funding Recipient shall immediately notify the Originating Department and SBO of any transfer or assignment of its contract with the CITY, as well as any transfer or change in its ownership or business structure.
6. Funding Recipient shall retain all records of its Subcontractor payments for this contract for a minimum of four years, or as required by state law, following the conclusion of this contract or, in the event of litigation concerning this contract, for a minimum of four years, or as required by state law, following the final determination of litigation, whichever is later.
7. In instances wherein the SBO determines that a Commercially Useful Function is not actually being performed by the applicable S/M/WBE or HUBZone firms listed in a Funding Recipient's Subcontractor / Supplier Utilization Plan, the Funding Recipient shall not be given credit for the participation of its S/M/WBE or HUBZone subcontractor(s) or joint venture partner(s) toward attainment of S/M/WBE or HUBZone firm utilization goals, and the Funding Recipient and its listed S/M/WBE firms or HUBZone firms may be subject to sanctions and penalties in accordance with the SBEDA Ordinance.
8. Funding Recipient acknowledges that the CITY will not execute a contract or issue a Notice to Proceed for this project until the Funding Recipient and each of its Subcontractors for this project have registered and/or maintained active status in the CITY's Centralized Vendor Registration System, and Funding Recipient has represented to CITY which primary commodity codes each registered Subcontractor will be performing under for this contract.



#### E. SBEDA Program Compliance – Affirmative Procurement Initiatives

The CITY has applied the following contract-specific Affirmative Procurement Initiative to this contract: 26% Minority/Women Business Enterprise (M/WBE) subcontracting goal.

#### F. Commercial Nondiscrimination Policy Compliance

As a condition of entering into this Agreement, the Funding Recipient represents and warrants that it has complied with throughout the course of this solicitation and contract award process, and will continue to comply with, the CITY's Commercial Nondiscrimination Policy, as described under Section III. C. 1. of the SBEDA Ordinance. As part of such compliance, Funding Recipient shall not discriminate on the basis of race, color, religion, ancestry or national origin, sex, age, marital status, sexual orientation or, on the basis of disability or other unlawful forms of discrimination in the solicitation, selection, hiring or commercial treatment of Subcontractors, vendors, suppliers, or commercial customers, nor shall the company retaliate against any person for reporting instances of such discrimination. The company shall provide equal opportunity for Subcontractors, vendors and suppliers to participate in all of its public sector and private sector subcontracting and supply opportunities, provided that nothing contained in this clause shall prohibit or limit otherwise lawful efforts to remedy the effects of marketplace discrimination that have occurred or are occurring in the CITY's Relevant Marketplace. The company understands and agrees that a material violation of this clause shall be considered a material breach of this Agreement and may result in termination of this Agreement, disqualification of the company from participating in CITY contracts, or other sanctions. This clause is not enforceable by or for the benefit of, and creates no obligation to, any third party. Funding Recipient's certification of its compliance with this Commercial Nondiscrimination Policy as submitted to the CITY pursuant to the solicitation for this contract is hereby incorporated into the material terms of this Agreement. Funding Recipient shall incorporate this clause into each of its Subcontractor and supplier agreements entered into pursuant to CITY contracts.

#### G. Prompt Payment

Upon execution of this contract by Funding Recipient, Funding Recipient shall be required to submit to CITY accurate progress payment information with each invoice regarding each of its Subcontractors, including HUBZone Subcontractors, to ensure that the Funding Recipient's reported subcontract participation is accurate. Funding Recipient shall pay its Subcontractors in compliance with Chapter 2251, Texas Government Code (the "Prompt Payment Act") within ten days of receipt of payment from CITY. In the event of Funding Recipient's noncompliance with these prompt payment provisions, no final retainage on the Prime Contract shall be released to Funding Recipient, and no new CITY contracts shall be issued to the Funding Recipient until the CITY's audit of previous subcontract payments is complete and payments are verified to be in accordance with the specifications of the contract.

#### H. Violations, Sanctions and Penalties

In addition to the above terms, Funding Recipient acknowledges and agrees that it is a violation of the SBEDA Ordinance and a material breach of this Agreement to:



1. Fraudulently obtain, retain, or attempt to obtain, or aid another in fraudulently obtaining, retaining, or attempting to obtain or retain Certification status as an SBE, MBE, WBE, M/WBE, HUBZone firm, Emerging M/WBE, or ESBE for purposes of benefitting from the SBEDA Ordinance;
2. Willfully falsify, conceal or cover up by a trick, scheme or device, a material fact or make any false, fictitious or fraudulent statements or representations, or make use of any false writing or document, knowing the same to contain any false, fictitious or fraudulent statement or entry pursuant to the terms of the SBEDA Ordinance;
3. Willfully obstruct, impede or attempt to obstruct or impede any authorized official or employee who is investigating the qualifications of a business entity which has requested Certification as an S/M/WBE or HUBZone firm;
4. Fraudulently obtain, attempt to obtain or aid another person fraudulently obtaining or attempting to obtain public monies to which the person is not entitled under the terms of the SBEDA Ordinance; and
5. Make false statements to any entity that any other entity is, or is not, certified as an S/M/WBE for purposes of the SBEDA Ordinance.

Any person who violates the provisions of this section shall be subject to the provisions of Section III. E. 13. of the SBEDA Ordinance and any other penalties, sanctions and remedies available under law including, but not limited to:

1. Suspension of contract;
2. Withholding of funds;
3. Rescission of contract based upon a material breach of contract pertaining to S/M/WBE Program compliance;
4. Refusal to accept a response or proposal; and
5. Disqualification of Funding Recipient or other business firm from eligibility for providing goods or services to the City for a period not to exceed two years (upon City Council approval).

SW  
12/14/17  
Item No. 38

**Attachment II**

# **ATTACHMENT II**



**Funding Agreement for the  
Evaluation of Wastewater Disposal in the Recharge and Contributing Zones of the  
Edwards Aquifer Using a Coupled Surface-Water/Groundwater Model  
under the  
Proposition 1 Edwards Aquifer Protection Projects within Urbanized Areas of  
Bexar County's Recharge and Contributing Zones Program**

This Proposition 1 Edwards Aquifer Protection Projects within Urbanized Areas of Bexar County's Recharge and Contributing Zones Funding Agreement (Funding Agreement) is between the City of San Antonio (City), the San Antonio River Authority (River Authority), and the Southwest Research Institute (Funding Recipient), collectively the "Parties." The Parties understand and agree that this Funding Agreement documents the roles and responsibilities of each of the Parties in the City's Proposition 1 Edwards Aquifer Protection Projects within Urbanized Areas of Bexar County's Recharge and Contributing Zones Program (Program). The Parties agree to comply with the terms of this Funding Agreement (Agreement).

**Background**

Proposition 1, the Edwards Aquifer Protection Venue Project, authorizes the City to continue the voter-approved watershed and preservation project initiated in 2000 and continued in 2005, 2010, and 2015. A 1/8 cent sales tax is projected to collect \$100 million for this project. Of the \$100 million projected to be collected pursuant to the 2015 authorization, \$90 million will continue to be used toward the purchase of conservation easements and acquisition of real estate interests over the sensitive recharge and contributing zones of the aquifer. The remaining \$10 million is dedicated for Program-funded projects that will protect and improve Edwards Aquifer water quality. The Funding Recipient's Evaluation of Wastewater Disposal in the Recharge and Contributing Zones of the Edwards Aquifer Using a Coupled Surface-Water/Groundwater Model (Project) has received both Conservation Advisory Committee (CAB) and City of San Antonio City Council (Council) funding approval and is the subject of this Agreement. The primary project goal is to develop a coupled surface-water/groundwater model that accurately simulates solute transport from on-site sewage facilities (OSSF) and Texas Land Application Permit (TLAP) wastewater disposal in the Helotes Creek Watershed of the Edwards Aquifer Contributing Zone and that quantifies the impact of solute transport on recharge to the Edwards Aquifer, including the impact of residential land-use development on surface-water and groundwater quality.

**Funding**

The City has authorized and will contribute \$530,398 for the Project. The funding amount is documented by the detailed information in Exhibit A. All Parties acknowledge and agree that \$530,398 is the full amount authorized by this Funding Agreement, and no additional funds will be claimed by the Funding Recipient, unless this amount is modified through an amendment executed by all of the Parties.

**Agreement Term**

This Agreement shall be effective as of March 1, 2018 (the "Effective Date") through and including April 30, 2020 (the "Term"). The Parties may extend this Agreement for a mutually agreeable period.

**City of San Antonio Acknowledges and Agrees**

1. Funding Recipient will be responsible for the work to be conducted under the Program.
2. River Authority will serve as project manager and administrator of the Program.
3. Funding Recipient will submit invoices for payment directly to City, with a copy sent concurrently to River Authority, to the following addresses:

<b>City of San Antonio</b> Phillip Covington Special Projects Manager Edwards Aquifer Protection Program Parks and Recreation Department PO Box 839966 San Antonio, TX 78283 (210) 207-3003 phillip.covington@sanantonio.gov	<b>San Antonio River Authority</b> Karen Bishop Senior Supervisor Environmental Sciences Department PO Box 839980 San Antonio, Texas 78283 (210) 302-3642 kbishop@sara-tx.org
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4. Funding shall be paid directly to the Funding Recipient after River Authority verification of satisfactory performance of work in accordance with the payment schedule attached as Exhibit B and the completion of Funding Recipient's project milestones and deliverable dates, attached as Exhibit C.

**River Authority Acknowledges and Agrees**

1. River Authority will serve as project manager and administrator of the Program.
2. River Authority is responsible to the City to ensure quality and timely implementation of Project components and future monitoring of aquifer protection and improvement projects funded through the Program.
3. River Authority will coordinate payment to the Funding Recipient in a timely manner per Exhibits A and B.



### **Funding Recipient Acknowledges and Agrees**

1. Work to be conducted by Funding Recipient will be under the direct supervision of Principal Investigator, Ronald T. Green, an employee of the Funding Recipient.
2. The Project shall produce the following deliverables:
  - a. Literature review on the Helotes Creek watershed
  - b. Data assembly (hydraulic, water quality, flow, etc.)
  - c. Models
    - i. Hydrostratigraphic framework model
    - ii. Coupled surface-water/groundwater model
    - iii. Surface-water flow model
  - d. Simulation of solute transport using models
  - e. Compilation and reporting of results (monthly status reports, draft final and final report)
3. The Project shall answer the following questions:
  - a. What method of wastewater disposal imposes the greatest impact on water recharging the Edwards Aquifer: wastewater disposal using individual on-site sewage facilities (OSSF) versus wastewater disposal by Texas Land Application Permit (TLAP)?
  - b. Does a package sewage treatment plant (i.e., TLAP) have more/less impact on the quality of water recharged to the Edwards Aquifer compared with individual on-site sewage facilities (OSSF)?
  - c. What areas within the Contributing and Recharge zones are most vulnerable to degradation from development?
  - d. What, if any, areas located in the upland regions of watersheds within the Contributing Zone should be targeted by the EAPP as candidates for conservation easements or purchase to protect water quality and quantity that recharges the Edwards?
  - e. What are the specific threats, including the impact of development that occurs too close to rivers, either in the Recharge or Contributing zone, and development that occurs in the Contributing Zone too close to the Recharge Zone?
  - f. What are the minimum distances from rivers and from the Recharge Zone that development (i.e., additional OSSF or TLAP) facilities would be deemed to not pose a threat to the quality and quantity of Edwards recharge?
  - g. Secondary questions to be addressed include:
    - i. How does OSSF density impact aquifer recharge?
    - ii. How does TLAP impact aquifer recharge when it is applied in upland areas versus riverbeds?
    - iii. How does quantity of TLAP discharge scale in terms of impact on recharge to the Edwards Aquifer?
    - iv. How does the distance of the wastewater discharge from the Recharge Zone (when discharged in the Contributing Zone) impact the quality of recharge when it enters the Edwards Aquifer? and

- v. How does the distance of the wastewater discharge from the river channels (when discharged in either the Recharge and Contributing zones) impact the quality of recharge when it enters the Edwards Aquifer?
4. The Project's major milestones include:
- a. Final project area delineation within the Helotes Creek Watershed
  - b. Development of an integrated surface-water/groundwater model capable of simulating solute transport and surface-water/groundwater flow between the Trinity and Edwards aquifers in the Edwards Aquifer Recharge and Contributing zones
  - c. Completion of coupled surface-water/groundwater model runs
  - d. Analysis of coupled surface-water/groundwater model runs
  - e. Once a surface-water/groundwater flow model has been developed and is fully operational, the SwRI team will extend the flow model to accommodate solute transport. The source of solute will be obtained from the OSSF and TLAP facilities. The impact of these facilities on land use and the soil layer will be then be incorporated into the model.
  - f. Working with the Edwards Aquifer Authority (EAA) and the City of Austin Watershed Protection Department, Environmental Resource Management Division in a consulting capacity within their responsibilities at their respective agencies. The collaboration with the EAA and its programs, the project will be integrated with the multi-year Interformational Flow Program (IFFP) underway at the EAA. The project will also benefit from insights on watershed protection developed by the City of Austin Watershed Protection Department.
  - g. Monthly status reports will be provided to San Antonio River Authority documenting project activities including costs
  - h. Draft Report delivered one month prior to project end date
  - i. Final Report delivered on the project end date
  - j. The SwRI project team will make a formal presentation of the projects results to San Antonio River Authority staff at which the public will be invited.
  - k. The coupled surface-water/groundwater model developed, including sample input and output files, will be made available for consideration and use by the general public. These models will be maintained by San Antonio River Authority or an agent designated by San Antonio River Authority. All data generated by the project, including model input and output files, will be submitted to San Antonio River Authority at the conclusion of the project.
5. The Project's major tasks are as follows:
- a. Task 1. Literature search for documents on the Helotes Creek watershed, coupled surfacewater/groundwater models, impact of OSSF and TLAP on subsurface, and related subject material.
  - b. Task 2. Delineation of the study and model domain.



- c. Task 3. Development of a hydrostratigraphic framework model of the study domain. This framework model will be predicated on the larger-scale framework model developed by Fratesi et al. (2015).
  - d. Task 4. Data assembly, including hydraulic, water chemistry, water elevation, stream flow, and physical property data. In addition, surface-water flow data and soil data assembled during the Devils River watershed model project (Green et al., 2014; Toll et al., 2017) will be used as the basis for this task. Baseflow separations on stream data will be performed to assist in the early calibration process. Field activities such as geophysical imaging of the subsurface may be required to substantiate the conceptual model (Green et al., 2014).
  - e. Task 5. Development of a conceptual model for the coupled surface-water/groundwater model. These development will be predicated on the larger-scale model developed by Fratesi et al. (2015) and a watershed-basin scale model developed by Toll et al. (2017).
  - f. Task 6. Development and preliminary calibration of a surface-water flow model of Helotes Creek watershed. Preliminary calibration will be based on the surface-water portions of stream discharge.
  - g. Task 7. Development and preliminary calibration of a groundwater flow model of Helotes Creek watershed. This will happen concurrently with Task 5. Preliminary calibration will be based on baseflow portions of stream discharge and available aquifer water-level data.
  - h. Task 8. Determination of recharge for the coupled surface-water/groundwater flow model. Recharge will be directly calculated using NEXRAD precipitation data. The methodology to determine recharge from precipitation is documented in Toll et al. (2017).
  - i. Task 9. Final calibration of the coupled surface-water/groundwater flow model. Final calibration will be based on total streamflows and available aquifer water-level data.
  - j. Task 10. Simulation of solute transport in Helotes Creek watershed using the coupled surface-water/groundwater flow model. Solute will be introduced by both OSSF and TLAP wastewater disposal facilities.
  - k. Task 11. Compilation of solute transport in terms of quality or water recharged to the Edwards Aquifer. Results will be compared with a baseline case in which no solute is introduced into the Helotes Creek watershed.
  - l. Task 12. Project Management and Reporting. Monthly status report submission and final report preparation and submission. Communication and correspondence with San Antonio River Authority project manager.
6. The City may rescind the funding in whole or in part if milestones are missed without providing City with appropriate notice and justification, and alternative plans and timeline or the project falls significantly behind schedule, subject to force majeure.
  7. Funding Recipient may request an extension in writing up to fifteen business days before the original project end date.
  8. Any decisions regarding the extension to the project end date shall be made by the River Authority in coordination with the City.



9. The final report will be approved in writing by the River Authority and Funding Recipient prior to final payment.
10. Funding Recipient is aware that presentations may be requested by the River Authority, the City, the CAB, San Antonio City Council, or other governing or advisory bodies associated with the Program.
11. Funding Recipient agrees to be available for presentations to the best of its ability.
12. Funding Recipient shall acknowledge the City in any signage placed at project site, or in any news releases or other publications relating to the work performed under this Funding Agreement. News releases or other publications must be sent to the River Authority for review before they are sent to any outside party. Failure to send any news or publication release to the River Authority for review shall not result in a breach of this Funding Agreement.
13. Funding Recipient is aware that media interviews may be requested and/or coordinated by the City or the River Authority as a result of this project.
14. Funding Recipient agrees to be available for interviews to the best of its ability.
15. Funding Recipient grants the City and the River Authority, their representatives and employees the right to take photographs, videos, and other forms of media of the awarded Project.
16. Funding Recipient authorizes the City and the River Authority, their assigns and transferees to copyright, use and publish photographs, videos, and other forms of media in print and/or electronically.
17. Funding shall be paid by the City to the Funding Recipient by the City after the River Authority verification of satisfactory performance of work in accordance with the payment schedule attached as Exhibit B and the completion of the Funding Recipient's project milestones and deliverable dates, attached as Exhibit C.
18. Funding Recipient warrants and represents that it will comply with all Federal, State and Local laws and regulations applicable to Funding Recipient's use of City Funds for this project. To the extent applicable, Funding Recipient agrees to abide by the following laws in its expenditures of City Funds:
  - a. Chapter 252 of the Texas Local Government Code, or other competitive contracting processes allowed for as express exceptions to Chapter 252.
  - b. Government Code chapter 2258 and Ordinance No. 71312 regarding Prevailing Wage Rate regulations required for certain contracts, including ensuring that its construction contractor shall collect and monitor weekly certified payrolls and perform site visits to ensure the prevailing wage is being paid to all workmen. City has the right to audit certified payroll records as necessary in accordance with this Agreement. Upon audit of the records and certified payrolls under this section, should the City or its auditors find any violations, Funding Recipient shall cause its contractor to forfeit as a penalty to the City \$60.00 for each laborer, workman, or mechanic employed, for each calendar day, or portion thereof, that such laborer, workman or mechanic is paid less than the said stipulated rates for any work done under said contract, by the contractor or any subcontractor. The establishment of prevailing wage rates in accordance with Chapter 2258, Texas Government Code



shall not be construed to relieve Funding Recipient from its obligation under any federal or state law regarding the wages to be paid to or hours worked by laborers, workmen or mechanics insofar as applicable to the work to be performed under this Agreement.

19. At any time during normal business hours and as often as City may deem necessary, upon three-days written notice, Funding Recipient shall make all of its records pertaining to this Agreement available to City or any of its authorized representatives, and shall permit City or any of its authorized representatives to audit, examine, and make excerpts and/or copies of same.
20. Funding Recipient agrees and represents that it will cooperate with City and River Authority, at no charge to the City or River Authority, to satisfy, to the extent required by law, any and all requests for information received by City or River Authority under the Texas Public Information Act or related laws pertaining to this Agreement.
21. Funding Recipient shall not transfer, pledge or otherwise assign this Agreement, any interest in and to same, or any claim arising thereunder, without first procuring the written approval of City. Any attempt at transfer, pledge or other assignment shall be void ab initio and shall confer no rights upon any third person.
22. Beginning the month after the project's commencement, Funding Recipient shall provide status reports to the City through the River Authority on the first Friday monthly. Said status report shall include project activity toward milestones in the prior month and shall note any changes to the schedule of deliverables, if any.

#### **No Third Party Rights**

- A. This Agreement is not intended, nor shall it be construed, to create any third party beneficiary rights in any person who is not a party hereto, unless otherwise expressly herein provided.
- B. Nothing in this Agreement shall be deemed or construed by the Parties hereto, or any third party, to create the relationship of principal and agent, partners, joint venturers or any other similar such relationship between the parties hereto. It is understood and agreed that no provision contained herein, nor any acts of the Parties hereto, creates a relationship other than the relationship of independent contracting entities.

#### **Publication and Academic Rights**

Funding Recipient's Principal Investigator has the right to publish or otherwise publicly disclose information gained in the course of the project under this Agreement. Funding Recipient will, however, submit any prepublication material to City for review and comment at least sixty (60) days prior to planned submission for publication. City will notify Funding Recipient of any objections within thirty (30) days of receipt. Funding Recipient shall have final authority to determine the scope and content of any publications, subject to any objections for the protection of confidential information. Funding Recipient shall acknowledge the City's contribution and describe in any publications, the scope and nature of City's contribution accurately and appropriately.

**Ownership of Materials and Documents**

Any and all drawings, documents or information in whatsoever form and character produced by Funding Recipient pursuant to the provisions of this Agreement is the joint property of Funding Recipient and City and either Party shall be allowed to make use of such material without requiring the approval of the other Party. Funding Recipient understands and acknowledges that as the joint owner of any and all writings, documents and information, City has the right to use all such writings, documents and information as the City desires, without restriction.

**Equipment**

Funding Recipient shall retain title to all equipment and structures purchased and/or fabricated by it with funds provided under this Agreement.

**Liability**

As government entities, River Authority and City hereby expressly acknowledge that they are governed by the Texas Tort Claims Act, which is located in Chapter 101 of the Texas Civil Practice and Remedies Code, and nothing in this Agreement shall be construed as a waiver by either of the Parties of any of the immunities and protections from liability included therein.

**Insurance**

Funding Recipient, at its own expense, shall provide and maintain, during the term of this Agreement, either insurance, with or without retention, or a self-insurance program. This insurance or self-insurance shall cover liability for property damage and personal injury associated with Funding Recipient's performance of work under this Agreement.

**Notices**

Any notice required by this Agreement shall be given by prepaid, first class, certified mail, return receipt requested, or by a recognized overnight courier, address as follows:

<b><u>In the case of City:</u></b> Phillip Covington Special Project Manager Edwards Aquifer Protection Program Parks and Recreation Department PO Box 839966 San Antonio, Texas 78283 (210) 207-3003 phillip.covington@sanantonio.gov	<b><u>In the case of River Authority:</u></b> Karen Bishop Senior Supervisor Environmental Sciences Department PO Box 839980 San Antonio, Texas 78283 (210) 302-3642 kbishop@sara-tx.org	<b><u>In the case of Funding Recipient:</u></b> Ronald T. Green, Ph.D., P.G. Institute Scientist Earth Science Section Space Science and Engineering Division Southwest Research Institute® 6220 Culebra Road San Antonio, Texas 78238 (210) 522-5305 rgreen@swri.edu
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**COMPLIANCE WITH SMALL, MINORITY AND WOMAN-OWNED BUSINESS  
ENTERPRISES POLICY, NON-DISCRIMINATION AND EQUAL EMPLOYMENT  
OPPORTUNITY POLICY**

Funding Recipient is hereby advised that it is the policy of the City of San Antonio that Small, Minority or Woman-owned Business Enterprises (SMWBE) shall have the maximum practical opportunity to participate in the performance of public contracts. In all events, Funding Recipient shall comply with the CITY's Small Business Economic Development Advocacy Program, contained in San Antonio Ordinance No. 2007-04-12-0396, and the amendments thereto in connection with the award of the construction contract(s). Said ordinances are incorporated herein for all purposes, as if fully set forth herein. Funding Recipient further agrees that Funding Recipient will abide by all applicable terms and provisions of CITY's Non-Discrimination Policy, CITY's Small, Business Economic Development Advocacy (SBEDA) Policy and CITY's Equal Opportunity Affirmative Action Policy, these policies being available in CITY's Department of Economic Development, Division of Internal Review and the City Clerk's Office.

The CITY has applied the following contract-specific Affirmative Procurement Initiative to this contract: None (Waiver approved 11/20/2017).

**Termination**


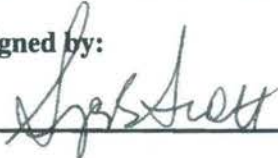
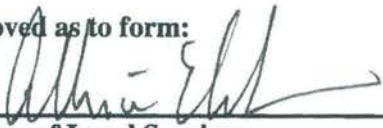
The Parties, with or without cause, may elect to terminate this Agreement by providing sixty (60) days written notice to the other Parties. Termination of this Agreement shall not affect the rights and obligations of the Parties accrued prior to the termination. Upon termination, City shall pay Funding Recipient for all reasonable expenses incurred or committed to be expended as of the effective termination date. Any provisions of this Agreement which by their nature extend beyond termination shall survive such termination; such provisions include but may not be limited to subsections 5, 25 and 35 of the section entitled "**Funding Recipient Acknowledges and Agrees**" herein.

**Amendment**

This Funding Agreement supersedes all prior agreements and understandings between the Parties regarding the Program and may only be changed by written amendment signed by all three of the Parties.

This Agreement shall be governed by, construed and enforced in accordance with the internal laws of the State of Texas.

*[Remainder of Page Intentionally Left Blank. Signatures on Following Page.]*

<p><b>Southwest Research Institute</b></p> <p>Date: <u>November 20, 2017</u></p> <p>Signed by:</p> 	<p><b>City of San Antonio</b></p> <p>Date: _____</p> <p>Signed by:</p>
<p><i>R</i> <b>R.B. Kalmbach</b> Executive Director, Contracts</p>	<p><b>Xavier D. Urrutia, Director</b> Parks &amp; Recreation Department</p> <p>Attest:</p> <p>_____</p> <p>City Clerk</p> <p>Approved as to form:</p> <p>_____</p> <p>City Attorney</p>
<p><b>San Antonio River Authority</b></p> <p>Date: <u>11-20-17</u></p> <p>Signed by:</p>  <p><b>Suzanne Scott</b> General Manager, San Antonio River Authority</p> <p>Date: _____</p> <p>Approved as to form:</p>  <p>_____</p> <p>Director of Legal Services</p>	



**Exhibit A**  
Project Budget

The anticipated cost of the proposed project (associated with fundable components only), including, as appropriate, monitoring, long-term sustainability and maintenance, and return on investment.

The cost of a coupled surface-water/groundwater flow model of the San Geronimo watershed capable of simulating solute transport is \$530,398.

<b>Task</b>	<b>Description</b>	<b>Cost</b>
1	Literature search	\$5,536
2	Delineation of the study and model domain	\$9,831
3	Development of a hydrostratigraphic framework model	\$46,060
4	Data assembly	\$24,028
5	Development of a conceptual model	\$53,783
6	Preliminary calibration of a surface-water flow model	\$41,898
7	Preliminary calibration of a groundwater flow model	\$36,984
8	Determination of recharge	\$68,528
9	Final calibration of the coupled surface-water/groundwater flow model	\$61,931
10	Simulation of solute transport	\$69,536
11	Compilation of solute transport	\$62,341
12	Project Management and Reporting	\$49,941
<b>Total</b>		<b>\$530,398</b>

**Exhibit B****Funding Schedule**

The City Council-approved total cost is Five Hundred Thirty Thousand Three Hundred Ninety-Eight Dollars (\$530,398) for SwRI's completion of the Project scope and deliverables as outlined in the "Funding Recipient Acknowledges and Agrees" section and in Exhibit C herein. The City of San Antonio is not obligated to reimburse SwRI in excess of such amount nor is SwRI obligated to continue the Project and incur excess charges unless the City of San Antonio agrees in writing to increase the contract amount and provide additional payment. The City of San Antonio shall make payments based upon invoices submitted at the end of each four (4) weeks after receipt of order for cost incurred for the prior four (4) weeks. All invoices submitted to City of San Antonio by SwRI shall be paid within thirty (30) days from date of invoice. SwRI is expressly authorized to declare the contract in default and to suspend or terminate work, without penalty, at any time any invoice is not paid by its due date.

The preferred method of payment is by electronic funds transfer to the account of Southwest Research Institute.

- Financial institution: Bank of America, N.A.
- Account number: 001390004879
- ACH ABA routing number: 111000025
- Wire ABA routing number: 026009593

Please reference the applicable invoice number with the payment or provide remittance information by email to [remit@swri.org](mailto:remit@swri.org). If this preferred method of payment is not feasible, please send all payments issued by check and/or any other information to the address identified on the invoice.

Although Southwest Research Institute is a 501(c)(3) exempt organization, state law requires that we collect and remit sales taxes for all taxable items sold. The price quoted herein does not include Texas sales tax, which, if applicable, will be added to SwRI invoice(s) for this work unless you provide a valid exemption or resale certificate with your acceptance.

Please direct questions regarding payment by phone to (210) 522-3715 or by email to [credit@swri.org](mailto:credit@swri.org).



**Exhibit C**  
**Project Timeline**

Task	Month																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Literature search																								
Delineation study and model domain																								
Development of hydrostratigraphic framework model																								
Assembly of hydraulic and physical property data																								
Development of conceptual model																								
Development of a surface-water flow model																								
Development of a groundwater flow model																								
Determination of recharge																								
Calibration of the coupled surface-water/groundwater model																								
Simulation of solute transport																								
Compilation of solute transport																								
Reports, project management	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
																							A	B

- X – Monthly status reports
- A – Draft Final Report
- B – Final Report