AGENDA

MEETING OF THE
SAN ANTONIO WATER SYSTEM
BOARD OF TRUSTEES
September 4, 2019, 9:00 A.M.
6th Floor Board Room #609
Administrative Offices
2800 U. S. Hwy 281 North, San Antonio, Texas 78212

1. MEETING CALLED TO ORDER.

2. Announcements.
   A. The San Antonio Water System Board of Trustees will, during the Meeting, close the Meeting and hold an Executive Session pursuant to and in accordance with Chapter 551 of the Texas Open Meetings Act. The Board of Trustees may, at any time during the Meeting, close the Meeting and hold an Executive Session for consultation with its attorneys concerning any of the matters to be considered during the Meeting pursuant to Chapter 551 of the Texas Open Meetings Act.

3. Minutes.
   A. Approval of the Minutes of the San Antonio Water System Board of Trustees Regular Board Meeting of July 2, 2019.


5. Public Comment.

SAN ANTONIO WATER SYSTEM
HANDICAPPED ACCESSIBILITY STATEMENT
The San Antonio Water System Buildings and Meeting Rooms are accessible to individuals with disabilities. Accessible visitor parking spaces as well as the accessible entrance and ramp are located at the west side main entrance of the SAWS Headquarters Building, Tower I, 2800 U.S. Highway 281 North. Individuals with disabilities in need of auxiliary aids and services, including Deaf interpreters, must request such aids and services forty-eight (48) hours prior to the meeting. For assistance, contact the Board Administrator at 210-233-3537 or 711 (Texas Relay Service for the Deaf).
CONSENT AGENDA ITEMS
Items 6 – 24

ITEMS CONCERNING THE PURCHASE OF EQUIPMENT, MATERIALS AND SUPPLIES

6. A Resolution accepting recommendations regarding the contracting for certain services, equipment, materials, and supplies, and authorizing the acceptance of bids as follows: (DOUG EVANSON – YVONNE TORRES)

A. Award of New One Time Purchases of Materials, Equipment and Services.

No items for this Meeting.

B. Award of New and Renewal Annual Goods & Services Requirement Contract and Maintenance Agreements. Estimated annual purchases are based on unit prices bid. Actual totals and quantities may vary from the estimate.

1. Acceptance of the bid of Aztec Service Group, LLC to provide: annual contract for the fencing repair/relocation services, Bid No. 19-2075, for a total of $301,500.00.

2. Acceptance of the bid of Austin White Lime Co. to provide: annual contract for the purchase and delivery of hydrated lime, Bid No. 19-9009, for a total of $279,100.00.

3. Acceptance of the bid of WW Peerless, LLC dba Peerless Equipment to provide: annual contract for high service pump repair, machining & technical/field support services, Bid No. 19-7033, for a total of $712,333.33.

4. Acceptance of the bid of Napco Chemical Co., Inc. to provide: annual contract for sodium bisulfite solution, Bid No. 19-0501, for a total of $210,022.00.

5. Acceptance of the best value bid of Olympia Landscape Development, Inc. to provide: annual contract for landscaping services for SAWS Headquarters and Commerce Street Cooling Plant, Bid No. 19-5067, for a total of $117,600.00.

CAPITAL IMPROVEMENT CONTRACTS

PROJECTS INVOLVING IMPROVEMENTS, EXTENSIONS AND ADDITIONAL CAPACITY

Water and Sewer Line Improvements

7. A Resolution awarding a construction contract to T Construction, LLC in an amount not to exceed $1,236,665.00 in connection with the BPC Central Small Diameter Package 2. (ANDREA BEYMER – GAIL HAMRICK-PIGG)
8. A Resolution awarding a construction contract to SAK Construction, LLC in an amount not to exceed $2,677,159.00 in connection with the Silverhorn Golf Course 24-Inch Rehabilitation Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

9. A Resolution awarding a construction contract to PM Construction & Rehab, LLC dba IPR South Central in an amount not to exceed $240,694.00 in connection with the Tobin Park 8-inch Siphon – CIPP. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

Production, Transmission and Treatment Improvements

10. A Resolution approving additional expenditures to the existing professional services contract with Black & Veatch Corporation in an amount not to exceed $614,465.00 in connection with the Artesia Pump Station Improvements Project. (ANDREA BEYMER – JUAN GOMEZ)

REPLACEMENT AND ADJUSTMENT PROJECTS

Governmental Relocations and Replacements

11. A Resolution approving expenditures in an amount not to exceed $372,177.00 to the City of San Antonio’s Tree Permit mitigation fund in connection with the W-1 Leon Creek: Hwy 151 to Hwy 90 – Lower Segment Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

12. A Resolution approving expenditures in an amount not to exceed $188,500.00 for the adjustment of water and sewer facilities by the City of San Antonio in connection with the 2019-2020 Task Order Contract for Flatwork and Street Improvements Package 4. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

13. A Resolution approving expenditures in an amount not to exceed $1,214,916.85 for the adjustment and replacement of water and sewer facilities by the City of San Antonio in connection with the South Pine/Greer Street Drainage Improvements Phase 1 Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

14. A Resolution approving an Interlocal Agreement with Bexar County; approving expenditures in an amount not to exceed $85,157.50 for the adjustment of water and sewer facilities by Bexar County in connection with the Fischer Road Phase I: Quintana Road to IH 35 South Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

15. A Resolution approving an Interlocal Agreement with the Alamo Regional Mobility Authority; approving expenditures in an amount not to exceed $753,839.90 for the adjustment of water and sewer facilities by the Alamo Regional Mobility Authority in connection with the Evans Road Phase II: TPC Parkway to Hanging Oak Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

16. A Resolution approving additional expenditures in an amount not to exceed $719,332.63 to the existing Advance Funding Agreement with Texas Department of Transportation in connection with the US 281: Loop 1604 to Stone Oak Parkway Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)
EASEMENT AND REAL PROPERTY

17. A Resolution approving settlement of claims made by Ernest A. Ruiz, Sr. and Rosalinda M. Ruiz against the San Antonio Water System in the amount of $200,000.00 in connection with construction of the Western Watershed Sewer Relief Line Middle Segment Project. (NANCY BELINSKY – BRUCE HABY)

18. A Resolution approving an amendment to the Purchase Agreement by and between the San Antonio Water System and Yancey Water Supply Corporation for the sale of the West View Subdivision Property and Operating Infrastructure, located in Medina County, Texas. (NANCY BELINSKY – BRUCE HABY)

MISCELLANEOUS ITEMS

19. A Resolution awarding a construction contract to South Texas BuildCon, LLC in an amount not to exceed $103,275.00 in connection with the Clouse Water Recycling Plant Buildings 10 and 11 – Roof Replacement Project. (JEFF HABY – CARLOS MENDOZA)

20. A Resolution approving the extension of a services contract with Genuine Parts Company dba NAPA Auto Parts in an amount not to exceed $1,820,000.00 for the period of October 1, 2019 through September 30, 2020, in connection with fleet parts management and supply services. (JEFF HABY – CARLOS MENDOZA)

21. A Resolution awarding a services contract to Ace Pipe Cleaning, Inc. in an amount not to exceed $1,792,089.30 for the period ending December 1, 2020, in connection with the Sanitary Sewer Condition Monitoring Program Cleaning and Inspection of Collection System Small Assets, Package 1. (JEFF HABY – ANNETTE DURON)

22. A Resolution awarding a services contract to All Points Inspection Services, Inc. in an amount not to exceed $405,094.55 for the period ending June 1, 2020, in connection with the Sanitary Sewer Condition Monitoring Program Cleaning and Inspection of Collection System Small Assets, Package 2. (JEFF HABY – ANNETTE DURON)

23. A Resolution approving a Settlement Agreement with Brown & Caldwell in connection with the Western Watershed Relief Line-Middle Segment Project; authorizing the President/Chief Executive Officer or his duly appointed designee to execute the Settlement Agreement and to execute all documents and take all actions necessary to implement the agreement. (NANCY BELINSKY)

24. A Resolution approving settlement of the lawsuit of Emma Gutierrez against the San Antonio Water System; approving the System’s financial obligation in the amount of $62,500.00 for purposes of the settlement. (NANCY BELINSKY)
ITEMS FOR INDIVIDUAL CONSIDERATION

25. A Resolution appointing members to the Rate Advisory Committee in connection with the 2019 Cost of Service and Rate Design Study. (MARY BAILEY)

26. A Resolution pledging support for the City of San Antonio Climate Action and Adaptation Plan. (MIKE FRISBIE)

27. PUBLIC HEARING: 2020 ANNUAL BUDGET
   A. Public Hearing Briefing (DOUG EVANSON)

28. Public Comment.

CAPITAL IMPROVEMENT CONTRACTS
PROJECTS INVOLVING IMPROVEMENTS, EXTENSIONS AND ADDITIONAL CAPACITY

Water and Sewer Line Improvements

29. A Resolution awarding a construction contract to SAK Construction, LLC in an amount not to exceed $4,229,084.10 in connection with the Multiple Sewershed Package 7A Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

30. A Resolution awarding a construction contract to BRH-Garver Construction, LP in an amount not to exceed $18,781,893.40 in connection with W-1 Leon Creek: Hwy 151 to Hwy 90 – Lower Segment Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

31. A Resolution awarding a construction management services contract to CAS Consulting and Services, Inc. in an amount not to exceed $8,233,406.00 in connection with the W-6 Upper Segment: Highway 90 to SW Military Drive Sewer Main Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

32. BRIEFING SESSION.
   A. Briefing and deliberation regarding the Vista Ridge Project
   B. Briefing and deliberation regarding the 2019 Cost of Service and Rate Design Study

33. Inquiries of the Board of Trustees for future briefings and/or follow-up action.
34. The Regular Session of the September 4, 2019, Regular Board Meeting is hereby recessed to hold an Executive Session and discuss the matters listed pursuant to Sections §551.071 and §551.087 of the Texas Open Meetings Act.

35. **EXECUTIVE SESSION.**

   A. Consultation with attorneys and deliberation regarding economic development negotiations pursuant to Sections §551.071 and §551.087 of the Texas Government Code.

   B. Consultation with attorneys regarding advice on legal matters in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act, pursuant to Texas Government Code §551.071.

36. The Regular Session of the Regular Board Meeting of September 4, 2019, is hereby reconvened.

37. Adjournment. THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES MEETING OF SEPTEMBER 4, 2019, IS HEREBY ADJOURNED.
MEETING CALLED TO ORDER.

The meeting of the San Antonio Water System Board of Trustees was held on July 2, 2019, and called to order at 9:11 a.m. by Chairman Berto Guerra.

2. Announcements.

A. The San Antonio Water System Board of Trustees will, during the Meeting, close the Meeting and hold an Executive Session pursuant to and in accordance with Chapter 551 of the Texas Open Meetings Act. The Board of Trustees may, at any time during the Meeting, close the Meeting and hold an Executive Session for consultation with its attorneys concerning any of the matters to be considered during the Meeting pursuant to Chapter 551 of the Texas Open Meetings Act.

Trustee Pat Jasso recognized special guests from the Citizens Advisory Panel, Chair Robert Sheldon, Vice Chair Javier Garcia, and member Mayor Mary Dennis with the City of Live Oak. She thanked the members of the CAP for their attendance at the meeting.
A. Approval of the Minutes of the San Antonio Water System Board of Trustees
   Regular Board Meeting of May 7, 2019.

Chairman Guerra asked if there were any corrections to the minutes. Hearing none, he stated the minutes were approved as presented.


None

5. Public Comment.

Alan Montemayor encourage SAWS to switch the majority of administrative fleet vehicles to electric vehicles and to become more aware of energy used to provide water. He hoped SAWS project would move forward to put solar panels at the H2Oaks Center as well consider energy storage at the facility. He encouraged SAWS to be more energy aware and to minimize energy use in San Antonio for a cleaner, greener, and sustainable future.

Dr. Terry Burns stated he was a retired physician and chair of the Alamo Sierra Club. He commended SAWS for having Citizens to be Heard for publishing board meeting minutes, having public and active citizen advisory committees, and efforts to be engaged with the community. He discussed the CEO bonuses for SAWS and CPS Energy, and the terms and process of selecting SAWS board members.

CONSENT AGENDA ITEMS

Items 6 – 29

ITEMS CONCERNING THE PURCHASE OF EQUIPMENT, MATERIALS AND SUPPLIES

6. A Resolution accepting recommendations regarding the contracting for certain services, equipment, materials, and supplies, and authorizing the acceptance of bids as follows: (DOUG EVANSON – YVONNE TORRES)

A. Award of New One Time Purchases of Materials, Equipment and Services.

1. Approving a one-time purchase from Core and Main to provide: ductile iron pipe, Bid No. 19-19068, for a total of $946,903.10.

2. Approving a one-time purchase from Kusters Zima Corporation to provide: two mechanically cleaned bar screens with multiple rake blades for the Steven M. Clouse WRC, Bid No. 19-19063, for a total of $204,000.00.

B. Award of New and Renewal Annual Goods & Services Requirement Contract and Maintenance Agreements. Estimated annual purchases are based on unit prices bid. Actual totals and quantities may vary from the estimate.

1. Acceptance of the sole source bid of Hach Co. to provide annual contract
for the supply of Hach miscellaneous products, Bid No. 19-14020, for a total of $161,235.33.

2. Acceptance of the sole source bid of Infor Public Sector, Inc. to provide annual contract for Hanson Software license maintenance and support, Bid No. 19-1430, for a total of $486,585.82.

CAPITAL IMPROVEMENT CONTRACTS
PROJECTS INVOLVING IMPROVEMENTS, EXTENSIONS AND ADDITIONAL CAPACITY

Developer Customer Contracts

7. A Resolution awarding a construction contract to Wauters Engineering, LLC in an amount not to exceed $259,999.00 in connection with the Arcadia Plaza 24-inch Oversize (12-inch Required) Water Main Extension Project; approving a contract between the System, Shops at Arcadia Ridge, LLC, and Wauters Engineering, LLC for the project work; authorizing the expenditure of funds in the amount of $194,999.25 for the System’s proportionate share of the project work payable to Wauters Engineering, LLC, and the expenditure of funds in the amount of $19,499.93 for the System’s proportionate share of the engineering design fees payable to Shops at Arcadia Ridge, LLC. (ANDREA BEYMER – TRACEY LEHMANN)

8. A Resolution awarding a construction contract to M5 Utilities, LLC in an amount not to exceed $261,114.00 in connection with the Sarfani Plaza 24-inch Oversize (12-inch Required) Water Main Extension Project; approving a contract between the System, Aamshu, Inc., and M5 Utilities, LLC for the project work; authorizing the expenditure of funds in the amount of $195,835.50 for the System’s proportionate share of the project work payable to M5 Utilities, LLC, and the expenditure of funds in the amount of $19,583.55 for the System’s proportionate share of the engineering design fees payable to Aamshu, Inc. (ANDREA BEYMER – TRACEY LEHMANN)

Water and Sewer Line Improvements

9. A Resolution awarding a construction contract to D Guerra Construction, LLC in an amount not to exceed $1,160,423.20 in connection with the Multiple Sewershed Package 6B Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

10. A Resolution awarding a professional services contract to Weston Solutions, Inc. in an amount not to exceed $728,965.00 in connection with the Basin Planning Consultants (BPC) East Package 3. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

11. A Resolution awarding a professional services contract to Jones & Carter, Inc. dba Jones|Carter in an amount not to exceed $238,180.00 in connection with the 2019 Small Capacity Constraints II Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

12. A Resolution approving additional expenditures to the existing professional services contract with CH2M Hill, Inc. in an amount not to exceed $140,265.00 in connection with the Basin Planning Consultants East Package 2 Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)
with the C13 Broadway Corridor – Josephine St. to South Alamo St. Project.  
(ANDREA BEYMER – GAIL HAMRICK-PIGG)

Production, Transmission and Treatment Improvements

13. A Resolution approving Change Order No. 8 in an amount not to exceed $263,650.65 to the construction contract with Archer Western Construction, LLC in connection with the Zarzamora Pump Station Improvements Project.  
(ANDREA BEYMER – JOE CARRENO)

14. A Resolution awarding a professional services contract to Arcadis U.S., Inc. in an amount not to exceed $1,390,945.00 in connection with the Water Production Facilities Disinfection System Upgrades Phase III Project.  
(ANDREA BEYMER – JUAN GOMEZ)

15. A Resolution approving additional expenditures to the existing professional services contract with Alan Plummer and Associates, Inc. in an amount not to exceed $129,461.00 in connection with the Feathercrest and Stone Ridge Lift Stations Upgrades Project.  
(ANDREA BEYMER – JUAN GOMEZ)

REPLACEMENT AND ADJUSTMENT PROJECTS

Governmental Relocations and Replacements

16. A Resolution authorizing expenditures in an amount not to exceed $112,917.00 for the adjustment of water and sewer facilities by the City of San Antonio in connection with the 2017 Bond Program Pedestrian Mobility & Streets Task Order Contract Package 4.  
(ANDREA BEYMER – GAIL HAMRICK-PIGG)

17. A Resolution authorizing expenditures in an amount not to exceed $248,969.83 for the replacement of water facilities by the City of San Antonio in connection with the E. Highland Blvd. Drainage: St. Anthony to New Braunfels Project.  
(ANDREA BEYMER – GAIL HAMRICK-PIGG)

18. A Resolution approving an Interlocal Agreement with the Texas Department of 
Transportation for reimbursement of funds in the amount of $93,878.00 for the construction costs, consultant services fees, and the System’s staff costs relating to the construction of the water facility adjustments in connection with the IH 410 from US 90 to Ingram Rd Project.  
(ANDREA BEYMER – GAIL HAMRICK-PIGG)

19. A Resolution awarding a professional services contract to K Friese & Associates, Inc. in an amount not to exceed $800,000.00 in connection with the 2019 Governmental Engineering Design Services – Package I.  
(ANDREA BEYMER – GAIL HAMRICK-PIGG)

20. A Resolution awarding a professional services contract to LNV, Inc. in an amount not to exceed $800,000.00 in connection with the 2019 Governmental Engineering Design Services – Package II.  
(ANDREA BEYMER – GAIL HAMRICK-PIGG)
21. A Resolution awarding a professional services contract to Lockwood, Andrews & Newnam, Inc. in an amount not to exceed $800,000.00 in connection with the 2019 Governmental Engineering Design Services – Package III. 
   (ANDREA BEYMER – GAIL HAMRICK-PIGG)

EASEMENT AND REAL PROPERTY

22. A Resolution approving a settlement agreement in the total amount of $68,581.35 with Charles H. Moore, in settlement of condemnation litigation for the acquisition of two permanent waterline easements containing 0.316 acres located on the southwest quadrant of Bexar County and the northwest quadrant of Atascosa County, Texas, for the Hume Road Water Main Replacement Project.
   (NANCY BELINSKY – BRUCE HABY)

MISCELLANEOUS ITEMS

23. A Resolution awarding a construction contract to T Construction, LLC in an amount not to exceed $1,308,545.00 in connection with the 2019 Annual Water Distribution Leak Repairs Contract - Package 5.
   (MICHAEL BRINKMANN – LEAMON ANDERSON)

24. A Resolution awarding a construction contract to Bartek Construction Co. in an amount not to exceed $1,359,270.00 in connection with the 2019 Annual Water Distribution Leak Repairs Contract - Package 6.
   (MICHAEL BRINKMANN – LEAMON ANDERSON)

25. A Resolution awarding a construction contract to T Construction, LLC in an amount not to exceed $1,327,295.00 in connection with the 2019 Annual Water Distribution Leak Repairs Contract - Package 7.
   (MICHAEL BRINKMANN – LEAMON ANDERSON)

26. A Resolution awarding a construction contract to Facilities Rehabilitation, Inc. in an amount not to exceed $1,330,575.00 in connection with the 2019 Annual Water Distribution Leak Repairs Contract - Package 8.
   (MICHAEL BRINKMANN – LEAMON ANDERSON)

27. A Resolution awarding a consulting services contract to Arcadis U.S., Inc. in an amount not to exceed $1,609,935.00 in connection with 2019 Risk and Condition Assessment of Water Distribution Mains. (ANDREA BEYMER – TRACEY LEHMANN)

28. A Resolution approving additional expenditures to the existing services contract with Olameter, Inc. in an amount not to exceed $1,450,289.16 and to extend the contract term to July 31, 2021 in connection with meter reading services.
   (MARY BAILEY – MARTY MARTINEZ)

29. A Resolution approving funds in an amount not to exceed $700,000.00 in connection with the design and construction of electrical service for the Vista Ridge Regional Supply Project pipeline cathodic protection system in fulfilling obligations to establish electric power service. (DONOVAN BURTON – MARTY JONES)
Chairman Guerra stated Item 21 was pulled for recusal purposes by Trustee Parra. He asked if there were any other items in the Consent Agenda that should be pulled for individual discussion or consideration.

Ms. Jasso made a motion to approve the Consent Agenda Items 6 – 29, except for Item 21. Ms. Merritt seconded the motion.

Consent Agenda Items 6 – 29, except for Item 21, were unanimously approved. Verbal voting.

Chairman Guerra stated he would take up Item 21 next, and Trustee Parra has recused himself from discussion and action on Item 21.

Mr. McGee made a motion to approve Item 21. Ms. Merritt seconded the motion.

After no further discussion, Item 21 was unanimously approved. Verbal voting. Trustee Parra recused himself from the vote on Item 21.

Ruben Barrera commented on the terms of office for the SAWS Board. For the benefit of the public and certainly for the benefit of the Board, it was important to state that even though a board member’s term expired, under Texas law, the board member must continue serving until a successors was appointed.

ITEMS FOR INDIVIDUAL CONSIDERATION

30. A Resolution accepting an offer in the amount of $2,775,000.00 for the sale of approximately 326.71 acres being a portion of the Straus Ranch located east of W.T. Montgomery Road and north of the Medina River, in Bexar County, Texas; approving a purchase agreement with Bigelow Texas Development Services, LLC; affirming a four percent commission to be paid to Cano and Company at closing and authorizing payment of closing costs up to $15,500.00 at closing.

(NANCY BELINSKY – BRUCE HABY)

Bruce Haby presented Item 30, the sale of a portion of the Straus Ranch. He discussed the history of the property and specifically a prior owner, Hendrick Arnold. Henrick Arnold was granted the property by the Republic of Texas for his participation in the Texas Revolution. The property was a historic landmark and included a plaque at the Medina Ranch Cemetery, where Henrick Arnold was laid to rest. The property was later purchased by W.T. Montgomery, and he drilled some of the first Edwards irrigation wells in Bexar County. The Straus Family bought the land from Mr. Montgomery, and later sold the property to BexarMet. SAWS acquired all of BexarMet’s properties on March 27, 2012, which included the Straus Ranch. A portion of the Straus Ranch was sold on June 14, 2016, to Lions Cave Ranch, LLC.

He discussed how the remainder of the property was split into two pieces due to a floodplain and conservation easement, a 327-acre tract and an 85-acre tract. The San Antonio River Authority (SARA) wanted to preserve the 85-acre tract, and staff was negotiating terms and
conditions to sell this portion to SARA. Some of the restrictions on the property included for park use only and naming rights reserved for SAWS. The broker method was used to list the 327-acre tract, and Bigelow Texas Development Services, LLC had the highest cash offer. He reviewed the terms and conditions of the purchase agreement, and the purchase price of $2,775,000.00. One of the conditions of the purchase agreement was that 40 percent of the property would be set-aside as a conservation area in compliance with Section 35-203 of Unified Development Code. He showed examples of the proposed development plan that included low impact conservation subdivisions, and introduced Mr. Bigelow to discuss his vision.

Mr. Bigelow reviewed a site plan of the property and discussed the vision for the Straus Medina Ranch. The Medina River was the southerly boundary of the property and the main road an along the edge of the greenbelt. The vision included the 40 percent set-aside for conservation development, the greenbelts and mini parks and courtyards. The land would use low-impact stormwater distribution, the magnificent pecan and oaks groves on the edge of the greenbelts would be preserved, and the development would provide affordable housing. The goal was to build the Straus Medina Ranch community similar to an old-fashioned Texas country town.

Chairman Guerra thanked Mr. Bigelow for sharing his vision. He recognized Joe Straus and asked Mr. Straus if he would like to say a few words.

Mr. Straus thanked the Board for their consideration of the item. He commented on a meeting with SARA about low impact development, and stated he was impressed with Mr. Bigelow’s environmentally sensitive development in Kyle, Texas.

Chairman Guerra thanked Mr. Straus and Mr. Bigelow for taking time to come to the board meeting to speak to the Board.

Mr. Haby stated staff’s recommendation to approve the purchase agreement with Bigelow Texas Development Services, LLC for the sale of the Straus Ranch.

Ms. Hardberger made a motion to approve Item 30. Mr. McGee seconded the motion.

Ms. Hardberger commented on the long process to see this vision come to fruition and the partnership between SARA, SAWS and the property owner. This was a great example of what could be done. She also encouraged the developer to partner with SAWS Conservation Department on the development’s landscape.

Chairman Guerra commented on the beautiful concept, and thanked Mr. Bigelow for having a conservation plan especially the fact that most of the trees would be kept.

Ms. Merritt inquired about the project’s timeline. Mr. Haby replied the purchase agreement was in the feasibility period, and staff expected the purchase to close around the end of the year. A property this large would have multiple phases of development so it might take many years to develop, but construction could start as early as 2021.

After no further discussion, Item 30 was unanimously approved. Electronic voting.
Chairman Guerra recognized Councilman John Courage and thanked him for taking the time to attend the board meeting. He also introduced his grandson, Easton Denver Myrick, who was shadowing the chairman over the summer to not only learn about the business side of the family but the community work with the city, county and state.

31. **A Resolution approving a consulting agreement with Raftelis Financial Consultants, Inc. in an amount not to exceed $462,430.00 for consulting services in connection with the 2019 Cost of Service and Rate Design Study.**
   **(DOUG EVANSON – MARY BAILEY)**

Mary Bailey presented Item 31, approval of a consulting agreement for the Cost of Service Rate Design Study. The last rate study was completed in 2015, and those recommendations were implemented in January 2016. The purpose was to ensure adherence to cost of service principles in accordance with industry standards, to develop pricing structures that reflect the utility and community objectives, and to make the pricing structures revenue neutral. SAWS generally conducts a rate study with the help of a rate consultant as well as the Rate Advisory Committee (RAC).

She outlined the basic components of the rate study process, which begins with establishing clear objectives and the over-arching policies and principles used in guiding the process. The next step was to establish the overall costs of the system and the revenues that were available for current rates. This was known as the revenue requirements forecast. The 2019 Operating Budget would be used as the basis for the revenue requirements forecast. There would be some adjustments made related to the Vista Ridge cost that would be rolled into 2020. The cost of service process would allocate costs to various classes of customers based on volume usage as well as the pattern of use. Finally, the design of the rate structure would be evaluated for any possible changes for the services provided.

Staff issued an RFP earlier this year for rate consulting services. The scope of the services to be provided by the rate consultant consists of providing education and support to staff, the Board and the RAC to develop the appropriate recommendation for modifications to the existing rate structure. This would include escalating the cost to provide water delivery, water supply, wastewater recycled water service, and make sure that those costs were appropriately allocated across various customer classes. The consultant would also need to develop rate models that allows for rates to be analyzed under various scenarios that consider all principles such as: conservation, consumption characteristics of various customer classes, cost of service, customer affordability, equity and fairness implications, and financial stability. The RAC and the Board would provide guidance as to the priority of those principles. The consultant would also perform an affordability assessment of SAWS rates, analyze current rate assistance offered to low-income customers and ultimately propose any alternative affordability solutions. SAWS received three proposals from Carollo Engineers, Inc., ScottMadden, Inc., and Raftelis Financial Consultants, Inc.

In evaluating the proposals, six individuals from across SAWS reviewed each proposal and scored each firm's project approach, project team, team member experience, compensation proposal, the understanding of San Antonio's socio-political environment, and SMWVB participation. The two top highest scoring firms were interviewed by the selection
committee. She reviewed the questions asked during the interviews. After the extensive review process, the selection committee recommended Raftelis for the rate consulting services contract. The services contract would be an amount not to exceed $462,430.00. She introduced Rick Giardina with Raftelis to discuss their extensive experience with rate studies for water utilities.

Mr. Giardina stated he was an executive vice president with Raftelis and would be the project director. He discussed the firm’s experience with rate studies and their focus on utilities. Raftelis was a large national firm with over 90 consultants and more than 100,000 accounts similar to SAWS. He mentioned some of the other cities Raftelis had worked with and the work published on utility management with the American Water Works Association (AWWA) and the Water Environment Federation (WEF). Recently, Raftelis had completed an affordability study with AWWA, WEF, and the National Association of Clean Water Agencies, and every other year conducted a national rate survey in partnership with the AWWA. Affordability was one of the emerging topics seen around the country, and Raftelis was an affordability leader in the industry. Last fall was the first ever affordability symposium jointly sponsored by the AWWA and WEF, and the director of strategic communications for Raftelis, Melissa Elliott, and the president-elect of AWWA gave one of the keynote addresses at the affordability symposium as well as several key presentations were given by Raftelis throughout the two-day effort. Raftelis worked on a national water affordability project to help develop some new metrics with the goal of getting those in front of the EPA affordability issues at the household level. He introduced the team members and mentioned each member’s experience and area of expertise.

Ms. Bailey discussed the proposed timeline for the rate study process that included the approval of the consulting services contract. Staff would bring the members for the RAC for approval in September. The RAC meetings should begin in probably early October and should last through May. Staff would provide updates to the Board all through the process, and would brief the Board, Council and community on the recommendations from June through October 2020. Finally, the Board and Council would approve changes hopefully in November 2020, with the implementation of those changes going into effect in January 2021.

Ms. Merritt made a motion to approve Item 31. Mr. Parra seconded the motion.

Chairman Guerra commented on affordability being one of his biggest concerns for the citizens of San Antonio. He asked Mr. Giardina how Raftelis proposed to help SAWS reach citizens who were getting their water turned off and may not have access to a computer. Mr. Giardina replied that one of the significant issues around affordability was not everyone was connected even in this day and age of social media, et cetera. Team members Kelli Epp and Melissa Elliott would work with SAWS customer outreach folks. This was a problem that cannot be totally solved. There would always be customers who for whatever reason would not avail themselves of the program. Even though high levels of eligibility were identified, outreach to those customers could be difficult. Efforts would be tailored in the community to reach those customers, whether it's holding public meetings, going out into the community and working with folks, or reaching out through other agencies in the community.

Chairman Guerra stated word of mouth sometimes was the best way to communicate. It's hard to ask for help so it's really difficult being in that situation. He encouraged the
Mr. Puente mentioned that Gavino Ramos, vice president of communications had a program to go block walking door to door. He had done block walking door to door with Alan Warrick from Council District 2, Shirley Gonzalez from District 5, and Rey Saldana from District 4. These local campaigns included block walking, knocking on doors with computers in hand to sign people up in the security or privacy of their own home without everybody looking to see what they're doing. It was that type of outreach when we can't reach the individual that's not connected.

Mr. Parra commented on the number of households in the City that had multiple generations living in the home. Even though there might be a lower amount per capita, the consumption of the household looked above average. He asked the consultant how they would deal with that situation specifically. Mr. Giardina stated Raftelis had seen this before, and there tends to be a mindset that low volume means low income. If this mindset was adopted, the very customers that had a number of generations in a household, had a high volume, and had income and affordability issues would be forgotten. He referenced the Chairman's comments about being able to reach out, understand and identify those customers. One way of doing this was through data analysis and looking at income by census track to help identify who might be at risk. This would help to understand the extent of the affordability issue and to help tailor a rate design, and even start to look at assistance programs.

Ms. Hardberger appreciated that the consultant had been watching SAWS meetings and hearing some of the concerns of the Board. Affordability was definitely one of the concerns, and there were other as well. As part of the analysis, she would like a review of the current program to see what the benefits were and what had not worked. She stated the listening portion was going to be critical for this whole process. With the rate increases that were already coming, the distributions of the increases would be a big conversation.

After no further discussion, Item 31 was unanimously approved. Electronic voting.

**32. A Resolution awarding a consulting services contract to Vass Solutions, LLC in an amount not to exceed $1,967,556.00 for consulting services in connection with Phases 1 and 2 of the Advanced Metering Infrastructure (AMI) Project.**

(MARY BAILEY – JOSE DE LA CRUZ)

Jose De La Cruz presented Item 32, the award of a consulting services contract for Phases 1 and 2 of the Advanced Metering Infrastructure (AMI) Project. AMI was a collection of systems that could measure, collect and analyze data from various devices such as electricity meters and, in this case, water meters. AMI provided near real-time, two-way communication between the utility and the collection of utility meters out in the field. Instead of just going one way from the meter into the utility, information could be pulled and pushed from the water meter as well. AMI would help to unlock significant business value by minimizing the amount of labor intensive, manually intensive field activities that were currently done today. For example, meter reading or every time somebody turns off a meter, SAWS had to go out and physically do those activities at the meter. He reviewed a diagram of the major components of an AMI system.
Some of the significant benefits and value of AMI included leak detection, water usage data, reduction of manual meter reads, conservation, and billing efficiencies. Today, a customer may not be aware of a leak until a high bill was received at the end of the month. With an AMI system, the customer could be alerted of continued usage over several hours and even days to check their property for a leak. Pressure monitoring could send alerts to the operators to help troubleshoot issues out in the field. Water usage reports would provide significant value to the customer to show daily trends and habits. A more obvious benefit was the manual meter reads would be minimized. In terms of conservation, target messaging could be sent to customers for usage modification. In regards to billing, move out and final bills would not require a truck to roll anymore, customers could select their billing date, billing periods could be consistent, and theft detection could be more efficient with real-time data.

Electric utilities had taken a jump on AMI nationally, and water utilities were starting to catch up. Most of the utilities with AMI were in smaller communities such as New Braunfels and the City of Fort Collins, but larger cities were now starting to undertake this effort, as evidenced by the addition of New York City and Baltimore. SAWS had been looking at AMI and AMR for nearly 15 years to research and evaluate technology. In 2017, SAWS hired West Monroe Partners to conduct a business case to look at the feasibility, and West Monroe reported that the technology was mature enough, the costs had seemed to come down enough to make it feasible to continue in the process of evaluating whether or not this was the right move for SAWS and our customers.

As part of the business case and with any system, there would be a significant capital investment needed to fully implement the AMI system. Depending on the various options selected, those costs could vary. One of the options would be to not replace meters, but retrofit the existing mechanical meters. This option would require an investment of about $144 million. The next option would replace meters that were greater than seven years old with new mechanical meters to get the benefits of increased registration with new meters. This option would require an investment of about $172 million. The third option would replace all mechanical meters with static meters. Static or ultrasonic meters were different in that there were no moving parts internally and were better able to capture local consumption. The third option would require an investment of about $193 million, and West Monroe’s business case stated this option could potentially increase revenues. Staff was looking at all the different options and key decisions needed. West Monroe’s business case stated the greatest return on investment came with the largest investment and capital up front, which was the third option.

Staff looked at hiring additional consulting and program experience from a firm with experience, especially in the water utility industry. An RFP was issued in mid-February. The RFP was split into three phases. The first phase would set up all the program infrastructure and do all the requirements gathering for full implementation. The second phase would be the meter-to-cash pilot project to test all of the assumptions and technology options in a real world environment. The third phase would be the system-wide roll out.

Proposals were received in mid-March and the selection committee shortlisted the top three firms. The top three firms were interviewed. Additional questions were sent to each of the three firms before the selection committee made a recommendation of VASS Solutions for the award of the consulting contract. He recognized Scott Syne, president of VASS...
Solutions, and Mark Michaels, executive vice president, who were in attendance. He reviewed the VASS team’s industry experience and some of their client list. If the Board approved the contract, staff would work with VASS and their team to develop the requirements for the AMI pilot, which would happen mid-2020 and go to the beginning of 2021. Based on the results from the pilot, staff would bring information back to the Board for discussion and to assess moving forward with Phase 3.

Staff recommended the award of the consulting services contract to VASS Solutions, and approval of funding for Phases 1 and 2 in an amount not to exceed $1,967,556.00. Funding for Phase 3 would be contingent upon future Board approval after the pilot project.

Mr. Parra made a motion to approve Item 32. Ms. Merritt seconded the motion.

Ms. Jasso inquired about details for the pilot. Mr. De La Cruz replied that to get the best assessment, there would probably be a mix of customer location and testing all of the equipment beforehand in-house to make sure that it works before placing it at a customer location. Eventually, the field test would be needed to make sure the equipment works the way it should work. The test lab would be test equipment so any issues could be mitigated ahead of time. Staff would take a structured approach before getting out into the field.

Mr. McGee asked about a cost benefit analysis for the program. Mr. De La Cruz referenced the business case in 2017, and the costs versus the perceived benefits for the variety of options. Ms. Bailey added that VASS would update this in Phase 1, and base the payback on the decisions or the options to move forward.

Mr. McGee inquired about protecting an interconnected system, and ability for VASS to help maintain SAWS security at the same time. Mr. De La Cruz replied that would be part of gathering the up-front requirements and VASS working with our IT department. Ms. Bailey stated as part of this process, there was a potential to utilize CPS Energy’s network. CPS had invested a lot in making sure their network was resilient and up all the time. Any option would be looked at to make sure it provided reliability and resiliency.

Ms. Hardberger commented on putting a value to alerting a customer of a leak for the cost analysis. She asked about the briefing schedule to the Board of the findings well before an actual vote. Mr. De La Cruz responded staff would come back at another time for a contract to approve the equipment before the pilot would be undertaken in July 2020. Staff would come back before the Board probably early next year to provide an update.

Mr. Parra asked to include total operation and replacement costs on the pilot program, and look at a five-year and ten-year scenario for a clear picture rather than just looking at capital cost investment. He liked that VASS was already working with CPS Energy because of the potential for collaboration. He also stated data privacy was something that definitely needed to be looked into. Mr. De La Cruz confirmed.

Ms. Merritt inquired about the advantages or disadvantages of mechanical versus static meters. Mr. De La Cruz responded static meters tend to not degrade over time like a mechanical meter, since there were no moving parts inside. Static meters also had improved registration over mechanical meters. A field test would make sure that the meter type fit
Chairman Guerra commented on the different scenarios and the corresponding costs for each scenario. He inquired about a comparison of the maintenance involved for each scenario, the cost benefit analysis, and determining the water saved. He asked if VASS would be able to provide how this process was done in other cities. Mr. De La Cruz replied staff would work with the consultant to provide answers.

Chairman Guerra asked about the savings by not sending people out to read the meters especially the difficult meters. Mr. De La Cruz responded the difficult meters would be evaluated for the AMI pilot, and staff would look into the cost savings associated with the program.

Chairman Guerra challenged staff to work with the consultant to determine the costs associated with each of the scenarios. If there was something that SAWS could learn from others such as CPS Energy, it would helpful. He commented how his company, Avanzar, would try things that Toyota had learned over the last 40 or 50 years. Mr. De La Cruz confirmed. He passed out an example of a meter interphase unit that would be hard wired into the meter to help transmit the data.

After no further discussion, Item 32 was unanimously approved. Electronic voting.

**CAPITAL IMPROVEMENT CONTRACTS**

**PROJECTS INVOLVING IMPROVEMENTS, EXTENSIONS AND ADDITIONAL CAPACITY**

**Water and Sewer Line Improvements**

33. A Resolution awarding a construction contract to S.J. Louis Construction of Texas, Ltd. in an amount not to exceed $26,961,646.89 in connection with the E-20: Wurzbach Parkway Project – Segment 1. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

Gail Hamrick-Pigg presented Item 33, an award of a construction contract for the E-20: Wurzbach Parkway Project – Segment 1. The project was a capacity project under the Consent Decree in northwest San Antonio that would replace approximately 2.2 miles of 36-inch and 42-inch sewer main with a 54-inch gravity sewer main. The construction method would be both open cut as well as tunnel construction. She reviewed the location of the project around Wetmore to Wurzbach Parkway that terminates at the northeast entrance of the airport. The project was a significant milestone in the Consent Decree work, and would help resolve the eastern capacity constraint. A temporary bypass was installed to help reduce the sanitary sewer overflows, which had been successful except for severe weather events. She showed a map of the eastern basin capacity constraints. The E-19 Segment 1 project should be done in August, and Segment 2 was under construction to be completed in July 2020. The E-16 project was at 90 percent design and was funded in the 2021 CIP. Hydraulic modeling and alternative analysis was done during the Consent Decree that showed the E-16 project could be deferred until about 2030. Some rehabilitation was done on that line to eliminate any structural concerns.
A Request for Competitive Sealed Proposal was issued due to the fast track Consent Decree schedule and complex construction. The project was also going through some closed municipal solid waste landfills, and there would be coordination with multiple stakeholders on the project with the City of San Antonio, CPS Energy, Union Pacific Railroad, MSW Landfill and local residents. She discussed the criteria used to evaluate the proposals. The best value proposal was received by S.J. Louis Construction of Texas, Ltd. in the amount of $26,961,646.89, which was a 19 percent increase over the engineer's estimate. Because the procurement was under the chapter of the competitive seal proposal, the statute allowed staff to negotiate with the contractor on scope changes. There were some modifications to the scope that allowed the cost to be reduced, which resulted in approximately $3 million of savings to SAWS. The construction duration was 630 days. She discuss the project and team experience submitted by S.J. Louis, and the detailed schedule S.J. Louis provided that gave staff confidence they could do the work.

Staff recommended the award of the construction contract to S.J. Louis Construction of Texas, Ltd. as the best value to the System, and approval of funds in an amount not to exceed $26,961,646.89 for the construction contract.

Ms. Merritt made a motion to approve Item 33. Mr. Parra seconded the motion.

After no further discussion, Item 33 was unanimously approved. Electronic voting.

Production, Transmission and Treatment Improvements

34. A Resolution awarding a construction contract to D Guerra Construction, LLC in an amount not to exceed $3,435,378.28 in connection with the Lift Station 251 Elimination Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

Ms. Hamrick-Pigg presented Item 34, award of a construction contract for the Lift Station 251 Elimination Project. The project was also part of the Consent Decree and had contributed to repeated SSOs due to capacity issues. The project would install a little over one mile of 18-inch to 24-inch gravity sewer main. The project was part of a bigger extension of gravity system that would eliminate two other lift stations and reroute the flows by gravity into the Medina River Sewer Outfall interceptor. She reviewed a project map that included the location of the larger extension of gravity mains that were at substantial completion.

Six bids were received on the project, and the lowest bid was from D Guerra Construction, LLC in the amount of $3,435,378.28. The lowest bid represented a 15 percent decrease from the engineer's estimate, and the SMWVB participation was 95 percent. D Guerra Construction, LLC was a local/MBE-Hispanic contractor.

Staff recommended the award of the construction contract to D Guerra Construction, LLC, and approval of funds in an amount not to exceed $3,435,378.28 for the construction contract.

Mr. Parra made a motion to approve Item 34. Ms. Jasso seconded the motion.

After no further discussion, Item 34 was unanimously approved. Electronic voting.
35. **BRIEFING SESSION.**

A. **Briefing and deliberation regarding Citizens Advisory Panel Benchmarking: SAWS Brackish Groundwater Desalination Program**

Robert Sheldon, president of the Citizens Advisory Panel (CAP), provided a briefing on the benchmarking report for SAWS Brackish Groundwater Desalination Project in south Bexar County. Previous benchmarking reports had been done in 2007, 2009 and 2011, and this report was the first one since the project had been in operation since 2016. The CAP was created in 1998 to provide community input to the Board of Trustees and staff on water planning, policies, and project development activities. For more than two decades, the CAP has provided a key mechanism for two-way technical communication from SAWS to the community and from the community to SAWS. The CAP recognizes the importance of SAWS mission statement, sustainable, affordable, water services, and their evaluation of any project ultimately measured against those goals. The CAP was made up of 22 community representatives with experience and interest in water issues and who were adept at understanding and evaluating technical topics.

He discussed the benchmarking process used to evaluate water resource projects in both local and regional water planning, operations, costs, benefits, and potential environmental impact. The CAP renders an opinion as how well the project delivers value to the customer and supports SAWS mission. The benchmarking process involves responding to a list of questions developed as evaluation criteria and revised periodically to form the basis of the benchmarking report. The benchmarking report on brackish groundwater desalination was a consensus of the CAP and passed by unanimous vote. The CAP began drafting a report over a four-month period from February to June. Experts provided presentations on the project's history, construction, cost, operational experience, and the CAP toured the facility. A six-member subcommittee was formed and drafted the response to the evaluation criteria that was later edited by the full membership.

The desalination project was located at SAWS H2Oaks Center in southern Bexar County. The production wells were located in Bexar County, and the brine injection well was located just inside Wilson County. The CAP Benchmarking Report focused on three positive attributes of the project, diversification, regionalism, and operational flexibility. The desalination project was making a significant contribution to SAWS further diversification by adding a firm as drought proof supply of groundwater from brackish groundwater in south Bexar County. The project had a planned yield of 11,200 acre-feet per year, with a potential of being expanded to meet future demands and reduced use of the Edwards Aquifer. The goal over the past 20 years had been resource diversification and the desalination project helps to further that goal. At full production of 11,200 acre-feet per year, the project would supply four percent of total supply.

The Lower Wilcox Aquifer was not being used by any other entity due to the depth and salinity. The resources proximity to San Antonio keeps transportation costs low and permits operational flexibility. The production yield of 11,200 acre-feet per year was fully supported by the Groundwater Management Area 13 and by the regional planning group with Region L. Staff continued to be in communication with the Evergreen Underground Water
Conservation District, a conservation group that followed this project from the beginning. The House Natural Resources Committee also toured the H2Oaks Center in January as an introduction to innovative technology. Due to the project’s location, SAWS has the ability to meet customer demand to the east or to the west in current and planned infrastructure, including the high growth area in the northwest side of San Antonio.

The CAP strongly supports the Brackish Groundwater Desalination Project because it added to continuing efforts to ensure high quality water for a thriving and growing San Antonio region, and the project does it at a cost that was in line with other supply alternatives. The desalination project has been a successful addition to SAWS diversified water resource portfolio that did not impact other surface or groundwater resources, and offered significant expandability and operational flexibility. The CAP had one recommendation, which was to continue to monitor the recharge rate of the Lower Wilcox Aquifer.

Chairman Guerra thanked Mr. Sheldon for the presentation and the CAP for volunteering their time. He recognized the members who were present, Mayor Mary Dennis, Chair Robert Sheldon, and Vice Chair Javier Garcia.

Chairman Guerra commented on the diversification of the water supply. SAWS went from being dependent on the Edwards Aquifer a hundred percent to having nine different water sources. Mr. Sheldon pointed out that the desalination project at four percent of supply when fully operational would be a significant source.

Chairman Guerra commented that everyone in the community stepped up to the plate to help SAWS diversify our water supply and to still be one of the most water conservative-minded cities. Mr. Puente confirmed. SAWS had a great water resource, the conservation department, and San Antonio used roughly the same amount of water today as we did 25 years ago. He emphasized the people that served on the CAP belong to 60 other organizations, and could bring in information to SAWS and export our thoughts and ideas to those others organizations.

B. Briefing and deliberation regarding the Vista Ridge Project

Marty Jones provided an update on the construction of the Vista Ridge Project. Garney had installed approximately 138 miles of the 142-mile pipeline or 97 percent. There was a small section in Comal County and Guadalupe County remaining. The well field facilities were approximately 50 percent complete. The high service pump station was about 85 percent complete. Construction at Intermediate Pump Station No. 1 was 85 percent complete, and construction at Intermediate Pump Station 2 was 82 percent complete. Garney just started installing the cathodic protection system and was about 20 percent complete.

He provided the progress on the O&M Budget Panel and a couple of milestones coming up in 2020 for the performance testing and commercial operations. One of the ongoing collaborative tasks between SAWS and the project company was the discussion on the O&M Budget Panel. The WTPA defined the panel as a five-member panel that would meet several times before commercial operation, and then, every other month or so after to review the efficiency and cost of the operations and maintenance for the system. The WTPA required the panelists to be industry experts in municipal water system O&M and budgeting, and
could not be past or present employees of SAWS, Garney, or affiliates. The panelist also could not be agents or consultants that served SAWS or the project company in the last three years. Panelists may serve as long as both SAWS and the project company agreed, and the panelist would be reviewed on an annual basis. The O&M Budget Panel make-up and selection process was put in place in the WTPA during the negotiations with Abengoa. SAWS was working with the project company to see if there was a better, less cumbersome way to select the panel. Both parties agreed that a three-member panel versus a five-member panel might make more sense. A three-member panel should be much more efficient and much easier to work around schedules. A three-member panel could also reduce the budget panel cost for SAWS. SAWS was working with the project company to identify individuals that could be ideally suited for this role, keep the goals of the WTPA for independence and neutrality, and someone closer to or even within Texas that would better understand O&M challenges for water systems here in South Texas. SAWS and the project company were working to define the level of effort and compensation for the panel. These panelists have to be senior-level industry experts and have to work around the deadlines and times of the WTPA. SAWS and the project company were discussing the protocols for interaction with the panel. The initial idea was that both SAWS and the project company would appoint a dedicated staff to manage the aspects of the Vista Ridge O&M and do all the leg work for the panel to minimize their efforts.

In 2020, the performance test would be used to demonstrate the project company’s ability to deliver water at the targeted flow rates, meet the water quality parameters of the WTPA, and demonstrate SAWS ability to take delivery of the product water. The test was scheduled to begin in the first quarter of 2020. The test was comprised in two parts or events. Event 1 was a seven-day functional test that called for 20 to 30 million gallons per day to be delivered continuously and taken by SAWS. After Event 1 was successful and completed, there would be a three-day period with no flow. During that time, SAWS and the project company would make adjustments and get ready for the next phase of the test. The second and final part of test, Event 2, was an 18-day test that would be performed at the required baseline flow rate of 137 acre-feet per day or roughly 44.6 million gallons per day. All the water delivered during the testing must meet the water quality parameters listed in the WTPA, and SAWS pays for no water taken during the performance test. The biggest milestone was obviously commercial operation. This was when the contractual delivery of product water actually begins and was scheduled to begin in April 2020. After the first month of operation at 137 acre-feet per day, the project company would ramp up to the maximum allowable flow rate of 149.2 acre-feet per day during the summer months. In November, the project company would reduce pumping and go back down to the winter allowable max of 137 acre-feet per day. In preparation for the performance test and the commercial operation, SAWS was working on the internal staffing plan for managing the Vista Ridge supply and the Agua Vista operations and maintenance. Management wanted to make sure that everyone was in place and to become familiar with the project before the performance testing started.

C. Briefing and deliberation regarding the 2019 Cost of Service and Rate Design Study

Mr. Puente stated Ms. Bailey covered the briefing item under Item 31, the consulting services in connection with the 2019 Cost of Service and Rate Design Study.
36. Inquiries of the Board of Trustees for future briefings and/or follow-up action.

Mr. Puente responded that staff would follow-up on the Board’s questions regarding the Rate Study and AMI, and like the monthly briefings on Vista Ridge and the Rate Study, AMI may be every other month to keep the Board advised.

At this point in the meeting, an Executive Session was held. The time was 11:30 a.m.

37. The Regular Session of the July 2, 2019, Regular Board Meeting is hereby recessed to hold an Executive Session and discuss the matters listed pursuant to Sections §551.071 and §551.074 of the Texas Open Meetings Act.

38. EXECUTIVE SESSION.


B. Deliberation and consultation with attorneys regarding the annual evaluation, performance objectives and duties of the President/Chief Executive Officer pursuant to Texas Government Code §551.074 and §551.071, respectively.

C. Consultation with attorneys regarding advice on legal matters in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act, pursuant to Texas Government Code §551.071.

39. The Regular Session of the Regular Board Meeting of July 2, 2019, is hereby reconvened.

The meeting reconvened at 12:43 p.m. The Chairman stated that no decisions were made in Executive Session.

40. Deliberation and possible action regarding the compensation for Robert R. Puente, President/Chief Executive Officer.

(BERTO GUERRA, JR., CHAIRMAN, BOARD OF TRUSTEES)

David McGee presented Item 40 on behalf of the Compensation Task Force (CTF), and reviewed the work over the past two years regarding the process to evaluate the President/CEO. The process started at the request of Mayor Nirenberg, when he was first elected in 2017. Through the work of the task force that included Trustee Merritt, the CTF worked to establish a process that was understandable to the public that was fair to Robert, and as rigorous a performance assessment anywhere in the public or private sector. Every one of the goals that were given to Robert were very difficult to achieve. The task force contracted with two nationally-respected consultants to help refine the goals in performance metrics, and to study Robert’s compensation in comparison to the market. The big takeaways
were that SAWS was an extremely well-run organization and Robert was worth every penny. In fact, Robert continued to add tremendous value to the organization. After 11 years of steering this organization, the compensation consultant concluded from the market surveys that Robert deserved a five percent raise to stay competitive with the market. The scorecard and compensation recommendations were not calculated by SAWS, but were actually reviewed by the outside consultants. Going forward, the task force intends to have third-party verifications just as was done in this particular review. The results here today and into the future were to be transparent, verifiable, and a third-party process that the entire community would have great confidence in. Based on the consensus of the Board of Trustees, Robert exceeded our expectation for his performance in 2018. As a result, the task force recommended that Robert receive a five percent increase of his base pay to $496,520.00 and that he also receive a performance payment of $100,000.00. The scorecard looked at 28 different metrics in addition to a subjective Trustees’ score. Those metrics were used to arrive at today’s recommendation and included water management, conservation, availability of water, financial management, affordability, infrastructure management, regulatory compliance, as well as customer service.

Chairman Guerra thanked Trustees Merritt and McGee for being part of the task force, and making the process subjective and open. He stated Robert Puente had another great year in 2018, and SAWS was lucky to have his guidance both from a technical level to a political level. He reviewed the major accomplishments from 2018. SAWS finished 2018 in the strongest financial position of the past 15 years with improvement in every major financial metric. Robert's team focused on customer first by launching a new web portal and mobile phone apps to make it easier for customers to interact with SAWS. Robert understands the challenges of the most financially challenged customers, and led efforts to increase participants in SAWS affordability programs to more than 30,000, the most in SAWS history and growing. He continued by adding new outreach mechanisms. Even with a major increase in water supplies, Robert continued to take conservation programs to new heights by adding over 5,000 new participants. Operationally, there was so much done but a highlight was the team ensured full compliance with the EPA Consent Decree including negotiating difficult issues that put our timelines in jeopardy. He brought together local companies, businesses, military officials, all levels of elected leaders to solve these issues for our community. Finally, Robert's leadership of SAWS team was proven again in 2018 with SAWS being named a Top Workplace for the sixth time in the past nine years. Robert led SAWS to another banner year, increasing our presence in the community, improving our customer interaction, solving very difficult operational issues in our favor, and he put SAWS in the best financial position in its history. He thanked Robert for another great year, and for his leadership in developing over 90 percent customer satisfaction while keeping rates low and still helping SAWS to become a leading utility of the world.

Chairman Guerra read a message from Mayor Nirenberg. “Thank you for your understanding of my absence as I am post-op from eye surgery. The purpose of this text is to offer my input regarding CEO compensation on the Agenda today. Mr. Puente continues to lead the organization well towards its strategic goals and through significant local and regional challenges. He is deserving of performance pay in accordance with his contract. I am grateful to the Compensation Task Force for strengthening, standardizing, and making defensible the metrics for which the CEO is evaluated. The public demands such rigor. And I look forward to continuing to improve that process for FY 2019. I believe we should
include all of the metrics approved by the Board at the outset of the review year.”

Ms. Jasso made a motion to approve Item 40. Ms. Merritt seconded the motion.

After no further discussion, Item 40 was unanimously approved. Electronic voting.

41. **Adjournment.** THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES MEETING OF JULY 2, 2019, IS HEREBY ADJOURNED.

The San Antonio Water System Board of Trustees Meeting of July 2, 2019, adjourned at 12:51 a.m.

______________________________
Berto Guerra, Jr., Chairman

**ATTEST:**

______________________________
Amy Hardberger, Secretary
TO: San Antonio Water System Board of Trustees
FROM: Robert R. Puente, President/Chief Executive Officer
SUBJECT: Acceptance of Bids for Services, Equipment, Materials and Supplies

The attached resolution accepts bids and awards contracts for services, equipment and supplies as follows:

<table>
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<tr>
<th>Description</th>
<th>This Board Meeting</th>
<th>Year-to-Date</th>
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<tr>
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<td>Number of Contracts (SMWB)</td>
<td>Estimated Amount (SMWB)</td>
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<td>A. Award of New One Time Purchases of Materials, Equipment or Services</td>
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<td>16</td>
<td>2</td>
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<tr>
<td>B. Award of New and Renewal of Annual Goods &amp; Services Requirements Contracts and Maintenance Agreements</td>
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<td>3</td>
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SMWB Purchasing Contracts (percentage) 60.00% 38.82% 23.40% 18.18%

Approved:

Robert R. Puente
President/Chief Executive Officer

Reviewed:

Marisol V. Robles
SMWB Program Manager
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES ACCEPTING BIDS AND AWARDING CONTRACTS FOR THE PROCUREMENT OF CERTAIN SERVICES, EQUIPMENT, MATERIALS AND SUPPLIES; AUTHORIZING EXPENDITURES TO PROCURE THE SAID SERVICES, EQUIPMENT, MATERIALS AND SUPPLIES; AUTHORIZING THE DIRECTOR OF THE PURCHASING DIVISION, OR HER DESIGNEE, TO EXECUTE DOCUMENTS RELATED THERETO; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the Director of the Purchasing Division of the San Antonio Water System (the “System”) has recommended certain bids be accepted, that certain contracts be awarded, and that certain other actions be taken to procure services, equipment, materials and supplies which are necessary for the operation of the System; and

WHEREAS, the said recommendations are fully set out in "Attachment I" which is attached hereto and made a part hereof, and said recommendations have been approved by the System’s President/Chief Executive Officer; and

WHEREAS, the appropriate bidding procedures regarding the procurement of goods and services have been adhered to in the compiling of the attached recommendations, as reflected in administrative records supporting this resolution; and

WHEREAS, funds are available in the System’s budget to pay for the required services, equipment, materials and supplies; and

WHEREAS, the Board of Trustees of the San Antonio Water System desires (i) to accept the bids and award the contracts as recommended, (ii) to authorize from available funds of the System the expenditures necessary to carry out the recommended procurements, and (iii) to authorize the Director of the Purchasing Division or her designee to execute all contracts and other documents necessary to carry out the recommended procurements; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the bids are accepted and the contracts are awarded for procurement of the services, equipment, materials and supplies listed in Attachment I, as recommended by the Director of the Purchasing Division.

2. That the expenditure of the necessary funds from the appropriate budget fund of the System for the procurement of the said services, equipment, materials and supplies is hereby authorized.
3. That the Director of the Purchasing Division, or her designee, is hereby authorized to notify bidders of the acceptance of bids, to execute contracts and other documents, and to carry out all other actions necessary to procure the said services, equipment, materials and supplies.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this the 4th day of September, 2019.

______________________________________________
Berto Guerra, Jr., Chairman

ATTEST:

______________________________________________
Amy Hardberger, Secretary
Award of New One Time Purchases of Materials, Equipment or Services

The following items will establish price and delivery for the one time purchase of Materials, Equipment and Services. These items are included in the current budget. Payment will be made from the applicable fund.

<table>
<thead>
<tr>
<th>NO ITEMS TO REPORT</th>
<th>DESCRIPTION</th>
<th>VENDOR</th>
<th>ITEM NO(s.)</th>
<th>ESTIMATED TOTAL PURCHASES</th>
<th>REMARKS</th>
</tr>
</thead>
</table>

*Indicates vendor is an SMWB, unless otherwise noted vendor is non minority.

Board Date: September 4, 2019
**Award of New and Renewal Annual Goods & Services Requirement Contracts and Maintenance Agreements**

B. The following items will establish estimated quantities, unit price and delivery for the Service and Supply Contracts and their extensions. These items are included in the current budget. Payment will be made from the applicable fund. Estimated annual purchase is based on unit price bid; actual total and quantities, may vary from the estimate.

B. **VENDOR** | **DESCRIPTION** | **NO(s).** | **PURCHASES** | **REMARKS**
---|---|---|---|---
1. Aztec Service Group, LLC (MBE) | Annual Contract for Fencing Repair/ Relocation Services for Jobs Under $3,000 Bid No. 19-2075 | All | $ 301,500.00 | This is a new contract. This contract will be utilized to provide fencing services to repair and/or relocation of existing fence on an as needed basis as requested by System personnel. This contract will be effective Date of Award (September 4, 2019) through May 31, 2020. If determined that an extension is favorable to System, price and service considered, the award includes the availability of three (3) additional one-year options to extend as provided for and approved in future years budgets.

2. Austin White Lime Co | Annual Contract for Purchase and Delivery of Hydrated Lime Bid No. 19-9009 | All | $ 279,100.00 | This is a new contract. This contract will be utilized for the purchase and delivery of hydrated lime for the use in the treatment of potable water supplies at the Twin Oaks ASR Treatment facility. This contract will be effective October 1, 2019 through September 30, 2020. If determined that an extension is favorable to System, price and service considered, the award includes the availability of three (3) additional one-year options to extend as provided for and approved in future years budgets.

*Indicates vendor is an SMWB unless otherwise noted vendor is non minority.
**Award of New and Renewal Annual Goods & Services Requirement Contracts and Maintenance Agreements**

B. The following items will establish estimated quantities, unit price and delivery for the Service and Supply Contracts and their extensions. These items are included in the current budget. Payment will be made from the applicable fund. Estimated annual purchase is based on unit price bid; actual total and quantities, may vary from the estimate.

<table>
<thead>
<tr>
<th>VENDOR</th>
<th>DESCRIPTION</th>
<th>NO(s)</th>
<th>PURCHASES</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3. WW Peerless, LLC dba Peerless Equipment</strong></td>
<td>Annual Contract for High Service Pump Repair, Machining &amp; Technical/Field Support Services Bid No. 19-7033</td>
<td>All</td>
<td>$ 712,333.33</td>
<td>This is a new contract. This contract will be utilized by System for Production &amp; Treatment Groups to repair high service pumps. This contract will be effective Date of Award (September 4, 2019) through December 31, 2020. If determined that an extension is favorable to System, price and service considered, the award includes the availability of four (4) additional one-year options to extend as provided for and approved in future years budgets.</td>
</tr>
<tr>
<td><strong>4. Napco Chemical Co., Inc. (WBE)</strong></td>
<td>Annual Contract for Sodium Bisulfite Solution Bid No. 19-0501</td>
<td>All</td>
<td>$ 210,022.00</td>
<td>This is a new contract. This contract will be utilized by System for the purchase and delivery of sodium bisulfite solution to treat recycled water discharge at multiple locations in the City of San Antonio. This contract will be effective October 1, 2019 September 30, 2020. If determined that an extension is favorable to System, price and service considered, the award includes the availability of three (3) additional one-year options to extend as provided for and approved in future years budgets.</td>
</tr>
</tbody>
</table>

*Indicates vendor is an SMWB unless otherwise noted vendor is non minority.
Award of New and Renewal Annual Goods & Services Requirement Contracts and Maintenance Agreements

B. The following items will establish estimated quantities, unit price and delivery for the Service and Supply Contracts and their extensions. These items are included in the current budget. Payment will be made from the applicable fund. Estimated annual purchase is based on unit price bid; actual total and quantities, may vary from the estimate.

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<thead>
<tr>
<th>VENDOR</th>
<th>DESCRIPTION</th>
<th>NO(s.)</th>
<th>PURCHASES</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Olympia Landscape Development, Inc. (MBE)</td>
<td>Best Value Bid for Annual Contract for Landscaping Services for SAWS Headquarters and Commerce Street Bid No. 19-5067</td>
<td>All</td>
<td>$117,600.00</td>
</tr>
</tbody>
</table>

REMARKS

DIRECTOR Comments

The solicitation was sent to thirteen vendors on the email bidders list. The formal bid was also posted on the SAWS and Demand Star websites. Only one vendor attended the first mandatory pre-bid meeting, thus a second mandatory pre-bid meeting was scheduled in an attempt to increase competition. In total, two vendors attended the mandatory pre-bid meetings. One bid and two no-bids were received. Napco Chemical is the incumbent is has proposed a price that is 3% less than 4 years ago. Recommend Award.

This is a new contract. This contract will be utilized by System for landscaping services at the SAWS Headquarters and Commerce Street Cooling Station locations. This contract will be effective Date of Award (September 4, 2019) through August 31, 2020. If determined that an extension is favorable to System, price and service considered, the award includes the availability of three (3) additional one-year options to extend as provided for and approved in future years budgets.

$1,620,555.33

*Indicates vendor is an SMWB unless otherwise noted vendor is non minority.

Board Date: September 4, 2019
**SAN ANTONIO WATER SYSTEM**  
P. O. BOX 2449  
SAN ANTONIO, TEXAS 78296-2449  
TABULATION OF BIDS

**PROPOSAL**  
Annual Contract for Fencing Repair/Relocation Services for  
Jobs under $3,000  
(Date of Award through May 31, 2020)  
TIME & DATE  
3:00 p.m., June 25, 2019  
ROUTINE SERVICES  

<table>
<thead>
<tr>
<th>GROUP</th>
<th>ROUTINE SERVICES</th>
<th>PRICE/ESTIMATE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP 1</td>
<td>ROUTINE SERVICES</td>
<td>3,000 hours</td>
<td>65.00</td>
</tr>
<tr>
<td>1.</td>
<td>Crew Regular Time</td>
<td>PRICE</td>
<td>TOTAL</td>
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<tr>
<td>2.</td>
<td>Crew Night Work</td>
<td>PRICE</td>
<td>TOTAL</td>
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<tr>
<td>3.</td>
<td>Crew Sat./Sun./Hol.</td>
<td>PRICE</td>
<td>TOTAL</td>
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<tr>
<td>SUB TOTAL GROUP 1</td>
<td></td>
<td></td>
<td>202,500.00</td>
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</tbody>
</table>

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<thead>
<tr>
<th>GROUP 2</th>
<th>EMERGENCY SERVICES</th>
<th>300 hours</th>
<th>100.00</th>
<th>30,000.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Crew Regular Time</td>
<td>PRICE</td>
<td>TOTAL</td>
<td></td>
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<tr>
<td>2.</td>
<td>Crew Night Work</td>
<td>PRICE</td>
<td>TOTAL</td>
<td></td>
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<tr>
<td>3.</td>
<td>Crew Sat./Sun./Hol.</td>
<td>PRICE</td>
<td>TOTAL</td>
<td></td>
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<tr>
<td>SUB TOTAL GROUP 2</td>
<td></td>
<td></td>
<td>39,000.00</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>GROUP 3</th>
<th>PARTS &amp; MATERIALS (not to exceed base cost of)</th>
<th>Unit Price $60,000</th>
<th>PERCENT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Cost Plus applies to all PARTS &amp; MATERIALS, Lawson No. 34245</td>
<td>PERCENT</td>
<td>TOTAL</td>
<td></td>
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<tr>
<td>GRAND TOTAL (GROUPS 1-3)</td>
<td></td>
<td>PRICE/HOUR/CREW</td>
<td>50.00</td>
<td></td>
</tr>
</tbody>
</table>

**EXTENSION 1**  
301,500.00

**EXTENSION 2**  
301,500.00

**EXTENSION 3**  
301,500.00

**Terms**  
2%  
10 days

**Delivery Days**

*LOW BIDDER*

**BID INVITATIONS WERE E-MAILED TO AND/OR PICKED UP BY:**

<table>
<thead>
<tr>
<th>AAA Fence Pros</th>
<th>Aztec Fence &amp; Ornamental Iron, LLC</th>
<th>Mikko Fencing</th>
<th>Demadntstar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aztec Fence &amp; Ornamental Iron, LLC</td>
<td>Pecos Fencing</td>
<td>Roberson GC</td>
<td>SAWS website</td>
</tr>
<tr>
<td>Border-Construction</td>
<td>SA Quality Fence</td>
<td>Solutions by MC</td>
<td>Demandstar</td>
</tr>
<tr>
<td>de la Garza Fence Co.</td>
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<tr>
<td>DLS Solutions</td>
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</tbody>
</table>
Bid No. 19-2075 solicited formal bids for a qualified Contractor to provide fencing services in the repair and/or relocation of existing fence on an as needed basis as requested by SAWS personnel. Contractor shall perform fencing repairs, fencing replacements and fencing relocation.

The solicitation was sent to 12 SMWVB vendors on the email bidders list. The formal bid was also posted on the SAWS and Demand Star websites. Only one vendor submitted a bid response. A few of the companies did not participate in the bid process because they do not provide the type of “on-call” fencing services specified in the Scope of Work of the bid (requires availability 24 hrs / 7 days/week). Another vendor indicated they purchase material in bulk and are unable to provide the supporting documentation as required in the bid.

Aztec Service Group is the single responsible bidder in response to Formal bid 19-2075. Aztec Service Group is also the incumbent contractor for the current fencing repair/relocation services for jobs under $3,000 contract Formal bid 17-2075. The incumbent contractor has a satisfactory performance history and poses minimum risk to SAWS by continuing as the awardee for the next contract. Award includes the base year and three one-year options to extend.

See bid tabulation for unit pricing.

SAWS estimated 2019 budget for Bid No. 19-2075 is $301,500.00
SAN ANTONIO WATER SYSTEM
P. O. BOX 2449
SAN ANTONIO, TEXAS 78298-2449
TABULATION OF BIDS

PROPOSAL FOR
Annual Contract for Purchase and Delivery of Hydrated Lime
(October 1, 2019 through September 30, 2020)
DATE: 3:00 p.m., July 26, 2019

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION AND APPROXIMATE QUANTITY</th>
<th>PRICE/TON</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2,000 Tons Type A Hydrate (Dry) Lime</td>
<td>105.98</td>
<td>211,960.00</td>
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<tr>
<td>2.</td>
<td>2,000 Tons Delivery Costs per ton</td>
<td>27.52</td>
<td>55,040.00</td>
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<td>2,000 Tons Fuel Surcharge per ton</td>
<td>6.05</td>
<td>12,180.00</td>
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<td></td>
<td>GRAND TOTAL</td>
<td></td>
<td>279,100.00</td>
</tr>
</tbody>
</table>

EXTENSION 1
279,100.00

EXTENSION 2
279,100.00

EXTENSION 3
279,100.00

Terms
Net
30 days

Delivery Days

*LOW BIDDER

BID INVITATIONS WERE E-MAILED TO AND/OR PICKED UP BY:
Austin White Lime Co.
Chem Trade Logistics
Cheney Lime
Lhoist North America
Standard Lime Products
Univar USA

Demandstar
SAWS Website
Bid No. 19-9009 solicited Formal Bids for the purchase and delivery of Hydrated Lime on an as needed basis as requested by SAWS. The purchase and delivery of type A Hydrated Lime is required for the use in the treatment of potable water supplies at the Twin Oaks ASR Treatment Facility located at 4588 Hardy Road San Antonio TX 78112. It is estimated SAWS will use 2000 tons over a twelve month period, however this will vary with the weather.

The Formal Bid was sent to nine vendors on the email bidders list. The Formal Bid was also posted on the SAWS and Demand Star websites. This requirement did not require a pre-bid conference or site survey. Two vendors responded to the bid; one submitted a bid response and the other submitted a no-bid. The vendor providing the no-bid stated they could not be competitive. After researching the bid tabulation for the current Hydrated Lime contract (15-9009), it was determined that we received only one responsible bid, one non-responsive bid, and one no-bid. Based on the information found from the current contract and Bid 19-9009 responses, re-bidding the requirement will most likely not increase competition. It is in the best interest of SAWS to move forward with the award of the single responsible bidder.

Austin White Lime Company is the single responsible bidder in response to Formal Bid 19-9009. Austin White Lime Company is also the incumbent contractor for the current Hydrated Lime contract 15-9009. The incumbent contractor has a satisfactory performance history and poses minimum risk to SAWS by continuing as the awardee for the next contract. This Award includes the base year and three one-year options to extend.

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<tr>
<th></th>
<th>SAWS</th>
<th>AMOUNT TO BE TAKEN TO THE BOARD</th>
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<tbody>
<tr>
<td>Original POP</td>
<td>$279,100.00</td>
<td>$279,100.00</td>
</tr>
<tr>
<td>Extension 1</td>
<td>$279,100.00</td>
<td>$279,100.00</td>
</tr>
<tr>
<td>Extension 2</td>
<td>$279,100.00</td>
<td>$279,100.00</td>
</tr>
<tr>
<td>Extension 3</td>
<td>$279,100.00</td>
<td>$279,100.00</td>
</tr>
</tbody>
</table>

SAWS estimated 2019 budget for Bid No. 19-9009 is $279,100.00.
**SAN ANTONIO WATER SYSTEM**  
**P. O. BOX 2449**  
**SAN ANTONIO, TEXAS 78298-2449**

**TABULATION OF BIDS**

**PROPOSAL**
Annual Contract for High Service Pump Repair, Machining, and Technical/Field Support Services

**TIME & DATE**
(July 1, 2019 through December 31, 2020)  
3:00 p.m., May 30, 2019

**ITEM NO**  
DESCRIPTION AND APPROXIMATE QUANTITY

<table>
<thead>
<tr>
<th>GROUP 1</th>
<th>PUMP REPAIR SERVICES, LABOR</th>
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<tbody>
<tr>
<td><strong>GROUP 1</strong></td>
<td><strong>PUMP REPAIR SERVICES, LABOR</strong></td>
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</tbody>
</table>
## SAN ANTONIO WATER SYSTEM

**SAN ANTONIO, TEXAS 78298-2449**

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**SAN ANTONIO WATER SYSTEM**

**SAN ANTONIO, TEXAS 78298-2449**

---

**TABLE OF BIDS**

**Annual Contract for High Service Pump Repair, Machining, and Technical/Field Support Services (July 1, 2019 through December 31, 2020)**

**P.O. BOX 2449**

---

**TABULATION OF BIDS**

---

### Item No. Description and Approximate Quantity

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Approximate Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Large Pump Repair Shop Labor (250 HP and Greater)</td>
<td>20 Hours</td>
</tr>
<tr>
<td>2</td>
<td>Horizontal Pump - Overtime</td>
<td>1,600.00</td>
</tr>
<tr>
<td>3</td>
<td>Vertical Pump - Regular Time</td>
<td>80.00</td>
</tr>
<tr>
<td>4</td>
<td>Large Pump Repair Shop Labor (250 HP and Greater)</td>
<td>400 Hours</td>
</tr>
<tr>
<td>5</td>
<td>Horizontal Pump - Overtime</td>
<td>32,000.00</td>
</tr>
<tr>
<td>6</td>
<td>Vertical Pump - Regular Time</td>
<td>32,000.00</td>
</tr>
<tr>
<td>7</td>
<td>Large Pump Repair Shop Labor (less than 250 HP)</td>
<td>20 Hours</td>
</tr>
<tr>
<td>8</td>
<td>Horizontal Pump - Overtime</td>
<td>1,600.00</td>
</tr>
<tr>
<td>9</td>
<td>Vertical Pump - Regular Time</td>
<td>80.00</td>
</tr>
<tr>
<td>10</td>
<td>Small Pump Repair Shop Labor (less than 250 HP)</td>
<td>80 Hours</td>
</tr>
<tr>
<td>11</td>
<td>Horizontal Pump - Overtime</td>
<td>6,400.00</td>
</tr>
<tr>
<td>12</td>
<td>Vertical Pump - Regular Time</td>
<td>800.00</td>
</tr>
</tbody>
</table>

### TOTAL GROUP 3

- **Total Allowances and markups for Pump Repairs Parts and Materials, including shipping**

  - **Cost-Plus Markup**
  - **% Markup**
  - **Total**

<table>
<thead>
<tr>
<th>Group 3</th>
<th>Description</th>
<th>Markup</th>
<th>% Markup</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pump Major Components (rotors, impellers, impeller keys, etc.)</td>
<td>17%</td>
<td>23,000.00</td>
<td>29,450.00</td>
</tr>
<tr>
<td>2</td>
<td>Pump Auxiliary Components (keys, key shaft couplings, lantern rings, bearings, stuffing boxes, etc.)</td>
<td>15%</td>
<td>20,000.00</td>
<td>23,400.00</td>
</tr>
<tr>
<td>3</td>
<td>Pump/Gland seals, bowl wear rings, packing glands, collars, stuffing boxes, etc.</td>
<td>15%</td>
<td>20,000.00</td>
<td>23,400.00</td>
</tr>
<tr>
<td>4</td>
<td>Sand collars, etc.</td>
<td>15%</td>
<td>20,000.00</td>
<td>23,400.00</td>
</tr>
</tbody>
</table>
### SAN ANTONIO WATER SYSTEM

**Address:** P. O. BOX 2449  
**City:** SAN ANTONIO  
**State:** TEXAS  
**Zip Code:** 78298-2449

#### TABULATION OF BIDS

**Proposal:** Annual Contract for High Service Pump Repair, Machining, and Technical/Field Support Services  
**Time & Date:** (July 1, 2019 through December 31, 2020)  
**Date:** 3:00 p.m., May 30, 2019

<table>
<thead>
<tr>
<th>ITEM NO</th>
<th>DESCRIPTION AND APPROXIMATE QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GROUP 4A</strong></td>
<td>SPECIALTY MACHINING WORK, LABOR AND ALLOWANCES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>400 Hours Labor @ Regular Time Rate</td>
<td>80.00</td>
<td>32,000.00</td>
</tr>
<tr>
<td>2</td>
<td>20 Hours Labor @ Overtime Rate</td>
<td>120.00</td>
<td>2,400.00</td>
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<tr>
<td>TOTAL GROUP 4A</td>
<td></td>
<td></td>
<td>34,400.00</td>
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<tr>
<td><strong>GROUP 4B</strong></td>
<td>SPECIALTY MACHINING WORK, LABOR AND ALLOWANCES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Material allowance for machining work by Supplier. Bid Markup</td>
<td>70,000.00</td>
<td>80,500.00</td>
</tr>
<tr>
<td>2</td>
<td>Allowance for subcontracted machining work. Bid Markup for invoiced work</td>
<td>11,000.00</td>
<td>11,500.00</td>
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<tr>
<td>TOTAL GROUP 4B</td>
<td></td>
<td></td>
<td>92,000.00</td>
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<tr>
<td><strong>GROUP 5A</strong></td>
<td>FIELD AND TECHNICAL SUPPORT SERVICES, LABOR AND ALLOWANCE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>120 Hours Field Work @ Regular Rate</td>
<td>75.00</td>
<td>10,080.00</td>
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<td>2</td>
<td>40 Hours Field Work @ Overtime Rate</td>
<td>126.00</td>
<td>5,040.00</td>
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<td>3</td>
<td>40 Hours Technical Work @ Regular Rate</td>
<td>84.00</td>
<td>3,360.00</td>
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<td>4</td>
<td>10 Hours Technical Work @ Overtime Rate</td>
<td>126.00</td>
<td>1,260.00</td>
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<tr>
<td>TOTAL GROUP 5A</td>
<td></td>
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<td>19,740.00</td>
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<tr>
<td><strong>GROUP 5B</strong></td>
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</tr>
<tr>
<td>1</td>
<td>Materials/Equipment Allowance</td>
<td>5,000.00</td>
<td>5,750.00</td>
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<tr>
<td>2</td>
<td>Hydraulic/Performance Testing Services</td>
<td>20,000.00</td>
<td>23,000.00</td>
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<td>3</td>
<td>Travel (Flat/Rate/Person)</td>
<td>350.00</td>
<td>1,750.00</td>
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<td>TOTAL</td>
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<td>23,440.00</td>
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</table>
# SAN ANTONIO WATER SYSTEM

**P. O. BOX 2449**
**SAN ANTONIO, TEXAS 78298-2449**

## TABULATION OF BIDS

**PROPOSAL:** Annual Contract for High Service Pump Repair, Machining, and Technical/Field Support Services

**TIME & DATE:** (July 1, 2019 through December 31, 2020)
3:00 p.m., May 30, 2019

<table>
<thead>
<tr>
<th>ITEM NO</th>
<th>DESCRIPTION AND APPROXIMATE QUANTITY</th>
<th>TOTAL GROUP 5B</th>
<th>GROUP 6</th>
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</thead>
<tbody>
<tr>
<td>TOTAL GROUP 5B</td>
<td></td>
<td>28,500.00</td>
<td>30,500.00</td>
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<tr>
<td>Allowance and Markups for Pump Replacement, including shipping, Cost-Plus markup. Invoice parts and materials. Pump Replacement Allowance</td>
<td></td>
<td>100,000.00</td>
<td>100,000.00</td>
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<tr>
<td>% Markup</td>
<td>TOTAL</td>
<td>117,000.00</td>
<td>120,000.00</td>
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<td>Replacement Pumps</td>
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<td>TOTAL GROUP 6</td>
<td></td>
<td>117,000.00</td>
<td>120,000.00</td>
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<td>TOTAL BID AMOUNT GROUPS 1 THROUGH 6)</td>
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<td>534,250.00</td>
<td>534,840.00</td>
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**FIRST PERIOD AWARD AMOUNT FOR 16 MONTHS**

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<tr>
<th>EXTENSION 1</th>
<th>EXTENSION</th>
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<tr>
<td>534,250.00</td>
<td>NO BID</td>
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<tr>
<th>EXTENSION 2</th>
<th>EXTENSION</th>
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<tbody>
<tr>
<td>534,250.00</td>
<td>NO BID</td>
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<thead>
<tr>
<th>EXTENSION 3</th>
<th>EXTENSION</th>
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<tbody>
<tr>
<td>534,250.00</td>
<td>NO BID</td>
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<tr>
<th>EXTENSION 4</th>
<th>EXTENSION</th>
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<tr>
<td>534,250.00</td>
<td>NO BID</td>
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**Terms**

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<tr>
<th>Delivery Days</th>
<th>30 days</th>
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*LOW BIDDER*

BID INVITATIONS WERE E-MAILED TO AND/OR PICKED UP BY:

- Aawems
- Airmail
- Alsay
- Conhagen
- DXPE
- Gicon Pumps
- Layne
- Odessa Pumps
- Peerless Equipment
- Demandstar
- Pump Power
- SAWS Website
- Smith Pump
- Weisinger
- Joe's Industrial Machine Shop
- Austin Armature Works

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4
**SAN ANTONIO WATER SYSTEM**  
P. O. BOX 2449  
SAN ANTONIO, TEXAS 78298-2449  

**TABULATION OF BIDS**

**PROPOSAL**  
Annual Contract for  
Sodium Bisulfite Solution  
(October 1, 2019 through September 30, 2020)

**TIME & DATE**  
3:00 p.m., July 26, 2019

<table>
<thead>
<tr>
<th>ITEM NO</th>
<th>DESCRIPTION AND APPROXIMATE QUANTITY</th>
<th>UNIT PRICE/GAL</th>
<th>TOTAL</th>
<th>BID</th>
<th>EXTENSION 1</th>
<th>EXTENSION 2</th>
<th>EXTENSION 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>121,400 gallons 40% Sodium Bisulfite Solution, Bulk Tank Load, Lawson No. 30891</td>
<td>1.73</td>
<td>210,022.00</td>
<td>NO BID</td>
<td>210,022.00</td>
<td>210,022.00</td>
<td>210,022.00</td>
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**Terms**  
Net 30 days

**Delivery Days**

*LOW BIDDER*

**BID INVITATIONS WERE E-MAILED TO AND/OR PICKED UP BY:**

- Alfa Chem  
- Altivia  
- Aquasol  
- Brenntag SW  
- Calabrian Corp.  
- Commercial Chemical Products, Inc. dba Poolsure  
- Continental Chemical  
- DX Group  
- GVTC  
- Haviland USA  
- Napco Chemical Co., Inc.  
- PVS Chemical Solutions, Inc.  
- Univar USA, Inc.
Bid No. 19-0501 solicited Formal Bids for the purchase and delivery of Sodium Bisulfite solution on an as needed basis as requested by SAWS. The purchase and delivery of 40% Sodium Bisulfite (NaHSO3) solution will be used to treat recycled water discharge at multiple locations in the City of San Antonio.

The Formal Bid was sent to thirteen vendors on the email bidders list. The Formal Bid was also posted on the SAWS and Demand Star websites. Two mandatory pre-bid meetings were held. Only one vendor attended the first meeting and a second meeting was scheduled to solicit additional competition. In total, two vendors attended the mandatory pre-bid meetings.

Three vendors responded to the bid; one submitted a responsive bid and the other two vendors submitted no-bids. One vendor's no-bid indicated the driving distance to be too far to be competitive. The other vendor stated they were currently unable to provide a bid on the requirement and did not attend the mandatory pre-bid meeting. These three vendors are the same vendors that responded to Bid 15-0501. Based on the information found in the current contract and Bid 19-9009 responses, re-bidding the requirement will most likely not increase competition. It is in the best interest of SAWS to move forward with ward of the single responsible bidder.

NAPCO Chemical Company is the single responsible bidder in response to Formal Bid 19-0501. NAPCO’s bid price for Bid 19-0501 is 3% less than their current contract price. NAPCO Chemical Company is also the incumbent contractor for the current Sodium Bisulfite Solution contract 15-0501. The incumbent contractor has a satisfactory performance history per the SAWS’s user and poses minimum risk to SAWS by continuing as the awarded for the next contract. The Award included the base year and three one-year options to extend.

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<thead>
<tr>
<th></th>
<th>SAWS</th>
<th>AMOUNT TO BE TAKEN TO THE BOARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original POP</td>
<td>$210,022.00</td>
<td>$210,022.00</td>
</tr>
<tr>
<td>Extension 1</td>
<td>$210,022.00</td>
<td>$210,022.00</td>
</tr>
<tr>
<td>Extension 2</td>
<td>$210,022.00</td>
<td>$210,022.00</td>
</tr>
<tr>
<td>Extension 3</td>
<td>$210,022.00</td>
<td>$210,022.00</td>
</tr>
</tbody>
</table>

SAWS estimated 2019 budget for Bid No. 19-0501 is $210,220.00.
BEST VALUE BID
FOR
LANDSCAPING SERVICES FOR SAWs HQs AND COMMERCES STREET
SAWS BID # 19-5067

SUPPLEMENTARY COMMENTS:

Three vendors were evaluated for BVB 19-5067. The evaluation team recommends the BVB is awarded to Olympia Landscape Developer, Inc. The contractor provided the best overall bid at the best value for the System based on the evaluation criteria set forth below. Price and other factors were considered. In determining the “Best Value Bid”, the criteria is weighted as shown below.

A) Evaluation Committee: The committee consisted of four members, which included the team leader. All bids were responsive and reviewed by an Evaluation Committee.

B) Weighted Evaluation Criteria: The following weighted criteria were considered to determine which proposal offers the “best value” to the System.

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Bidder’s Pricing</td>
<td>30</td>
</tr>
<tr>
<td>b. On-Staff Resources</td>
<td>30</td>
</tr>
<tr>
<td>c. Qualifications and Experience of Personnel</td>
<td>25</td>
</tr>
<tr>
<td>d. Small, Minority and Woman Business Program Compliance</td>
<td>15</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

System received bids from the following companies:

<table>
<thead>
<tr>
<th>NO</th>
<th>BIDDER</th>
<th>BID AMOUNT</th>
<th>BEST VALUE SCORE</th>
<th>LOCAL/ SMWB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Olympia Landscape Developers, Inc.</td>
<td>$117,600.00&lt;br&gt;Ext 1: $<em><strong>$117,600.00&lt;br&gt;Ext 2: $</strong></em>$117,600.00&lt;br&gt;Ext 3: $___$117,600.00&lt;br&gt;Total: $470,400.00</td>
<td>363 points</td>
<td>Local/SMWB</td>
</tr>
<tr>
<td>2</td>
<td>Maldonado Nursery &amp; Landscaping, Inc</td>
<td>$105,640.00&lt;br&gt;Ext 1: $<em><strong>$105,640.00&lt;br&gt;Ext 2: $</strong></em>$105,640.00&lt;br&gt;Ext 3: $___$105,640.00&lt;br&gt;Total: $422,560.00</td>
<td>325 points</td>
<td>Local/Non-SMWB</td>
</tr>
<tr>
<td>3</td>
<td>Horton Horticulture, Inc</td>
<td>$159,824.00&lt;br&gt;Ext 1: $<em><strong>$159,824.00&lt;br&gt;Ext 2: $</strong></em>$159,824.00&lt;br&gt;Ext 3: $___$159,824.00&lt;br&gt;Total: $639,296.00</td>
<td>277 points</td>
<td>Local/Non-SMWB</td>
</tr>
</tbody>
</table>
Additionally, the overall SMWB analysis is shown in the following table:

<table>
<thead>
<tr>
<th>SAWS BVB No. 19-5067</th>
<th>Landscaping Services for HQs and Commerce St.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Olympia Landscape Services, Inc.</td>
</tr>
<tr>
<td>SMWB Analysis - Board Award</td>
<td></td>
</tr>
<tr>
<td>SBE</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE - African American</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE - Asian</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE - Hispanic</td>
<td>100.00%</td>
</tr>
<tr>
<td>MBE - Other</td>
<td>0.00%</td>
</tr>
<tr>
<td>WBE - Minority</td>
<td>0.00%</td>
</tr>
<tr>
<td>WBE - Non-Minority</td>
<td>0.00%</td>
</tr>
<tr>
<td>SMWB Total</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

**PERIOD OF AWARD:**

Contract period shall begin on **September 10, 2019** and shall end on **August 31, 2020**. The contract shall include three (3) additional one-year options to extend subject to future years budgets.

In determining the best value, staff considered relevant criteria specifically listed in the request for bid. Staff has determined that Olympia Landscape Services, Inc. will provide services at the best value to System. Olympia Landscape Developers, Inc. has satisfactorily performance history with the System.
TO:          San Antonio Water System Board of Trustees

FROM:        Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH:     Robert R. Puente, President/Chief Executive Officer

SUBJECT:     AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE BPC CENTRAL SMALL DIAMETER PACKAGE 2

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to T Construction LLC, a non-local, non-SMWVB contractor, in an amount not to exceed $1,236,665.00 in connection with the Basin Planning Consultants (BPC) Central Small Diameter Package 2.

- The contract that is the subject of the attached resolution will, if approved, authorize work required by the Consent Decree between the San Antonio Water System, the United States of America, and the State of Texas that was lodged in the United States District Court for the Western District of Texas on July 23, 2013.

- This contract will be used to rehabilitate sewer mains in need of repair based on condition assessment.

- This contract will be for the rehabilitation of approximately 2,648 feet of 8-inch to 15-inch sanitary sewer main and associated manholes at six separate project locations throughout the central basin. The project will replace approximately 759 feet of 8-inch pipe and 399 feet of 15-inch pipe. Additionally, 460 feet of 8-inch pipe and 655 feet of 10-inch pipe will be rehabilitated by pipe burst method and 375 feet of 12-inch pipe will be rehabilitated by cured-in-place-pipe method.

- T Construction LLC has submitted the lowest responsible bid of $1,236,665.00.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement Program. This project is included in the Wastewater Core Business budget line item. The amount is $1,236,665.00 for wastewater related construction work under job number 18–4533.
SUPPLEMENTARY COMMENTS:

Bain Medina Bain, Inc. prepared the bid proposal and specifications for the project. The engineer’s estimated construction cost was $1,075,664.58.

A bid opening was held on August 8, 2019, at 10:00 AM. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineer’s Estimate</td>
<td>$1,075,664.58</td>
<td></td>
</tr>
<tr>
<td>T Construction LLC*</td>
<td>$1,236,665.00</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Pronto Sandblasting &amp; Coating &amp; Oil-Field Services Co., Inc.</td>
<td>$1,257,117.00</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Vortex Turnkey Solution LLC</td>
<td>$1,253,884.00</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>PM Construction &amp; Rehab LP dba IPR South Central</td>
<td></td>
<td>Non-responsive/Non-SMWVB</td>
</tr>
</tbody>
</table>

*Lowest Responsible Bidder

The bid amount represents a 14.97 percent increase from the engineer’s estimated construction cost.

Additionally, the overall SMWVB analysis is shown in the table below:

<table>
<thead>
<tr>
<th>BPC Central Small Diameter Package 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>T Construction LLC</td>
</tr>
<tr>
<td>SMWVB Analysis – Board Award</td>
</tr>
<tr>
<td>SBE</td>
</tr>
<tr>
<td>MBE – African American</td>
</tr>
<tr>
<td>MBE – Asian</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
</tr>
<tr>
<td>MBE – Other</td>
</tr>
<tr>
<td>WBE – Minority</td>
</tr>
<tr>
<td>WBE – Non–Minority</td>
</tr>
<tr>
<td>SMWVB Total</td>
</tr>
</tbody>
</table>
Award of Construction Contract
BPC Central Small Diameter Package 2

Gail A. Hamrick-Pigg, P.E.
Director
Pipelines

Andrea L.H. Beymer, P.E.
Vice President
Engineering and Construction

APPROVED:

Robert R. Puente
President/Chief Executive Officer

Attachments:
1. Project Area Map
2. Project Site Map
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO T CONSTRUCTION LLC IN AN AMOUNT NOT TO EXCEED $1,236,665.00 IN CONNECTION WITH THE BPC CENTRAL SMALL DIAMETER PACKAGE 2; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $1,236,665.00 FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH T CONSTRUCTION LLC, AND TO PAY T CONSTRUCTION LLC AN AMOUNT NOT TO EXCEED $1,236,665.00 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, this contract will be used to rehabilitate sewer mains in need of repair based on condition assessment; and

WHEREAS, the San Antonio Water System (the “System”) has solicited bids for the project work; and

WHEREAS, T Construction LLC, a non-local, non-SMWVB contractor, has submitted a bid of $1,236,665.00 for the project work and has been determined to be the lowest responsible bidder; and

WHEREAS, System funds in the amount of $1,236,665.00 are required for the project work; and

WHEREAS, the amount of $1,236,665.00 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to T Construction LLC in an amount not to exceed $1,236,665.00 in connection with the Basin Planning Consultants (BPC) Central Small Diameter Package 2, (ii) to approve the expenditure of funds and make available an amount not to exceed $1,236,665.00 from the Project Fund, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a construction contract with T Construction LLC, and to pay T Construction LLC an amount not to exceed $1,236,665.00 for the project work; now, therefore:
BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in an amount not to exceed $1,236,665.00 is hereby awarded to T Construction LLC, who is determined to be the lowest responsible bidder, in connection with the BPC Central Small Diameter Package 2.

2. That the expenditure of funds in an amount not to exceed $1,236,665.00 for the project work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with T Construction LLC, and to pay T Construction LLC an amount not to exceed $1,236,665.00 in connection with the BPC Central Small Diameter Package 2.

4. It is officially found, determined, and declared that the meeting at which this resolution is adopted was open to the public, and that the public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 4th day of September, 2019.

Berto Guerra, Jr., Chairman

ATTEST:

Amy Hardberger, Secretary
TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE SILVERHORN GOLF COURSE 24-INCH REHABILITATION PROJECT

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to SAK Construction, LLC, a local, non-SMWVB contractor, in an amount not to exceed $2,677,159.00 in connection with the Silverhorn Golf Course 24-Inch Rehabilitation Project.

- The contract that is the subject of the attached resolution will, if approved, authorize work required by the Consent Decree between the San Antonio Water System (the “System”), the United States of America, and the State of Texas that was lodged in the United States District Court for the Western District of Texas on July 23, 2013.

- This contract will be used to rehabilitate approximately 3,740 feet of 24-inch and 30-inch sewer mains by the cured-in-place-pipe (CIPP) method. This will address sewer mains in need of repair based on condition assessment.

- SAK Construction, LLC has experience to complete the project based on the bidder’s experience confirmed by System references for the following completed projects: C13 Broadway Corridor Project Sewer Rehab Package 2.C and 4.C project, Castroville Rd. 48-inch Rehab Project – DR 144, and Eastern Sewershed Package IV Project.

- SAK Construction, LLC’s proposed personnel demonstrates it has available manpower to complete the project and will have supervisory ability on the project site.
  - SAK Construction, LLC is currently operating with sixteen crews nationwide: eight Central Crews, four Pacific Crews, two Atlantic Crews, and three Southeast Crews, all with approximately five to eight members per crew. SAK Construction, LLC has the labor resources, manpower and crew availability that is required for this project, all of which are capable of working on multiple line segments simultaneously, if necessary to meet the project schedule.
  - The personnel SAK proposes to serve in supervisory roles on this project have experience managing multiple CIPP projects and maintaining open...
communications with clients, inspectors, subcontractors and residents throughout the life of the project.

- SAK Construction, LLC’s quality of services on previous projects demonstrates it has had good business judgment, efficiency, and reliability in completing its work.
  - SAK Construction, LLC has completed eight projects for the System within budget. Of those, the C13 Broadway Corridor Project Sewer Rehabilitation Package 2.C and 4.C Project was completed 20.74 percent below budget.
  - SAK Construction, LLC has installed over ten million feet of CIPP since being formed in 2006. Of the eight completed System construction projects, SAK Construction, LLC has completed all construction on schedule.
  - SAK Construction, LLC has been given additional work for the emergency projects Page Middle School 36-inch CIPP as part of the East Sewershed Package III construction contract as well as the 24-inch Wurzbach Parkway Emergency Project as part of the Multiple Sewershed Package 2A.

- SAK Construction, LLC has a reputation as an industry leader in CIPP installation. SAK Construction, LLC was founded in 2006 and is comprised of an experienced team, well-known in both the pipeline rehabilitation and tunneling industries with a nation-wide presence.

- SAK Construction, LLC has capacity to complete the work within schedule taking into account its existing commitments. SAK Construction, LLC has nine open construction contracts with the System with Notice to Proceed dates from December 6, 2017 to June 4, 2019. Four of these construction contracts have completed construction. These include East Sewershed Package 3, East Sewershed Package 4, Central Sewershed Package 5, and 2018 CIPP Small Diameter Package. Five construction contracts are currently in construction, are within budget and on schedule. These include Multiple Sewershed Package 2A, Multiple Sewershed Package 5, West Sewershed Package 1, 2018 EARZ CIPP, and Multiple Sewershed Package 7A.

- In addition to having available the labor resources, manpower and crew, and supervisors necessary to complete the project, it also has available equipment to complete the project. SAK Construction, LLC equipment capabilities include CIPP lining from 6-inch to 96-inch diameter sewer including six various Water Boilers, five refrigerated trucks, and thirteen refrigerated trailers. SAK Construction, LLC has two permanent wet-out facilities located in O’Fallon, MO and Rocklin, CA.

- After considering SAK Construction, LLC’s experience, proposed personnel, quality of services, reputation, and capacity to perform the work on time considering existing
commitments, staff has determined that SAK Construction, LLC has submitted the lowest responsible bid of $2,677,159.00.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement Program. This project is included in the Wastewater Core Business budget line item. The amount is $2,677,159.00 for wastewater related construction work. The job number is 18-4540.

**SUPPLEMENTARY COMMENTS:**

K Friese & Associates, Inc. prepared the bid proposal and specifications for the project. The engineer’s estimated construction cost was $2,601,813.64.

A bid opening was held on August 12, 2019, at 10:00 AM. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Lowest Responsible Bidder</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineer’s Estimate</td>
<td>$2,601,813.64</td>
<td></td>
</tr>
<tr>
<td>SAK Construction, LLC</td>
<td>$2,677,159.00</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>PM Construction &amp; Rehab dba IPR South Central</td>
<td>Non-responsive</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
</tbody>
</table>

Additionally, the overall SMWVB analysis is shown in the table below:

<table>
<thead>
<tr>
<th>Silverhorn Golf Course 24-Inch Rehabilitation Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAK Construction, LLC</td>
</tr>
<tr>
<td>SMWVB Analysis – Board Award</td>
</tr>
<tr>
<td>SBE</td>
</tr>
<tr>
<td>MBE – African American</td>
</tr>
<tr>
<td>MBE – Asian</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
</tr>
<tr>
<td>MBE – Other</td>
</tr>
<tr>
<td>WBE – Minority</td>
</tr>
<tr>
<td>WBE – Non–Minority</td>
</tr>
<tr>
<td>SMWVB Total</td>
</tr>
</tbody>
</table>
Award of Construction Contract
Silverhorn Golf Course 24-Inch Rehabilitation Project

Gail A. Hamrick-Pigg, P.E.
Director
Pipelines

APPROVED:

Andrea L.H. Beymer, P.E.
Vice President
Engineering and Construction

Robert R. Puente
President/Chief Executive Officer

Attachments:
1. Project Area Map
2. Project Site Map
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO SAK CONSTRUCTION, LLC IN AN AMOUNT NOT TO EXCEED $2,677,159.00 IN CONNECTION WITH THE SILVERHORN GOLF COURSE 24-INCH REHABILITATION PROJECT; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $2,677,159.00 FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH SAK CONSTRUCTION, LLC, AND TO PAY SAK CONSTRUCTION, LLC AN AMOUNT NOT TO EXCEED $2,677,159.00 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, this contract will be used to rehabilitate sewer mains in need of repair based on condition assessment, specifically including a portion of a 24-inch sewer line that was recently identified to be in very poor condition located on Silver Horn Golf Course (the “Project”); and

WHEREAS, the San Antonio Water System (the “System”) has solicited bids for the project work; and

WHEREAS, SAK Construction, LLC (“SAK”) has completed C13 Broadway Corridor Project Sewer Rehab Package 2.C and 4.C Project, Castroville Rd. 48-inch Rehab Project – DR 144, and Eastern Sewershed Package IV Project, and based on the System’s own experience and responses from references, SAK has the experience to complete the rehabilitation required for this project; and

WHEREAS, System staff has determined that SAK has the equipment, labor resources, manpower and crew, and supervisory availability that is required for this Project, all of which are capable of working on multiple line segments simultaneously, if necessary to meet the critical Project schedule; and

WHEREAS, the System has determined that SAK has good business judgment and experience based on previous projects, including completion of eight projects for the System on schedule and within or below budget; and
WHEREAS, SAK Construction, LLC, a local, non-SMWVB contractor, has submitted a bid of $2,677,159.00 for the project work and has been determined to be the lowest responsible bidder after considering their experience, proposed personnel, quality of services, reputation, and capacity to perform the work on time; and

WHEREAS, System funds in the amount of $2,677,159.00 are required for the project work; and

WHEREAS, the amount of $2,677,159.00 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to SAK Construction, LLC in an amount not to exceed $2,677,159.00 in connection with the Silverhorn Golf Course 24-Inch Rehabilitation Project, (ii) to approve the expenditure of funds and make available an amount not to exceed $2,677,159.00 from the Project Fund, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a construction contract with SAK Construction, LLC, and to pay SAK Construction, LLC an amount not to exceed $2,677,159.00 for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in an amount not to exceed $2,677,159.00 is hereby awarded to SAK Construction, LLC, who is determined to be the lowest responsible bidder, in connection with the Silverhorn Golf Course 24-Inch Rehabilitation Project, after considering SAK Construction, LLC’s experience, proposed personnel, quality of services, reputation, and capacity to perform the work on time considering existing commitments.

2. That the expenditure of funds in an amount not to exceed $2,677,159.00 for the project work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with SAK Construction, LLC, and to pay SAK Construction, LLC an amount not to exceed $2,677,159.00 in connection with the Silverhorn Golf Course 24-Inch Rehabilitation Project.

4. It is officially found, determined, and declared that the meeting at which this resolution is adopted was open to the public, and that the public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted
without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 4th day of September, 2019.

______________________________
Berto Guerra, Jr., Chairman

ATTEST:

______________________________
Amy Hardberger, Secretary
AGENDA ITEM NO. ___9___

TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE TOBIN PARK 8-INCH SIPHON - CIPP

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to PM Construction & Rehab, LLC dba IPR South Central, a non-local, non-SMWVB contractor, in an amount not to exceed $240,694.00 in connection with the Tobin Park 8-inch Siphon - CIPP.

- The contract that is the subject of the attached resolution will, if approved, authorize work required by the Consent Decree between the San Antonio Water System, the United States of America, and the State of Texas that was lodged in the United States District Court for the Western District of Texas on July 23, 2013.

- This contract will be used to rehabilitate approximately 1,018 feet of 8-inch sanitary sewer mains in need of repair based on condition assessment.

- Tobin Park is located in northeast San Antonio near Starcrest and Northeast Loop 410. Approximately 509 feet of 8-inch sanitary sewer siphon main was determined to be in need of repair based on condition assessment under the 2020 Condition Remedial Measures plan will be rehabilitated by cured-in-place-pipe method (CIPP).

- The site near Crippen Street contains approximately 509 feet of 8-inch sanitary sewer gravity main determined to be in need of repair based on condition assessment in accordance with the 2019 and 2021 Condition Remedial Measures plan. These mains will also be rehabilitated by CIPP.

- PM Construction & Rehab, LLC dba IPR South Central has submitted the lowest responsible bid of $240,694.00.

Staff recommends that the Board approve this resolution.
FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement Program. This project is included in the Wastewater Core Business budget line item. The amount is $240,694.00 for wastewater related construction work under job number 19-4515.

SUPPLEMENTARY COMMENTS:

RPS Infrastructure, Inc. prepared the bid proposal and specifications for the project. The engineer’s estimated construction cost was $354,458.00.

A bid opening was held on August 9, 2019, at 2:30 PM. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM Construction &amp; Rehab, LLC dba IPR South Central *</td>
<td>$240,694.00</td>
<td>Non-Local/Non-SMWV</td>
</tr>
<tr>
<td>Cruz Tec, Inc.</td>
<td>$328,521.00</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Engineer’s Estimate</td>
<td>$354,458.00</td>
<td></td>
</tr>
<tr>
<td>D Guerra Construction, LLC</td>
<td>$520,181.00</td>
<td>Local/MBE-Hispanic</td>
</tr>
</tbody>
</table>

*Lowest Responsible Bidder

The bid amount represents a 32.10 percent decrease from the engineer’s estimated construction cost.

Additionally, the overall SMWVB analysis is shown in the table below:

<table>
<thead>
<tr>
<th>Tobin Park 8-inch Siphon - CIPP</th>
<th></th>
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<tbody>
<tr>
<td>PM Construction &amp; Rehab, LLC dba IPR South Central</td>
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<tr>
<td>SMWVB Analysis – Board Award</td>
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<tr>
<td>SBE</td>
<td>4.26%</td>
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<tr>
<td>MBE – African American</td>
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<tr>
<td>MBE – Asian</td>
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</tr>
<tr>
<td>MBE – Hispanic</td>
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<tr>
<td>MBE – Other</td>
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</tr>
<tr>
<td>WBE – Minority</td>
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<tr>
<td>WBE – Non–Minority</td>
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<tr>
<td>SMWVB Total</td>
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</tbody>
</table>
Award of Construction Contract
Tobin Park 8-inch Siphon - CIPP

GAFF A.HAMNICK-PIGG, P.E.
Director
Pipelines

APPROVED:

ANDREA L.H. BEYMER, P.E.
Vice President
Engineering and Construction

Robert R. Puente
President/Chief Executive Officer

Attachments:
1. Project Area Map
2. Project Site Map
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO PM CONSTRUCTION & REHAB, LLC DBA IPR SOUTH CENTRAL IN AN AMOUNT NOT TO EXCEED $240,694.00 IN CONNECTION WITH THE TOBIN PARK 8-INCH SIPHON - CIPP; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $240,694.00 FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH PM CONSTRUCTION & REHAB, LLC DBA IPR SOUTH CENTRAL, AND TO PAY PM CONSTRUCTION & REHAB, LLC DBA IPR SOUTH CENTRAL AN AMOUNT NOT TO EXCEED $240,694.00 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, this contract will be used to rehabilitate sewer mains in need of repair based on condition assessment; and

WHEREAS, the San Antonio Water System (the “System”) has solicited bids for the project work; and

WHEREAS, PM Construction & Rehab, LLC dba IPR South Central, a non-local, non-SMWVB contractor, has submitted a bid of $240,694.00 for the project work and has been determined to be the lowest responsible bidder; and

WHEREAS, System funds in the amount of $240,694.00 are required for the project work; and

WHEREAS, the amount of $240,694.00 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to PM Construction & Rehab, LLC dba IPR South Central in an amount not to exceed $240,694.00 in connection with the Tobin Park 8-inch Siphon - CIPP, (ii) to approve the expenditure of funds and make available an amount not to exceed $240,694.00 from the Project Fund, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a construction contract with PM Construction & Rehab, LLC dba IPR South Central,
and to pay PM Construction & Rehab, LLC dba IPR South Central an amount not to exceed $240,694.00 for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in an amount not to exceed $240,694.00 is hereby awarded to PM Construction & Rehab, LLC dba IPR South Central, who is determined to be the lowest responsible bidder, in connection with the Tobin Park 8-inch Siphon - CIPP.

2. That the expenditure of funds in an amount not to exceed $240,694.00 for the project work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with PM Construction & Rehab, LLC dba IPR South Central, and to pay PM Construction & Rehab, LLC dba IPR South Central an amount not to exceed $240,694.00 in connection with the Tobin Park 8-inch Siphon - CIPP.

4. It is officially found, determined, and declared that the meeting at which this resolution is adopted was open to the public, and that the public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 4th day of September, 2019.

Berto Guerra, Jr., Chairman

ATTEST:

Amy Hardberger, Secretary
TO: San Antonio Water System Board of Trustees

FROM: Juan D. Gomez, Ph.D., P.E., Director, Plants and Major Projects, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: APPROVAL OF ADDITIONAL FUNDS FOR PROFESSIONAL SERVICES IN CONNECTION WITH THE ARTEZIA PUMP STATION IMPROVEMENTS PROJECT

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution amends Resolution No. 18-280 by authorizing additional funds to an existing professional services contract with Black & Veatch Corporation, a local, non-SMWVB firm, in an amount not to exceed $614,465.00 for additional engineering design services in connection with the Artesia Pump Station Improvements Project (the “Project”).

- By Resolution No. 18-280, passed and approved on December 4, 2018, the San Antonio Water System’s (the “System”) Board of Trustees approved a professional services contract in an amount not to exceed $1,299,463.00 with Black & Veatch Corporation in connection with the Project.

- The project will replace all electrical equipment including all wiring, switchgear, motor control center, high service pumps, associated high service and well pump controls, duct banks, Supervisory Control and Data Acquisition, security equipment, lighting, yard piping, and valves. The project will also upgrade the fluoride facility, access roadways, and related infrastructure.

- The preliminary engineering report of the project identified potential structural issues in the Artesia Station pump building, which requires investigation and structural design work beyond the scope of the original contract. Additional structural work will also be required to improve the accessibility and maintainability of the pump station. This work includes improved roof and basement access, and a manual hoist system to allow for the maneuvering of equipment in the basement’s pipe gallery.

- It is also necessary to replace existing pipelines connecting the production wells to the storage tank and pump station facility.

- Bid Phase and Construction Phase Services were not originally included in this professional services contract. This amendment provides funds necessary for Bid Phase and Construction Phase Services, which are required to transition the project into
Approval of Additional Funds
Artesia Pump Station Improvements Project

construction. Additional design coordination efforts are being added to accommodate the process of securing Texas Water Development Board funding, which was not originally intended for this project.

- Additional funding in an amount not to exceed $614,465.00 is available from the Project Fund.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvements Program. The project is included in the Water Delivery Core Business, Production Category budget line item. The amount is $614,465.00 for professional services. The job number is 18-8603. The revised authorization for this project is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Amount Authorized</th>
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<tbody>
<tr>
<td>Original Contract Amount (Resolution No. 18-280)</td>
<td>$1,299,463.00</td>
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<tr>
<td>Proposed Additional Funds</td>
<td>614,465.00</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$1,913,928.00</td>
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</tbody>
</table>

As a result of the additional funds, the new contract amount is $1,913,928.00. This represents a 47.29 percent increase to the original contract amount.

Juan D. Gomez, Ph.D., P.E.
Director
Plants and Major Projects

Andrea L.H. Beymer, P.E.
Vice President
Engineering and Construction

APPROVED:

Robert R. Puente
President/Chief Executive Officer

Attachments:
1. Project Area Map
2. Project Site Map
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING ADDITIONAL FUNDS TO THE EXISTING PROFESSIONAL SERVICES CONTRACT WITH BLACK & VEATCH CORPORATION IN AN AMOUNT NOT TO EXCEED $614,465.00 IN CONNECTION WITH THE ARTESIA PUMP STATION IMPROVEMENTS PROJECT; APPROVING THAT AN AMOUNT NOT TO EXCEED $614,465.00 BE MADE AVAILABLE AND EXPENDED FROM THE PROJECT FUND FOR THE ADDITIONAL PROFESSIONAL SERVICES; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE AN AMENDMENT TO THE EXISTING PROFESSIONAL SERVICES CONTRACT WITH BLACK & VEATCH CORPORATION, AND TO PAY BLACK & VEATCH CORPORATION AN AMOUNT NOT TO EXCEED $614,465.00 FOR ADDITIONAL PROFESSIONAL SERVICES; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, on December 4, 2018, the San Antonio Water System’s (the “System”) Board of Trustees, by Resolution No. 18-280, approved a professional services contract with Black & Veatch Corporation in an amount not to exceed $1,299,463.00 in connection with the Artesia Pump Station Improvements Project (the “Project”); and

WHEREAS, additional funding to the existing professional services contract with Black & Veatch Corporation in an amount not to exceed $614,465.00 is required to provide additional professional services; and

WHEREAS, an amount not to exceed $614,465.00 is available from the Project Fund for the additional professional services; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to approve additional funds to the existing professional services contract with Black & Veatch Corporation in an amount not to exceed $614,465.00 in connection with the Artesia Pump Station Improvements Project, (ii) to make available an amount not to exceed $614,465.00 from the Project Fund for the additional professional services, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute an amendment to the existing professional services contract with Black & Veatch Corporation, and to pay Black & Veatch Corporation an amount not to exceed $614,465.00 for the additional professional services; now, therefore:
BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF
TRUSTEES:

1. That Resolution No. 18-280 is hereby amended to provide additional funds to the existing
   professional services contract with Black & Veatch Corporation in an amount not to exceed
   $614,465.00 in connection with the Artesia Pump Station Improvements Project.

2. That an amount not to exceed $614,465.00 is hereby made available and is to be expended
   from the Project Fund for the additional professional services.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby
   authorized to execute an amendment to the existing professional services contract with Black &
   Veatch Corporation, and to pay Black & Veatch Corporation an amount not to exceed $614,465.00
   in connection with the Artesia Pump Station Improvements Project.

4. It is officially found, determined and declared that the meeting at which this resolution is
   adopted was open to the public, and that public notice of the time, place and subject matter of the
   public business to be conducted at such meeting, including this resolution, was given to all as
   required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason
   held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon
   any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective,
   the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted
   without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

    PASSED AND APPROVED this 4th day of September, 2019.

______________________________
Berto Guerra, Jr., Chairman

ATTEST:

______________________________
Amy Hardberger, Secretary
TO: San Antonio Water System Board of Trustees
FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction
THROUGH: Robert R. Puente, President/Chief Executive Officer
SUBJECT: APPROVAL OF EXPENDITURE OF FUNDS IN CONNECTION WITH THE W-1 LEON CREEK: HWY 151 TO HWY 90 – LOWER SEGMENT PROJECT

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution approves the expenditure of funds in an amount not to exceed $372,177.00 to the City of San Antonio’s (the “City”) Tree Permit mitigation fund in connection with the W-1 Leon Creek: Hwy 151 to Hwy 90 – Lower Segment Project (the “Project”).

- The Project will replace and upsize about two and a half miles of 42-inch and 54-inch gravity sewer main with 72-inch and 78-inch gravity sewer main along Leon Creek. The sewer mains are in the western sewershed and extend from U.S. Highway 90 to an existing 66-inch sewer pipeline approximately 2,500 feet east of Pinn Road.

- This project is part of work required by the Consent Decree between the San Antonio Water System (the “System”), the United States of America, and the State of Texas that was lodged in the United States District Court for the Western District of Texas on July 23, 2013.

- On July 24, 2019, the City’s Development Services Planning Commission approved a variance to the Tree Permit Ordinance applied for by the System regarding required tree removal as part of the construction of the Project.

- In order for the Tree Permit to be approved by the City Arborist, the tree removal mitigation fee needs to be paid.

- The Project is scheduled to be constructed from September 18, 2019, through May 20, 2021. An estimated $372,177.00 is needed for the tree removal mitigation fee component of the Tree Permit.

- This resolution requests approval for the expenditure of funds in an amount not to exceed $372,177.00 in connection with the Project.

Staff recommends that the Board approve this resolution.
FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement Program. This work is included in the Wastewater Core Business – Main Replacement budget line item. The amount is $372,177.00 for tree removal mitigation fee. The job number is 15-4508.

Gail A. Hamrick-Pigg, P.E.
Director
Pipelines

Andrea L.H. Beymer, P.E.
Vice President
Engineering and Construction

Robert R. Puente
President/Chief Executive Officer

Attachments:
1. Project Area Map
2. Project Site Map
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM’S BOARD OF TRUSTEES APPROVING THE EXPENDITURE OF FUNDS IN AN AMOUNT NOT TO EXCEED $372,177.00 IN CONNECTION WITH THE W-1 LEON CREEK: HWY 151 TO HWY 90 – LOWER SEGMENT PROJECT; APPROVING AN AMOUNT NOT TO EXCEED $372,177.00 BE MADE AVAILABLE AND EXPENDED FROM THE PROJECT FUND FOR THE PURPOSE OF TREE MITIGATION; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXPEND FUNDS IN AN AMOUNT NOT TO EXCEED $372,177.00; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) is undertaking the W-1 Leon Creek: Hwy 151 to Hwy 90 – Lower Segment Project as part of its Capital Improvement Program; and

WHEREAS, this project replaces and upsizes about two and a half miles of 42-inch and 54-inch gravity sewer main with 72-inch and 78-inch gravity sewer main along Leon Creek; and

WHEREAS, in order to start construction of the W-1 Leon Creek: Hwy 151 to Hwy 90 – Lower Segment Project, the tree removal mitigation fee associated with the City of San Antonio’s Tree Permit needs to be paid; and

WHEREAS, based on the trees that must be mitigated, a payment of $372,177.00 must be made to the tree mitigation fund; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to approve expenditures in an amount not to exceed $372,177.00 in connection with the Tree Permit for the W-1 Leon Creek: Hwy 151 to Hwy 90 – Lower Segment Project, and (ii) to authorize the President/Chief Executive Officer or his duly appointed designee to expend funds in an amount not to exceed $372,177.00 for tree mitigation in connection with the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the expenditure of funds in an amount not to exceed $372,177.00 in connection with the W-1 Leon Creek: Hwy 151 to Hwy 90 – Lower Segment Project is hereby approved.
2. That an amount not to exceed $372,177.00 is hereby made available and is to be expended from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to expend an amount not to exceed $372,177.00 for tree mitigation in connection with the W-1 Leon Creek: Hwy 151 to Hwy 90 – Lower Segment Project.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid, or ineffective.

6. This resolution becomes effective immediately upon its passage.

    PASSED AND APPROVED this 4th day of September, 2019.

______________________________
Berto Guerra, Jr., Chairman

ATTEST:

______________________________
Amy Hardberger, Secretary
TO:       San Antonio Water System Board of Trustees

FROM:     Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E.,
          Vice President, Engineering and Construction

THROUGH:  Robert R. Puente, President/Chief Executive Officer

SUBJECT:  AUTHORIZATION TO REIMBURSE THE CITY OF SAN ANTONIO IN
          CONNECTION WITH THE 2019-2020 TASK ORDER CONTRACT FOR
          FLATWORK AND STREET IMPROVEMENTS PACKAGE 4

          Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution authorizes the President/Chief Executive Officer to reimburse the City of
San Antonio (the “City”) an amount not to exceed $188,500.00 for the joint construction of water
and sewer facility adjustments in connection with the 2019-2020 Task Order Contract for Flatwork
and Street Improvements Package 4.

- The City plans to apply this contract citywide to improve sidewalks, curbs, driveway, drainage
  and other items required due to site conditions to accomplish the project in connection with the
  2019-2020 Task Order Contract for Flatwork and Street Improvements Package 4 for
  Transportation and Capital Improvements. The City’s work is estimated to cost $3,474,306.92.

- Existing water valve box covers, water meter boxes, fire hydrants, manhole covers, sewer
  cleanouts and other impacted appurtenances within the project boundaries may require
  adjustment to match the final grade of the new pavement.

- Bid item quantities for the adjustments were included in the City’s bid documents. Funds
  for this work will be reimbursed to the City as payments to the contractor are made.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement
Program. The water work is included in the Water Delivery Core Business, Governmental – Water
Category, and Governmental Water Replacements budget line item. The amount is $131,500.00
for water work. The job number is 19-5029.

The wastewater work is included in the Wastewater Core Business, Governmental Wastewater
Category, and Governmental Wastewater Replacements budget line item. The amount is
$57,000.00 for sewer work. The job number is 19-5530.

SUPPLEMENTARY COMMENTS:

The City received four bids for this project on February 26, 2019. The lowest qualified, responsive bidder for this project is Austin Constructors, LLC, a non-local, non-SMWVB contractor. City Council approved the construction contract on May 16, 2019, and construction is expected to begin September 2019. Time allowed for total construction is 540 calendar days. The request for reimbursement is requested after City Council approved the award of the construction contract to ensure that the contract is awarded, to determine which contractor was awarded the project, to give the System’s staff time to review the bids and establish the reimbursement amount based on the awarded bid.

Gail A. Hamrick-Pigg, P.E.
Director
Pipelines

APPROVED:

Andrea L.H. Beymer, P.E.
Vice President
Engineering and Construction

Robert R. Puente
President/Chief Executive Officer
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING THE EXPENDITURE OF FUNDS IN AN AMOUNT NOT TO EXCEED $188,500.00 FOR THE ADJUSTMENT OF WATER AND SEWER FACILITIES BY THE CITY OF SAN ANTONIO IN CONNECTION WITH THE 2019-2020 TASK ORDER CONTRACT FOR FLATWORK AND STREET IMPROVEMENTS PACKAGE 4; APPROVING AN AMOUNT NOT TO EXCEED $188,500.00 BE MADE AVAILABLE AND EXPENDED FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO PAY THE CITY OF SAN ANTONIO AN AMOUNT NOT TO EXCEED $188,500.00 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the City of San Antonio (the “City”) will construct street improvements in connection with the 2019-2020 Task Order Contract for Flatwork and Street Improvements Package 4; and

WHEREAS, the 2019-2020 Task Order Contract for Flatwork and Street Improvements Package 4 will require the adjustment of certain water and sewer facilities of the San Antonio Water System (the “System”); and

WHEREAS, the City has received a bid for the project work from Austin Constructors, LLC in an amount not to exceed $188,500.00 and this bidder has been determined to be the lowest responsible bidder; and

WHEREAS, System funds in an amount not to exceed $188,500.00 are required for the project work; and

WHEREAS, the amount of $188,500.00 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to approve the expenditure of funds in an amount not to exceed $188,500.00 for the adjustment of water and sewer facilities by the City of San Antonio in connection with the 2019-2020 Task Order Contract for Flatwork and Street Improvements Package 4, (ii) to approve and make available an amount not to exceed $188,500.00 from the Project Fund to reimburse the City of San Antonio for the project work, and (iii) to authorize the President/Chief Executive Officer or his duly appointed
designee to pay an amount not to exceed $188,500.00 to the City of San Antonio for the project work; now, therefore:

**BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:**

1. That the expenditure of funds in an amount not to exceed $188,500.00 for the adjustment of water and sewer facilities by the City in connection with the 2019-2020 Task Order Contract for Flatwork and Street Improvements Package 4 is hereby approved.

2. That an amount not to exceed $188,500.00 to reimburse the City for the project work costs is hereby made available and is to be expended from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to pay the City an amount not to exceed $188,500.00 for the adjustment of water and sewer facilities by the City in connection with the 2019-2020 Task Order Contract for Flatwork and Street Improvements Package 4.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

**PASSED AND APPROVED this 4th day of September, 2019.**

_________________________________
Berto Guerra, Jr., Chairman

**ATTEST:**

_________________________________
Amy Hardberger, Secretary
TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AUTHORIZATION TO REIMBURSE THE CITY OF SAN ANTONIO IN CONNECTION WITH THE SOUTH PINE / GREER STREET DRAINAGE IMPROVEMENTS PHASE 1 PROJECT

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution authorizes the President/Chief Executive Officer to reimburse the City of San Antonio (the “City”) in the amount of $1,214,916.85 for the joint construction of water and sewer facility adjustments and replacements in connection with the South Pine / Greer Street Drainage Improvements Phase 1 Project.

- This project is a City Capital Improvement Program project included in the 2017-2022 Bond Program. The City proposes to construct street and drainage improvements in the project area illustrated on the attached maps. The City’s improvement work is estimated to cost $3,882,052.50.

- The existing water mains within the South Pine / Greer Street Drainage Improvements Phase 1 Project limits, constructed between 1928 and 1987 require adjustment to avoid conflict with the City’s adjustments and replacement to meet San Antonio Water System (the “System”) current standards.

- The existing sewer mains within the project limits, constructed between 1927 and 2011, require adjustment to avoid conflict with the City’s adjustments and replacement to meet System current standards.

- The water work will consist of the adjustment and replacement of approximately 2940 feet of 2-inch through 20-inch water mains.

- The sewer work will consist of the adjustment and replacement of approximately 1,177 feet of 6-inch through 8-inch sewer mains.

Staff recommends that the Board approve this resolution.
FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement Program. The water work is included in the Water Delivery Core Business, Governmental - Water Category, and Governmental Water Replacements budget line item. The amount is $865,024.97 for water work. The job number is 17-5059.

The sewer work is included in the Wastewater Core Business, Governmental - Wastewater Category, and Governmental Wastewater Replacements budget line item. The amount is $349,891.88 for sewer work. The job number is 17-5548.

SUPPLEMENTARY COMMENTS:

The City received two bids for this project on July 9, 2019. The lowest qualified, responsive bidder for this project is E-Z Bel Construction, LLC, a local, MBE-Hispanic contractor. City Council approved the construction contract on August 22, 2019 and construction is expected to begin September, 2019. Time allowed for total construction is 365 days. The request for reimbursement is requested after City Council approves the award of the construction contract to ensure that the contract is awarded, to determine which contractor was awarded the project, to give the System’s staff time to review the bids and establish the reimbursement amount based on the winning bid.

Gail A. Hamrick-Pigg, P.E.
Director
Pipelines

Andrea L.H. Beymer, P.E.
Vice President
Engineering and Construction

Robert R. Puente
President/Chief Executive Officer

Attachments:
1. Project Area Map
2. Project Site Map
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING THE EXPENDITURE OF FUNDS IN THE AMOUNT NOT TO EXCEED $1,214,916.85 FOR THE ADJUSTMENT AND REPLACEMENT OF WATER AND SEWER FACILITIES BY THE CITY OF SAN ANTONIO IN CONNECTION WITH THE SOUTH PINE / GREER STREET DRAINAGE IMPROVEMENTS PHASE 1 PROJECT; APPROVING AN AMOUNT NOT TO EXCEED $1,214,916.85 BE MADE AVAILABLE AND EXPENDED FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO PAY TO THE CITY OF SAN ANTONIO AN AMOUNT NOT TO EXCEED $1,214,916.85 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the City of San Antonio (the “City”) intends to construct the South Pine / Greer Street Drainage Improvements Phase 1 Project as part of its 2017-2022 Bond Program; and

WHEREAS, the City’s South Pine / Greer Street Drainage Improvements Phase 1 Project will require the adjustment and replacement of certain water and sewer facilities (the “project work”) of the San Antonio Water System (the “System”); and

WHEREAS, the City has received a bid for the project work from E-Z Bel Construction, LLC, and this bidder has been determined to be the lowest responsible bidder; and

WHEREAS, System funds in an amount not to exceed $1,214,916.85 are required for the project work; and

WHEREAS, the amount of $1,214,916.85 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to approve the expenditure of funds in an amount not to exceed $1,214,916.85 for the adjustment and replacement of water and sewer facilities by the City of San Antonio in connection with the South Pine / Greer Street Drainage Improvements Phase 1 Project, (ii) to approve and make available an amount not to exceed $1,214,916.85 from the Project Fund to reimburse the City of San Antonio
for the project work, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to pay an amount not to exceed $1,214,916.85 to the City of San Antonio for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the expenditure of funds in an amount not to exceed $1,214,916.85 for the adjustment and replacement of water and sewer facilities by the City in connection with the South Pine / Greer Street Drainage Improvements Phase 1 Project is hereby approved.

2. That an amount not to exceed $1,214,916.85 to reimburse the City for the project work costs is hereby made available and is to be expended from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to pay the City an amount not to exceed $1,214,916.85 for the adjustment and replacement of water and sewer facilities by the City in connection with the South Pine / Greer Street Drainage Improvements Phase 1 Project.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 4th day of September, 2019.

Berto Guerra, Jr., Chairman

ATTEST:

Amy Hardberger, Secretary
AGENDA ITEM NO. 14

TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L. H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: APPROVING AN INTERLOCAL AGREEMENT AND AUTHORIZING EXPENDITURES TO BEXAR COUNTY IN CONNECTION WITH THE FISCHER ROAD PHASE I: QUINTANA ROAD TO IH 35 SOUTH PROJECT

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution authorizes the President/Chief Executive Officer to execute an Interlocal Agreement with Bexar County through the Bexar County Public Works Program (the “County”) and authorizes expenditures to the County in an amount not to exceed $85,157.50 for the joint construction of water and sewer facility adjustments in connection with the Fischer Road Phase I: Quintana Road to IH 35 South Project.

- The County proposes to construct street and drainage improvements in the area illustrated on the attached maps. The County’s improvement work was estimated to cost $2,468,205.00.

- Due to the reconstruction and improvements within the Fischer Road Phase I: Quintana Road to IH 35 South Project, the existing water mains that were installed in 1997 require adjustment to avoid conflicts with the County’s street and drainage improvements.

- Existing sewer mains that were installed from 2000 through 2013 require adjustment to avoid conflicts with the County’s street and drainage improvements.

- The water work will consist of the adjustment of twelve valve boxes, four meter boxes, one fire hydrant, and the installation of a concrete cap to protect the existing water main.

- The sewer work will consist of the reconstruction of three manholes.

- The County approved the bid of J3 Company, LLC for construction of this project on September 3, 2019. As part of joint bidding, advanced approval for funding and for the execution of an Interlocal Agreement is required by the County prior to issuing a notice to proceed on construction.

- Funds as determined by the amount bid will be transferred to the County following the execution of the Interlocal Agreement.
Approval of an Interlocal Agreement and Authorization for Expenditure of Funds to Bexar County for the Fischer Road Phase I: Quintana Road to IH 35 South Project

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement Program. The water work is included in the Water Delivery Core Business, Governmental – Water Category, and Governmental Water Replacements budget line item. The amount is $45,712.50 for water work. The job number is 16-5039.

The sewer work is included in the Wastewater Core Business, Governmental – Wastewater Category, and Governmental Wastewater Replacements budget line item. The amount is $39,445.00 for sewer work. The job number is 16-5539.

![Signature]

Gail A. Hamrick-Pigg, P.E.
Director
Pipelines

Andrea L. H. Beymer, P.E.
Vice President
Engineering and Construction

APPROVED:

![Signature]

Robert R. Puente
President/Chief Executive Officer

Attachments:
1. Project Area Map
2. Project Site Map
SAN ANTONIO WATER SYSTEM
PROJECT AREA MAP
ATTACHMENT I

FISCHER ROAD PHASE I
QUINTANA ROAD TO IH 35 SOUTH

LEGEND
★ PROJECT SITE
EDWARDS AQUIFER RECHARGE ZONE
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING AN INTERLOCAL AGREEMENT WITH BEXAR COUNTY AND AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THE INTERLOCAL AGREEMENT FOR THE ADJUSTMENT OF WATER AND SEWER FACILITIES BY BEXAR COUNTY IN CONNECTION WITH THE FISCHER ROAD PHASE I: QUINTANA ROAD TO IH 35 SOUTH PROJECT; AUTHORIZING THE EXPENDITURE OF FUNDS IN AN AMOUNT NOT TO EXCEED $85,157.50 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, Bexar County through the Bexar County Public Works Program (the “County”) proposes to construct the Fischer Road Phase I: Quintana Road to IH 35 South Project; and

WHEREAS, the Fischer Road Phase I: Quintana Road to IH 35 South Project will require the adjustment of certain water and sewer facilities (the “project work”) of the San Antonio Water System (the “System”); and

WHEREAS, to increase the efficiency and effectiveness of local governments the County has requested that the System execute an Interlocal Agreement and pay for the System’s share of the project work costs; and

WHEREAS, System funds in an amount not to exceed $85,157.50 are required for the project work; and

WHEREAS, the amount of $85,157.50 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to approve an Interlocal Agreement with the County for the adjustment of water and sewer facilities by the County in connection with the Fischer Road Phase I: Quintana Road to IH 35 South Project and to authorize the President/Chief Executive Officer or his duly appointed designee to execute an Interlocal Agreement, and (ii) to authorize the expenditure of funds in an amount not to exceed $85,157.50 for the System’s share of the project work; now, therefore:
BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That an Interlocal Agreement with the County substantially in the form of the agreement attached hereto is hereby approved and the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute the Interlocal Agreement with the County in connection with the Fischer Road Phase I: Quintana Road to IH 35 South Project.

2. That the expenditure of funds in an amount not to exceed $85,157.50 for the adjustment of water and sewer facilities by the County in connection with the Fischer Road Phase I: Quintana Road to IH 35 South Project is hereby approved.

3. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

4. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid, or ineffective.

5. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 4th day of September, 2019.

_________________________________
Berto Guerra, Jr., Chairman

ATTEST:

_________________________________
Amy Hardberger, Secretary
This Interlocal Agreement is made and entered into this _____ day of _______, 2019, by and between the COUNTY OF BEXAR, a political subdivision of the State of Texas (“COUNTY”), and SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES, a political subdivision of the State of Texas (“SAWS”) (also, individually, a “Party” or, collectively, the “Parties), pursuant to the Interlocal Cooperation Act, Chapter 791 of the Government Code.

PURPOSE

1.01 The purpose of this Agreement is to facilitate the COUNTY’s improvement of the Fischer Road Phase I: Quintana Road to IH 35 South (the “Project”) by including certain necessary SAWS adjustments in COUNTY’s Specifications for the Project, thus assuring the coordination of COUNTY’s road and drainage improvements with SAWS’s adjustments.

SERVICES

2.01 COUNTY agrees to include in the Bexar County Public Works Specifications for the Project the plans and specifications for SAWS Water Job No. 16-5039 and SAWS Sewer Job No. 16-5539 (the “SAWS Work”) which SAWS shall prepare and deliver to COUNTY and is incorporated by reference herein, and to contract for the performance of the SAWS Work.

2.02 Immediately after tabulating all of the bids received for the Project, COUNTY will notify SAWS in writing of the name of the contractor selected by COUNTY for the Project (the “Contractor”) and the bid amount (the “Original Bid”) for the SAWS Work.

2.03 COUNTY agrees to use its best efforts to enforce all of its rights and remedies against the Contractor for the SAWS Work.

2.04 COUNTY agrees to allow SAWS access to the Project site to (i) inspect and witness testing of the SAWS Work and to determine if the SAWS Work is in conformity with the plans, specifications and special provisions applicable thereto and is in good working order, and (ii) verify all quantities used in connection with the SAWS Work.

FEE

3.01 COUNTY acknowledges that SAWS has provided the COUNTY with two signed copies of this Interlocal Agreement. COUNTY will return one fully executed original to SAWS upon COUNTY’s approval. Additionally, COUNTY acknowledges that SAWS has conditionally delivered to COUNTY good and sufficient funds (the “Funds”) for the bid amount (See Exhibit A) plus fifteen percent (15%) contingency. Any and all control and beneficial use of the funds by the COUNTY, will be contingent on SAWS receiving a fully executed original of this Interlocal Agreement from the COUNTY.
3.02 For materials and construction used in the SAWS Work, SAWS agrees to pay to COUNTY the amount of Eighty-Five Thousand, One Hundred Fifty-Seven Dollars and 50/100’s Dollars ($85,157.50), which includes the Original Bid amount and a fifteen percent (15%) contingency.

3.03 If the cost of performing the SAWS Work exceeds the Original Bid, the following provisions shall apply:

(a) Costs exceed Original Bid but do not exceed the Original Bid plus fifteen percent (15%) contingency. Once COUNTY receives notice from the Contractor that additional funds will be needed for SAWS Work, COUNTY will notify SAWS in writing of the change order. Unless, SAWS objects within five (5) business days of receipt of the written notification of the change order, COUNTY will proceed with SAWS Work and utilize the contingency amount for payment to the Contractor.

(b) Change Orders. If change orders are requested by SAWS or required for SAWS Work under this Agreement, SAWS will make a change order request and SAWS staff or SAWS’s Consultant shall prepare the change order. If COUNTY requires a change order that affects the SAWS Work, the change order will be submitted to SAWS staff for approval. SAWS staff agrees to use good faith efforts to respond to change orders within five (5) business days after SAWS staff’s receipt of request, or such additional period of time as may be reasonably necessary under the circumstances based on the complexity of the change order. In no event will SAWS’s deliberative process be allowed to jeopardize COUNTY’s timely completion of COUNTY’s Project, as determined by COUNTY. SAWS staff is under no obligation to approve any change orders, and in no event shall SAWS be responsible for costs or expenses under change orders that are not approved by SAWS staff.

(c) If a change order results in total costs exceeding the amount stated in §3.02, COUNTY will send copies of invoices covering the additional amounts authorized by a change order approved in writing and signed by authorized SAWS staff, and SAWS shall pay COUNTY the additional amounts in the approved change order within thirty (30) days, unless further time is required for Board action to appropriate funds. A change order under §3.03(c) approved in writing and signed by authorized SAWS staff shall, upon the Board action to appropriate the funds for the change order, have the automatic effect of amending §3.02 to increase the total amount in §3.02 by the total change order amount.

(d) A change order that results in total costs reducing the amount stated in §3.02 and that is approved in writing and signed by authorized SAWS staff shall have the automatic effect of amending §3.02 to decrease the total amount in §3.02 by the total change order amount.

3.04 If the cost of performing the SAWS Work is less than the amount actually paid by SAWS for SAWS Work under this Agreement, COUNTY agrees to refund the overpayment to SAWS within thirty (30) days of determination of same.

3.05 After County’s final recapitulation with the contractor, County will refund SAWS for Funds previously paid but unused.
3.06 The Parties acknowledge that the financial commitments stated in this Agreement are independent of the necessary operating and maintenance expenses that are SAWS’s responsibilities.

**SAWS’S RESPONSIBILITY**

4.01 SAWS agrees to accept full responsibility for inspection and acceptance of work performed as the SAWS Work.

4.02 Following Substantial Completion of SAWS Work, SAWS shall be responsible for all costs associated with operating and maintaining SAWS Work. Substantial Completion is the date, certified by COUNTY, County’s design professional and SAWS (including SAWS design professional) that the contractor has reached that stage of completion when SAWS and COUNTY accept use of SAWS Work for its intended purposes.

**ENTIRE AGREEMENT**

5.01 This Agreement, along with the specifications for the SAWS Work, supersedes any and all other agreements, either oral or in writing, and no other agreement, statement, or promise relating to the subject matter of this Agreement that is not contained herein shall be valid or binding.

**ATTORNEY’S FEES**

6.01 If any action at law or in equity is brought to enforce or interpret the provisions of this Agreement, to the extent allowed by law, the prevailing Party shall be entitled to reasonable attorney’s fees in addition to any other relief to which the prevailing Party may be entitled.

**TEXAS LAW TO APPLY**

7.01 This Agreement is performable in Bexar County, Texas and the validity of any of its terms or provisions, as well as the rights and duties of the Parties, shall be governed by the laws of the State of Texas.

**SEVERABILITY**

8.01 If any one or more of the provisions contained in the Agreement is for any reason be held to be invalid, illegal, or unenforceable in any respect, that invalidity, illegality, or unenforceability will not affect any other provision and this Agreement will be construed as if the invalid, illegal, or unenforceable provision had never been contained herein.

**AMENDMENT**

9.01 No amendment, supplementation, modification, or alteration of the terms hereof will be binding unless it is in writing, dated subsequent to the date hereof and duly executed by the Parties.

**THIRD PARTY BENEFICIARY**

10.01 SAWS shall be considered a third party beneficiary under COUNTY’s contract for the Project; provided, however, that prior to final completion of the work under the contract for the Project, SAWS shall not enforce any remedies against the Contractor without the prior written consent of COUNTY.
which consent may be withheld if COUNTY reasonably believes that enforcement would have an adverse effect on final completion of the Project. Prior to final completion of the work under the contract for the Project, COUNTY shall cooperate in the prosecution of any action against the Contractor, to the extent consistent with the terms of the Project Contract Documents, which SAWS may reasonably determine to be necessary to undertake in connection with the SAWS Work done by the Contractor or its subcontractors.

**INDEMNIFICATION**

11.01 COUNTY agrees to include SAWS in the list of parties being indemnified by the COUNTY contractors under contract documents, so that SAWS receives the benefit of all indemnities under the contract documents.

**INSURANCE**

12.01 In all contracts entered into by COUNTY for SAWS Work, County shall include provisions reflecting:

(a) With regard to insurance coverage during the construction phase of the Project, COUNTY shall require all consultants, contractors, subcontractors and suppliers to maintain insurance coverage limits that are sufficient to compensate COUNTY and SAWS for their respective interests in the Project with regard to any liability a third party may have due to the services, equipment, or materials provided for construction of the Project. SAWS shall be named as an additional insured on all policies naming COUNTY as an additional insured. COUNTY shall provide SAWS’s Designated Representative with copies of the completed Certificates of Insurance which Certificates shall be completed by an agent authorized to bind the named underwriters and their companies to the coverage limits and termination provisions shown thereon. SAWS reserves the right to review the insurance requirements during the effective period of this Agreement, and any extension or renewal hereof, and to modify insurance coverage and limits when deemed necessary and prudent by SAWS’s Risk Manager based upon changes in statutory law or court decisions. If SAWS requests a coverage modification which results in an increased cost, SAWS shall be responsible for the increased cost and COUNTY shall have no obligation to request a coverage modification until SAWS submits payment to cover the increased cost. COUNTY will not allow any modifications to the insurance coverage through which SAWS may incur increased risks.

(b) COUNTY shall require all contractors and service providers to maintain statutory worker’s compensation insurance for all of their employees with a waiver of subrogation in favor of COUNTY and SAWS.

(c) COUNTY will require the consultants, contractors, and any subcontractors to provide all statutorily-required payment and performance bonds at no additional cost to the Parties. On services for which performance bonds are not statutorily required, COUNTY shall determine whether to require performance bonds.
CURRENT REVENUES

13.01 In accordance with Section 791.011(d)(3) of the Texas Government Code, the party paying for the performance of governmental functions or services, if any, must make those payments from current revenues available to the paying party.

EXECUTED IN DUPLICATE ORIGINALS, EACH OF WHICH WILL HAVE FULL FORCE AND EFFECT ON THIS _______ DAY OF ______________________, 2019.

BEXAR COUNTY, TEXAS

By: __________________________
    Nelson W. Wolff
    County Judge

S AN ANTONIO WATER SYSTEM

By: __________________________
    Robert R. Puente
    President/Chief Executive Officer

APPROVED AS TO LEGAL FORM:

By: __________________________
    Patricia G. Prowse
    Assistant Criminal District Attorney
    -Civil Section

APPROVED AS TO FINANCIAL FORM:

By: __________________________
    Leo S. Caldera, CPA, CGAP
    County Auditor

By: __________________________
    David Smith
    County Manager

APPROVED:

By: __________________________
    Renee D. Green, PE
    Director of Public Works/County Engineer
Exhibit “A”
Bid Amount and Funds Committed by SAWS

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Main Relocation(^1)</td>
<td>$ 39,750.00</td>
</tr>
<tr>
<td>Sanitary Sewer (^2)</td>
<td>$ 34,300.00</td>
</tr>
<tr>
<td>Contingency (15% of Construction)</td>
<td>$ 11,107.50</td>
</tr>
<tr>
<td><strong>Total SAWS Contribution =</strong></td>
<td><strong>$ 85,157.50</strong></td>
</tr>
</tbody>
</table>

1. Adjustment of approximately 12 valve boxes, 4 meter boxes, 1 fire hydrant, and installation of a concrete cap
2. Reconstruction of approximately 3 sanitary sewer manholes
TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: APPROVING AN INTERLOCAL AGREEMENT AND AUTHORIZING EXPENDITURES TO THE ALAMO REGIONAL MOBILITY AUTHORITY IN CONNECTION WITH THE EVANS ROAD PHASE II: TPC PARKWAY TO HANGING OAK PROJECT

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution authorizes the President/Chief Executive Officer to execute an Interlocal Agreement with the Alamo Regional Mobility Authority (the “Authority”) and authorizes expenditures to the Authority in an amount not to exceed $753,839.90 for the joint construction of water and sewer facility adjustments in connection with the Evans Road Phase II: TPC Parkway to Hanging Oak Project.

- The Authority proposes to construct street and drainage improvements in the area illustrated on the attached maps. The Authority’s improvement work is estimated to cost $8,014,305.50.
- Due to the reconstruction and improvements with the Evans Road Phase II: TPC Parkway to Hanging Oak Project, the existing water main installed in 1999 requires adjustment to avoid conflicts with the Authority’s street and drainage improvements.
- The existing sewer force main installed in 2006 requires adjustment to avoid conflicts with the Authority’s street and drainage improvements.
- The water work will consist of the adjustment of approximately 500 feet of 20-inch water main and associated appurtenances.
- The sewer work will consist of the adjustment of approximately 268 feet of 8-inch sewer force main, three manhole reconstructions and associated appurtenances.
- The Authority plans to approve the bid of Jordan Foster Construction for construction of this project on September 18, 2019. As part of joint bidding, advanced approval for funding and for the execution of an Interlocal Agreement is required by the Authority prior to issuing a notice to proceed on construction.
Approval of an Interlocal Agreement and Authorization for Expenditure of Funds to Alamo Regional Mobility Authority for the Evans Road Phase II: TPC Parkway to Hanging Oak Project

- Funds as determined by the amount bid will be transferred to the Authority following the execution of the Interlocal Agreement.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement Program. The water work is included in the Water Delivery Core Business, Governmental – Water Category, and Governmental Water Replacements budget line item. The amount is $610,069.90 for water work. The job number is 17-5045.

The sewer work is included in the Wastewater Core Business, Governmental – Wastewater Category, and Governmental Wastewater Replacements budget line item. The amount is $143,770.00 for sewer work. The job number is 17-5538.

Gail A. Hamrick-Pigg, P.E.
Director
Pipelines

Andrea L.H. Beymer, P.E.
Vice President
Engineering and Construction

APPROVED:

Robert R. Puente
President/Chief Executive Officer

Attachments:
1. Project Area Map
2. Project Site Map
LEGEND

- PROJECT LIMITS
- Edwards Aquifer Recharge Zone

EVANS ROAD PHASE II
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING AN INTERLOCAL AGREEMENT WITH THE ALAMO REGIONAL MOBILITY AUTHORITY AND AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THE INTERLOCAL AGREEMENT FOR THE ADJUSTMENT OF WATER AND SEWER FACILITIES BY THE ALAMO REGIONAL MOBILITY AUTHORITY IN CONNECTION WITH THE EVANS ROAD PHASE II: TPC PARKWAY TO HANGING OAK PROJECT; AUTHORIZING THE EXPENDITURE OF FUNDS IN AN AMOUNT NOT TO EXCEED $753,839.90 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, Alamo Regional Mobility Authority (the “Authority”) proposes to construct the Evans Road Phase II: TPC Parkway to Hanging Oak Project; and

WHEREAS, the Evans Road Phase II: TPC Parkway to Hanging Oak Project will require the adjustment of certain water and sewer facilities (the “project work”) of the San Antonio Water System (the “System”); and

WHEREAS, to increase the efficiency and effectiveness of local governments the Authority has requested that the System execute an Interlocal Agreement and pay for the System’s share of the project work costs; and

WHEREAS, System funds in an amount not to exceed $753,839.90 are required for the project work; and

WHEREAS, the amount of $753,839.90 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to approve an Interlocal Agreement with the Authority for the adjustment of water and sewer facilities by the Authority in connection with the Evans Road Phase II: TPC Parkway to Hanging Oak Project and to authorize the President/Chief Executive Officer or his duly appointed designee to execute an Interlocal Agreement, and (ii) to authorize the expenditure of funds in an amount not to exceed $753,839.90 for the System’s share of the project work; now, therefore:
BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That an Interlocal Agreement with the Authority substantially in the form of the agreement attached hereto is hereby approved and the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute the Interlocal Agreement with the Authority in connection with the Evans Road Phase II: TPC Parkway to Hanging Oak Project.

2. That the expenditure of funds in an amount not to exceed $753,839.90 for the adjustment of water and sewer facilities by the Authority in connection with the Evans Road Phase II: TPC Parkway to Hanging Oak Project is hereby approved.

3. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

4. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid, or ineffective.

5. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 4th day of September, 2019.

_________________________________
Berto Guerra, Jr., Chairman

ATTEST:

_________________________________
Amy Hardberger, Secretary
This Interlocal Agreement (the “Agreement”) is made and entered into this __________ day of __________, 2019, by and between the ALAMO REGIONAL MOBILITY AUTHORITY, a political subdivision of the State of Texas (“AUTHORITY”), and the SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES, a political subdivision of the State of Texas (“SAWS”) (also, individually, a “Party” or, collectively, the “Parties), pursuant to the Interlocal Cooperation Act, Chapter 791 of the Government Code.

PURPOSE

1.01 The purpose of this Agreement is to facilitate the AUTHORITY’s improvement of the Evans Road Phase II: TPC Parkway to Hanging Oak (the “Project”) by including certain necessary SAWS adjustments in the AUTHORITY’s Specifications for the Project, thus assuring the coordination of the AUTHORITY’s road and drainage improvements with SAWS’s adjustments.

1.02 As part of its Project development activities, the Authority will include in its procurement of construction services the development and construction of the SAWS Work (as defined below).

SERVICES

2.01 The AUTHORITY agrees to include in the AUTHORITY Specifications for the Project the plans and specifications for SAWS Water Job No. 17-5045 and SAWS Sewer Job No. 17-5538 (the “SAWS Work”), which SAWS has prepared and delivered to the AUTHORITY and is incorporated by reference herein, and to contract for the performance of SAWS Work.

2.02 Immediately after tabulating all of the bids received for the Project, the AUTHORITY will notify SAWS in writing of the name of the contractor selected by the AUTHORITY for the Project (the “Contractor”) and the bid amount for the SAWS Work (the “Original Bid”). SAWS acknowledges that the Contractor selected by the AUTHORITY for the Project may not be the proposer which offered the lowest bid on the SAWS Work.

2.03 The AUTHORITY agrees to use its best efforts to enforce all of its rights and remedies against the Contractor for the SAWS Work.

2.04 The AUTHORITY agrees to allow SAWS access to the Project site to (i) inspect and witness testing of the SAWS Work and to determine if the SAWS Work is in conformity with the plans, specifications and special provisions applicable thereto and is in good working order, and (ii) verify all quantities used in connection with the SAWS Work, the AUTHORITY does not guarantee the performance of the Contractor in the performance of the SAWS Work, and SAWS will be responsible for inspecting and accepting the SAWS Work.
FEE

3.01 Not later than the fifteen (15) days after the execution of the Agreement by SAWS, SAWS shall deliver to the AUTHORITY good and sufficient funds (the “Funds”) for the Original Bid and a ten percent (10%) contingency (the “Contingency”). The Funds to be provided by SAWS are further described in Exhibit A attached hereto.

3.02 For materials and construction used in the SAWS Work, SAWS agrees to pay to the AUTHORITY the amount of Seven Hundred Fifty-three Thousand, Eight Hundred Thirty-Nine Dollars and Ninety Cents ($753,839.90), which includes the Original Bid amount and the Contingency.

3.03 If the cost of performing the SAWS Work exceeds the Original Bid, the following provisions shall apply:

(a) Contractor-Initiated Change Orders. Use of the Contingency. In the event the AUTHORITY receives a proposed change order from the Contractor indicating that additional funds exceeding the Original Bid will be needed for SAWS Work, the AUTHORITY will notify SAWS in writing of the proposed change order. Unless SAWS objects within ten (10) business days of receipt of the written notification of the proposed change order, the AUTHORITY will proceed with SAWS Work and utilize the Contingency for payment to the Contractor. In the event the amount of the proposed change order exceeds the Contingency amount, the AUTHORITY will authorize work up to the amount of the available Contingency, and will authorize the remaining work once a commitment, in writing, is received from an authorized representative of SAWS that the required additional funding (in excess of the available Contingency amount) will be remitted to the AUTHORITY prior to such time that payment for the work is due to the Contractor.

(b) SAWS-Initiated Change Orders. If change orders are requested by SAWS under this Agreement, SAWS will submit a change order request to the AUTHORITY, including all necessary documentation to prepare the change order.

(c) Authority-Initiated Change Orders. If the AUTHORITY requires a change order that affects the SAWS Work, the change order will be submitted to SAWS staff for approval. Notwithstanding the time period to reject a proposed change order under subsection (a), SAWS staff agrees to use good faith efforts to respond to change orders within ten (10) business days after SAWS staff’s receipt of request, or such additional period of time as may be reasonably necessary under the circumstances based on the complexity of the change order. SAWS staff is under no obligation to approve any change orders, and in no event shall SAWS be responsible for costs or expenses under Authority-Initiated Change Orders that are not approved by SAWS staff.

(d) If a SAWS Initiated Change Order or an Authority-Initiated Change Order results in total costs exceeding the amount stated in §3.02, the AUTHORITY will send copies of
invoices covering the additional amounts authorized by a change order approved by SAWS staff, and SAWS shall pay the AUTHORITY the additional amounts in the approved change order within fifteen (15) days after the approval of the Board of Trustees, unless further time is required for Board action to appropriate funds. In the event Board action is needed, SAWS agrees to present the request at the next regular or special Board meeting. A change order under §3.03(d) approved in writing and signed by authorized SAWS staff shall, upon the Board action to appropriate the funds for the change order, have the automatic effect of amending §3.02 to increase the total amount in §3.02 by the total change order amount.

(e) A change order that results in total costs reducing the amount stated in §3.02 and that is approved in writing and signed by authorized SAWS staff shall have the automatic effect of amending §3.02 to decrease the total amount in §3.02 by the total change order amount.

3.04 If the cost of performing the SAWS Work is less than the amount actually paid by SAWS for SAWS Work under this Agreement, AUTHORITY agrees to refund the overpayment to SAWS within thirty (30) days of determination of same.

3.05 Not later than thirty (30) days after the AUTHORITY’s final recapitulation with the Contractor, the AUTHORITY will refund SAWS for any surplus Funds.

3.06 The Parties acknowledge that the financial commitments stated in this Agreement are independent of the necessary operating and maintenance expenses that are SAWS’s responsibilities.

SAWS’S RESPONSIBILITY

4.01 SAWS agrees to accept full responsibility for inspection and acceptance of work performed as the SAWS Work, and acknowledges that the AUTHORITY is not responsible for the quality or performance of the SAWS Work by the Contractor.

4.02 Following Substantial Completion of SAWS Work, SAWS shall be responsible for all costs associated with operating and maintaining SAWS Work. Substantial Completion is the date, certified by the AUTHORITY, the AUTHORITY’s design professional and SAWS (including SAWS design professional) that the Contractor has reached that stage of completion when SAWS and the AUTHORITY accept use of SAWS Work for its intended purposes, recognizing that certain punch-list and/or clean-up items that do not preclude use of the SAWS Work for its intended purpose may be required.

ENTIRE AGREEMENT

5.01 This Agreement, along with the specifications for the SAWS Work, supersedes any and all other agreements, either oral or in writing, and no other agreement, statement, or promise relating to the subject matter of this Agreement that is not contained herein shall be valid or binding.
ATTORNEY’S FEES

6.01 If any action at law or in equity is brought to enforce or interpret the provisions of this Agreement, to the extent allowed by law, the prevailing Party shall be entitled to reasonable attorney’s fees in addition to any other relief to which the prevailing Party may be entitled.

TEXAS LAW TO APPLY

7.01 This Agreement is performable in Bexar County, Texas and the validity of any of its terms or provisions, as well as the rights and duties of the Parties, shall be governed by the laws of the State of Texas.

SEVERABILITY

8.01 If any one or more of the provisions contained in the Agreement is for any reason be held to be invalid, illegal, or unenforceable in any respect, that invalidity, illegality, or unenforceability will not affect any other provision and this Agreement will be construed as if the invalid, illegal, or unenforceable provision had never been contained herein.

AMENDMENT

9.01 No amendment, supplementation, modification, or alteration of the terms hereof will be binding unless it is in writing, dated subsequent to the date hereof and duly executed by the Parties.

THIRD PARTY BENEFICIARY

10.01 SAWS shall be considered a third party beneficiary under the AUTHORITY’s contract for the Project; provided, however, that prior to final completion of the work under the contract for the Project, SAWS shall not enforce any remedies against the Contractor without the prior written consent of the AUTHORITY, which consent may be withheld if the AUTHORITY reasonably believes that enforcement would have an adverse effect on final completion of the Project. Prior to final completion of the work under the contract for the Project, the AUTHORITY shall cooperate in the prosecution of any action against the Contractor, to the extent consistent with the terms of the Project Contract Documents, which SAWS may reasonably determine to be necessary to undertake in connection with the SAWS Work done by the Contractor or its subcontractors.

INDEMNIFICATION

11.01 The AUTHORITY agrees to include SAWS in the list of parties being indemnified by the Contractor, so that SAWS receives the benefit of all indemnities under the contract documents with respect to the SAWS Work. Neither party to this Agreement waives, or intends to waive, their governmental immunity in connection with this Agreement, the Project, or the SAWS Work.
INSURANCE

12.01 In all contracts entered into by the AUTHORITY for SAWS Work, the AUTHORITY shall include provisions reflecting:

(a) With regard to insurance coverage during the construction phase of the Project, the AUTHORITY shall require all consultants, contractors, subcontractors and suppliers to maintain insurance coverage limits that are sufficient to compensate the AUTHORITY and SAWS for their respective interests in the Project with regard to any liability a third party may have due to the services, equipment, or materials provided for construction of the Project. SAWS shall be named as an additional insured on all policies naming the AUTHORITY as an additional insured. The AUTHORITY shall provide SAWS with copies of the completed Certificates of Insurance which Certificates shall be completed by an agent authorized to bind the named underwriters and their companies to the coverage limits and termination provisions shown thereon. SAWS reserves the right to review the insurance requirements during the effective period of this Agreement, and any extension or renewal hereof, and to modify insurance coverage and limits when deemed necessary and prudent by SAWS’s Risk Manager based upon changes in statutory law or court decisions. If SAWS requests a coverage modification which results in an increased cost, SAWS shall be responsible for the increased cost and the AUTHORITY shall have no obligation to request a coverage modification until SAWS submits payment to cover the increased cost. The AUTHORITY will not allow any modifications to the insurance coverage through which SAWS may incur increased risks.

(b) The AUTHORITY shall require the Contractor to maintain statutory worker’s compensation insurance for all of their employees with a waiver of subrogation in favor of the AUTHORITY and SAWS.

(c) The AUTHORITY will require the Contractor, and any subcontractors to provide all statutorily-required payment and performance bonds at no additional cost to the Parties. On services for which performance bonds are not statutorily required, the AUTHORITY shall determine whether to require performance bonds.

CURRENT REVENUES

13.01 In accordance with Section 791.011(d)(3) of the Texas Government Code, the party paying for the performance of governmental functions or services, if any, must make those payments from current revenues available to the paying party.
EXECUTED IN DUPLICATE ORIGINALS, EACH OF WHICH WILL HAVE FULL FORCE AND EFFECT ON THIS _______ DAY OF ______________________, 2019.

ALAMO REGIONAL MOBILITY AUTHORITY

By: __________________________
   David Smith
   Executive Director

SAN ANTONIO WATER SYSTEM

By: __________________________
   Robert R. Puente
   President/Chief Executive Officer
Exhibit “A”
Bid Amount and Funds Committed by SAWS

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Main Adjustments(^1)</td>
<td>$554,609.00</td>
</tr>
<tr>
<td>Sanitary Sewer Adjustments(^2)</td>
<td>$130,700.00</td>
</tr>
<tr>
<td>Contingency (10% of Construction)</td>
<td>$68,530.90</td>
</tr>
</tbody>
</table>

Total SAWS Contribution = $753,839.90

1. Approx. 500 LF of 20-inch DI Water Main and associated appurtenances
2. Approx. 268 LF of 8-inch PVC Sanitary Sewer Force main, 3 manhole reconstructions, and associated appurtenances
AGENDA ITEM NO. 16

TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: APPROVAL OF ADDITIONAL FUNDS TO THE EXISTING ADVANCED FUNDING AGREEMENT WITH TEXAS DEPARTMENT OF TRANSPORTATION IN CONNECTION WITH THE US 281: LOOP 1604 TO STONE OAK PARKWAY PROJECT

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution amends Resolution No. 17-026, as amended by Resolution No. 17-175, by approving additional funds in an amount not to exceed $719,332.63 payable to Texas Department of Transportation (TxDOT) in connection with the US 281: Loop 1604 to Stone Oak Parkway Project.

- TxDOT is currently expanding to a six lane expressway along the US 281: Loop 1604 to Stone Oak Parkway Project in the area illustrated on the attached maps. The TxDOT highway and drainage cost estimate is $185,000,000.00 for the TxDOT work.

- The US 281: Loop 1604 to Stone Oak Parkway Project consists of the adjustment of approximately 6,600 feet of 6-inch through 36-inch water mains, with approximately 1,650 feet of 12-inch water main to be upsized to a 16-inch water main and approximately 4,150 feet of 20-inch water main to be upsized to a 24-inch water main.

- The sewer adjustment consists of approximately 2,458 feet of 4-inch through 30-inch sewer mains with approximately 2,218 feet of 10-inch sewer main will be upsized to a 12-inch sewer main and 424 feet of 18-inch sewer main will be upsized to a 30-inch sewer main.

- Since TxDOT’s proposed improvements conflict with existing San Antonio Water System (the “System”) infrastructure within existing easements, approximately 48.50 percent of the water and sewer adjustment work is eligible for reimbursement through the Federal Utility and State Utility Procedures. The remaining 51.50 percent of water and sewer work is to be funded by the System.

- Funds in the amount of $4,170,981.05 were originally authorized for the construction of System work on this project on January 10, 2017, by Resolution No. 17-026. Additional funds in the amount of $234,405.48 were authorized on August 1, 2017 by Resolution 17-
175, resulting in a total authorization of $4,405,386.53 based on the low bid by Webber, LLC.

- Additional funds are necessary to address additional project work and changes to original project scope to include additional water infrastructure to keep water service in place due to unforeseen construction sequencing, adjustment of approximately 300 feet of 8-inch sewer main, 1,400 feet of 6 and 12-inch water main, 200 feet of 20-inch water main and associated appurtenances due to unforeseen utility and infrastructure conflicts.

- Currently, there is $31,216.27 available in the construction contingency for the project. The additional amount of $719,332.63 includes $662,764.97 for this additional project work and $56,567.66 for additional contingency, bringing the contingency to $87,783.93 for additional contingency expenses that might be incurred for the remaining work.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement Program. The water work in the amount of $618,265.76 is included in the Water Delivery Core Business, Governmental-Water Category, and Governmental Water Replacements budget line item. The job number is 16-5035.

The sewer work in the amount of $101,066.87 is included in the Wastewater Core Business, Governmental – Wastewater Category, and Governmental Wastewater Replacements budget line item. The job number is 16-5535.

The revised authorizations for this project are as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount Authorized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Amount (Resolution No. 17-026)</td>
<td>$4,170,981.05</td>
</tr>
<tr>
<td>Additional Funds (Resolution No. 17-175)</td>
<td>234,405.48</td>
</tr>
<tr>
<td>Proposed Authorization</td>
<td>719,332.63</td>
</tr>
<tr>
<td>Revised Authorized Amount</td>
<td>$5,124,719.16</td>
</tr>
</tbody>
</table>

The new authorized amount for the System’s work is $5,124,719.16, which represents an increase of 16.33 percent to the original amount. The TxDOT original contract amount is $185,000,000.00.
Approval of Additional Funds
US 281: Loop 1604 to Stone Oak Parkway

Gail A. Hamrick-Pigg, P.E.
Director
Pipelines

APPROVED:

Andrea L.H. Beymer, P.E.
Vice President
Engineering and Construction

Robert R. Puente
President/Chief Executive Officer

Attachments:
1. Project Area Map
2. Project Site Map
SAN ANTONIO WATER SYSTEM
PROJECT AREA MAP
ATTACHMENT I

US 281: LOOP 1604 TO STONE OAK

LEGEND

★ PROJECT SITE

EDWARDS AQUIFER RECHARGE ZONE
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AMENDING RESOLUTION NO. 17-026, AS AMENDED BY RESOLUTION NO. 17-175, BY APPROVING THE EXPENDITURE OF ADDITIONAL FUNDS IN AN AMOUNT NOT TO EXCEED $719,332.63 PAYABLE TO THE TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT) FOR ADDITIONAL CONSTRUCTION EXPENSES IN CONNECTION WITH THE US 281: LOOP 1604 TO STONE OAK PARKWAY PROJECT; APPROVING AN ADDITIONAL AMOUNT NOT TO EXCEED $719,332.63 BE MADE AVAILABLE AND EXPENDED FROM THE PROJECT FUND FOR ADDITIONAL PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THE DOCUMENTS REQUIRED TO MEMORIALIZE THE ADDITIONAL PROJECT WORK AND FEES, AND TO PAY TxDOT AN AMOUNT NOT TO EXCEED $719,332.63 FOR ADDITIONAL PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, Texas Department of Transportation (TxDOT) is currently constructing the US 281: Loop 1604 to Stone Oak Parkway Project; and

WHEREAS, the adjustment and replacement of certain San Antonio Water System (the “System”) water and sewer facilities were included in TxDOT’s bid documents; and

WHEREAS, the System’s Board of Trustees (the “Board”) by Resolution No. 17-026, adopted January 10, 2017, originally approved the expenditure of $4,170,981.05 and additional funds in the amount of $234,405.48, by Resolution No. 17-175 adopted on August 1, 2017, resulting in a total authorization of $4,405,386.53 based on the low bid by Webber, LLC; and

WHEREAS, additional System funds in an amount not to exceed $719,332.63 are required in connection with the project work; and

WHEREAS, the amount of $719,332.63 is available from the Project Fund; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to further amend Resolution No. 17-026, as amended by Resolution No. 17-175, by approving the
expenditure of an additional amount not to exceed $719,332.63 payable to TxDOT in connection with the US 281: Loop 1604 to Stone Oak Parkway Project, (ii) to expend an amount not to exceed $719,332.63 from the Project Fund for additional project work, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute all documents required to memorialize the additional project work and fees and pay TxDOT an amount not to exceed $719,332.63 for additional project work; now, therefore;

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That Resolution No. 17-026, as amended by Resolution No. 17-175, is hereby further amended by authorizing additional funds in an amount not to exceed $719,332.63 payable to the Texas Department of Transportation in connection with the US 281: Loop 1604 to Stone Oak Parkway Project.

2. That an additional amount not to exceed $719,332.63 is hereby made available and is to be expended from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute all documents required to memorialize the additional project work and fees and to pay the Texas Department of Transportation an amount not to exceed $719,332.63 for additional project work in connection to the US 281: Loop 1604 to Stone Oak Parkway Project.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid, or ineffective.

6. This resolution becomes effective immediately upon its passage.
PASSED AND APPROVED this 4th day of September, 2019.

_________________________________
Berto Guerra, Jr., Chairman

ATTEST:

_________________________________
Amy Hardberger, Secretary
TO: San Antonio Water System Board of Trustees

FROM: Bruce A. Haby, Manager, Corporate Real Estate, and Nancy Belinsky, Vice President and General Counsel

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: APPROVING SETTLEMENT OF CLAIMS BY ERNEST A. RUIZ, SR. AND WIFE ROSALINDA M. RUIZ AGAINST THE SAN ANTONIO WATER SYSTEM

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution approves settlement of claims made by Ernest A. Ruiz, Sr. and wife Rosalinda M. Ruiz (collectively, the “Owner”) against the San Antonio Water System (the “System”) in the amount of $200,000.00, and authorizes the President/CEO or his designee to negotiate and execute a Settlement and Release Agreement (the “Settlement”) with Owner.

- The System acquired a 2.361 permanent sewer easement and a 3.434 acre temporary construction easement upon certain portions of the Owner’s 261.332 acre property as part of the Western Watershed Sewer Relief Line Middle Segment Project (the “Project”).

- The Owner has made various claims of damages to their property related to the construction of the Project.

- The Owner and the System desire to enter into the Settlement to resolve all claims and disputes of damages related to the construction of the Project.

- The Owner and the System agree the total consideration for the settlement of the various claims related to the property shall be $200,000.00, subject to Board approval.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the 2016 Capital Improvement Program, Water Delivery-Main Replacements Category under Job No. 15-4505.
Approval of Settlement of Claims

Bruce A. Haby
Manager
Corporate Real Estate

APPROVED:

Robert R. Puente
President/Chief Executive Officer

Nancy Belinsky
Vice President and General Counsel
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM (THE “SYSTEM”) BOARD OF TRUSTEES APPROVING SETTLEMENT OF CLAIMS MADE BY ERNEST A. RUIZ, SR. AND ROSALINDA M. RUIZ (COLLECTIVELY, THE “OWNER”) AGAINST THE SAN ANTONIO WATER SYSTEM IN THE AMOUNT OF $200,000.00 IN CONNECTION WITH THE CONSTRUCTION OF THE WESTERN WATERSHED SEWER RELIEF LINE MIDDLE SEGMENT PROJECT; AUTHORIZING THE PRESIDENT/CEO OR DULY AUTHORIZED DESIGNEE TO NEGOTIATE AND EXECUTE A SETTLEMENT AGREEMENT WITH OWNER; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the System acquired a 2.361 acre permanent sewer easement and a 3.434 acre temporary construction easement from the Owner for the construction of the Western Water Sewer Relief Line Middle Segment Project (the “Project”); and

WHEREAS, the Owner has made various claims of damages related to the construction of the Project on their property, and the nature and facts of these claims, the avoidance of further legal expense, and other relevant circumstances favor settlement of these claims of damages; and

WHEREAS, both the System and Owner now desire to settle all claims related to the Project; and

WHEREAS, the San Antonio Water System Board of Trustees desires to (i) authorize a settlement of the claims of Owner against the System in the total amount of $200,000.00, and (ii) authorize the President/Chief Executive Officer or duly authorized designee to negotiate and execute a Settlement and Release Agreement (the “Settlement”) and pay $200,000.00 to Owner pursuant thereto; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That settlement of the claims of Owner against the System in the total amount of $200,000.00 is hereby approved.
2. That the President/Chief Executive Officer or duly authorized designee is hereby authorized to negotiate and execute the Settlement, to pay $200,000.00 to Owner pursuant thereto, and to take all necessary action to enforce the terms of the Settlement.

3. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that published notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended. Title 5, Chapter 551, Government Code.

4. If any part, section, paragraph, sentence, phrase, word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

5. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 4th day of September, 2019.

Berto Guerra, Jr., Chairman

ATTEST:

Amy Hardberger, Secretary
AGENDA ITEM NO. 18

TO: San Antonio Water System Board of Trustees

FROM: Bruce A. Haby, Manager, Corporate Real Estate, Andrea L.H. Beymer, P.E. Vice President, Engineering and Construction, and Nancy Belinsky, Vice President and General Counsel

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: APPROVING AN AMENDMENT TO THE PURCHASE AGREEMENT BETWEEN THE SAN ANTONIO WATER SYSTEM AND YANCEY WATER SUPPLY CORPORATION FOR THE SALE OF THE WEST VIEW SYSTEM LOCATED IN MEDINA COUNTY, TEXAS

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution authorizes and approves an amendment (the “Amendment”) to the purchase agreement (the “Purchase Agreement”) between the San Antonio Water System (the “System”) and Yancey Water Supply Corporation (the “Buyer”) for the sale of the West View Subdivision water system (the “West View System”).

- The System acquired the West View System, which includes an Edwards Aquifer water well, ground storage tank, approximately 0.11 miles of 2-inch mains, 5.3 miles of 6-inch mains, and 0.5 miles of 8-inch mains, as part of the System’s assumption and integration of the Bexar Metropolitan Water District in 2012.

- On March 6, 2018, the System’s Board of Trustees declared the West View System surplus pursuant to Board Resolution No. 18-077.

- On June 14, 2018, by Ordinance No. 2018-06-14-0437, the City Council of San Antonio declared the West View System surplus, and authorized the System to sell the West View System.

- Following a bid solicitation, on October 9, 2018 the System’s Board of Trustees approved the Agreement pursuant to Board Resolution No. 18-232 (the “Authorizing Resolution”).

- The Purchase Agreement provided, that, as additional consideration, the Buyer will transfer 1,289 acres of the Buyer’s CCN to the System, and the System will transfer 1,882 acres of the System’s CCN to the Buyer (the “CCN Exchange”). It has been determined that Buyer serves a small number of customers off a 4-inch diameter water line in the 1,289 acre area.
As such, System staff has negotiated an Amendment which provides that, post-CCN Exchange, Buyer may continue to serve its existing customers in the 1,289 acre area and may, with the System’s consent, serve additional customers off said 4-inch line provided the applicable properties abut the line and are residential tracts greater than three acres in size.

The Purchase Agreement provided for closing to occur within 45 days following the approval of the Public Utilities Commission (the “PUC”), but no later than August 15, 2019.

The PUC has yet to approve the transfer of the Westview System and the CCN Exchange. So that the Purchase Agreement would not terminate of its own terms and pursuant to the authority given in the Authorizing Resolution to the President/Chief Executive Officer or duly appointed designee, a short-term extension of the closing date to October 15, 2019 was previously executed. The Amendment provides for an extension of the closing date to April 15, 2020 to accommodate an updated, conservative PUC timeframe for approval.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The Amendment does not affect the purchase price the System will receive for the sale of the West View System.
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM (THE “SYSTEM”) BOARD OF TRUSTEES APPROVING AN AMENDMENT TO THE PURCHASE AGREEMENT (THE “PURCHASE AGREEMENT”) BY AND BETWEEN THE SYSTEM AND YANCEY WATER SUPPLY CORPORATION (THE “BUYER”) FOR THE SALE OF THE WEST VIEW SUBDIVISION PROPERTY AND OPERATING INFRASTRUCTURE (THE “WEST VIEW SYSTEM”), LOCATED IN MEDINA COUNTY, TEXAS AND EXCHANGE BETWEEN SYSTEM AND BUYER OF CCN AREAS (THE “CCN EXCHANGE”); AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE ALL DOCUMENTS NECESSARY TO COMPLETE THE SALE OF THE WEST VIEW SYSTEM AND CCN EXCHANGE AND TO PERFORM ALL THE DUTIES AND OBLIGATIONS OF THE SELLER IN THE PURCHASE AGREEMENT, INCLUDING ALL NECESSARY FILINGS WITH THE PUBLIC UTILITIES COMMISSION; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the real property and operating infrastructure, known as West View System, located in Medina County, Texas, was acquired from the acquisition and assumption of the Bexar Metropolitan Water District in 2012; and

WHEREAS, the West View System was declared surplus to the System pursuant to Resolution No. 18-077, approved on March 6, 2018; and

WHEREAS, the City Ordinance No. 2018-06-14-0437, approved on June 14, 2018 declared the West View System surplus to the City of San Antonio; and

WHEREAS, following a public bidding process, a Purchase Agreement with Buyer for the sale of the West View System was approved pursuant to Resolution No. 18-232 on October 9, 2018; and

WHEREAS, the San Antonio Water System Board of Trustees desires to (i) approve an Amendment (the “Amendment”) to the Purchase Agreement that amends certain terms relating to the CCN Exchange provided for therein and extends the outside date for closing of the Purchase Agreement and (ii) authorize the President/Chief Executive Officer or his duly appointed designee to
execute all documents and take all actions necessary to complete the sale of the West View System and CCN Exchange, including all necessary filings with the Public Utility Commission (the “PUC”), now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the Amendment to the Purchase Agreement attached hereto as Attachment I is hereby approved.

2. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute all documents, including the Amendment, and take all actions necessary to complete the sale of the West View System and the CCN Exchange, including all necessary filings with the PUC.

3. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

4. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

5. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 4th day of September, 2019.

__________________________________
Berto Guerra, Jr., Chairman

ATTEST:

__________________________________
Amy Hardberger, Secretary

Attachments:
I. Amendment to Purchase Agreement
This Second Amendment to Purchase Agreement ("Amendment") is an amendment to that certain Purchase Agreement (the "Agreement") by and between the City of San Antonio by and through the San Antonio Water System ("Seller") and Yancey Water Supply Corporation ("Buyer") dated effective October 12, 2018 (as previously amended by the First Amendment to Purchase Agreement dated effective August 5, 2019) concerning property and related retail water system in Medina County, Texas, being more particularly described in the Agreement.

For good and valuable consideration, the receipt and sufficiency being hereby acknowledged, Buyer and Seller agree as follows. All capitalized terms herein, unless otherwise defined, have the meaning as set forth in the Agreement.

1. **CCN Exchange.** Section 2c of the Agreement is hereby amended and restated in its entirety to read:

   "c. CCN Exchange. Seller and Buyer shall exchange certain water service areas currently covered by Certificates of Convenience and Necessity (each, a "CCN"), as shown on Exhibit D attached hereto, such that upon approval by the Public Utility Commission ("PUC") of Texas Seller will transfer and/or relinquish the "SAWS Service Area" to Buyer, and Buyer will transfer and/or relinquish the "Yancey Area A," all as more particularly depicted on Exhibit D (the "CCN Exchange"). Within Yancey Area A, Yancey will continue serving its existing customers from its existing distribution line and may provide, with prior written consent from the SAWS' President/CEO or designee, additional residential service from that line to all existing tracts of greater than 3 acres that abut the line, so long as all tracts served are not subdivided into tracts of 3 acres or less. At closing, Yancey will provide a list of existing customer service locations served from the line."

2. **Closing.** Section 11 of the Agreement is hereby amended and restated in its entirety to read:

   "11. Closing. The conveyance of the System to Buyer shall be closed ("Closing") at the office of the Title Company on a date that is the first business day thirty (30) days following PUC approval of the sale of the System (the "Closing Date"), or such earlier date as the parties may agree to, but in no event later than April 15, 2020 (the "Outside Closing Date")."

3. **Other Terms.** All other terms, conditions and provisions of the Agreement are hereby ratified and confirmed and shall remain in full force and effect as of the date thereof, except as expressly modified hereby.

4. **Counterparts.** This Amendment may be executed by facsimile or pdf transmission in two or more counterparts, each of which shall be deemed to be an original, but all of which taken together shall constitute but one and the same instrument.

*Signatures on following page*
Executed to be effective on the _____ day of ________________, 2019.

Seller:

CITY OF SAN ANTONIO, ACTING BY AND THROUGH THE SAN ANTONIO WATER SYSTEM

BY: _________________________________
   Nancy Belinsky
   Vice President and General Counsel

Buyer:

YANCEY WATER SUPPLY CORPORATION, a Texas water supply corporation

BY: _________________________________
   Steve Hackebiel, President
TO: San Antonio Water System Board of Trustees

FROM: Carlos R. Mendoza, Director, Fleet and Facilities Management, and Jeffrey J. Haby, P.E., Vice President, Production and Treatment

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE CLOUSE WATER RECYCLING BUILDINGS 10 AND 11 – ROOF REPLACEMENT PROJECT

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to South Texas BuildCon, LLC, a non-local, non-SMWVB firm, in the amount of $103,275.00 in connection with the Clouse Water Recycling Buildings 10 and 11 – Roof Replacement Project.

- The chlorine and chemical buildings (buildings 10 and 11) roof system was installed in 1987. The existing roof is a coal tar pitch roof system. The average life for a coal tar pitch roof system is 22.5 years. The roof system on the building is still the original, with 31 years of service. The replacement will resolve recurrent leak issues and avoid structural damage, along with extending use of the building.

- The standard construction bidding process was used for this contract.

- South Texas BuildCon, LLC submitted the low bid of $103,275.00

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The System Fund will finance this expenditure included in the 2019 budget (Company: 1000, Account: 511220, Accounting Unit: 5031400, Total Amount: $103,275.00).
SUPPLEMENTARY COMMENTS:

Facility Maintenance Department staff prepared the plan and specifications for this project.

The bid opening was held on July 15, 2019 at 10:00 a.m. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Texas BuildCon, LLC*</td>
<td>$103,275.00</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Engineer's Estimate</td>
<td>$110,000.00</td>
<td></td>
</tr>
<tr>
<td>Vela Group</td>
<td>$146,485.26</td>
<td>Local/MBE-Hispanic/VBE</td>
</tr>
</tbody>
</table>

*Lowest Responsible Bidder

The bid amount represents a 6.11 percent decrease from the estimated construction cost.

Carlos R. Mendoza  
Director  
Fleet and Facilities Management

Jeffrey J. Haby, P.E.  
Vice President  
Production and Treatment

Robert R. Puente  
President/Chief Executive Officer
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO SOUTH TEXAS BUILDCON, LLC IN AN AMOUNT NOT TO EXCEED $103,275.00 IN CONNECTION WITH THE CLOUSE WATER RECYCLING PLANT BUILDINGS 10 AND 11 – ROOF REPLACEMENT PROJECT; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $103,275.00 FROM THE SYSTEM FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH SOUTH TEXAS BUILDCON, LLC, AND TO PAY SOUTH TEXAS BUILDCON, LLC AN AMOUNT NOT TO EXCEED $103,275.00 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the Steven M. Clouse Water Recycling Center Chlorine and Chemical Buildings 10 and 11 were originally constructed in 1987; and

WHEREAS, the original roof is beyond repair and requires a full replacement in order to avoid further damage to the structural integrity of the building and to secure the health and safety of the employees; and

WHEREAS, the San Antonio Water System (the “System”) has solicited bids for the project work; and

WHEREAS, South Texas BuildCon, LLC submitted a bid in the amount of $103,275.00 for the project work, and this bid has been determined to be the lowest responsible bid; and

WHEREAS, System funds in the amount of $103,275.00 are required for the project work; and

WHEREAS, the amount of $103,275.00 is available from the System Fund for the project work; and
WHEREAS, the San Antonio Water System Board of Trustees desires to (i) award a construction contract to South Texas BuildCon, LLC in an amount not to exceed $103,275.00 in connection with the Clouse Water Recycling Plant Buildings 10 and 11 – Roof Replacement Project, (ii) approve the expenditure of funds and make available an amount not to exceed $103,275.00 for the project work, (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a construction contract with South Texas BuildCon, LLC, and to pay South Texas BuildCon, LLC an amount not to exceed $103,275.00 for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in an amount not to exceed $103,275.00 is hereby awarded to South Texas BuildCon, LLC in connection with the Clouse Water Recycling Plant Buildings 10 and 11 – Roof Replacement Project.

2. That the expenditure of funds in an amount not to exceed $103,275.00 for project work is hereby approved and made available from the System Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with South Texas BuildCon, LLC, and to pay South Texas BuildCon, LLC an amount not to exceed $103,275.00 in connection with the Clouse Water Recycling Plant Buildings 10 and 11 – Roof Replacement Project.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.
PASSED AND APPROVED this 4th day of September, 2019.

_________________________
Berto Guerra, Jr., Chairman

ATTEST:

_________________________
Amy Hardberger, Secretary
TO: San Antonio Water System Board of Trustees

FROM: Carlos R. Mendoza, Director, Fleet and Facilities Management, and Jeffrey J. Haby, P.E., Vice President, Production and Treatment

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: APPROVAL OF A SERVICES CONTRACT EXTENSION FOR FLEET PARTS MANAGEMENT AND SUPPLY SERVICES

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution approves the extension of a services contract with Genuine Parts Company dba NAPA Auto Parts in an amount not to exceed $1,820,000.00 for the period of October 1, 2019 through September 30, 2020, with two remaining one-year extensions in connection with fleet parts management and supply services. Staff will return to the Board of Trustees at the appropriate times to exercise the extensions.

- The San Antonio Water System (SAWS) Fleet Management Department maintains a fleet of 1,303 light duty, medium duty and heavy duty equipment requiring fleet parts and supply services.

- SAWS has an Interlocal Agreement with the City of Fort Worth thereby allowing SAWS to contract for fleet parts management and supply services with Genuine Parts Company dba NAPA Auto Parts.

- On May 1, 2018, by Resolution No. 18-123, the SAWS Board of Trustees authorized a service contract with Genuine Parts Company dba NAPA Auto Parts in an amount not to exceed $2,115,750.00 for a period of May 1, 2018 through September 30, 2019, to include the availability of three one-year extensions.

- This resolution approves a services contract extension with Genuine Parts Company dba NAPA Auto Parts for the period of October 1, 2019 through September 30, 2020, and authorizes funding in an amount not exceed $1,820,000.00 for the services contract.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

Fleet Parts expenditures will be paid from the System Fund budgeted in the 2019 and 2020 budgets (Company: 1000, Account: 511224, Accounting Unit: 5019500, Total Amount: $1,450,000.00). Fleet Parts Management will be paid from the System Fund budgeted in the 2019 and 2020 budgets.
Award of Services Contract  
Fleet Parts Management and Supply Services

(Company: 1000, Account: 511312, Accounting Unit: 5019500, Total Amount: $270,000.00). Motor Oil and Lubricants will be paid from the System Fund budgeted in the 2019 and 2020 budgets (Company: 1000, Account: 511451, Accounting Unit: 5019500, Total Amount: $100,000.00).

Parts and services expenditures paid from the System Fund in the 2020 budget will be made pursuant to and contingent on Board approval of the 2020 budget with a line item for such expenditures.

Carlos R. Mendora  
Director  
Fleet and Facilities Management

Jeffrey J. Haby, P.E.  
Vice President  
Production and Treatment

Robert R. Puente  
President/Chief Executive Officer

APPROVED:
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING A SERVICES CONTRACT EXTENSION WITH GENUINE PARTS COMPANY DBA NAPA AUTO PARTS IN AN AMOUNT NOT TO EXCEED $1,820,000.00 FOR THE PERIOD OF OCTOBER 1, 2019 THROUGH SEPTEMBER 30, 2020 IN CONNECTION WITH FLEET PARTS MANAGEMENT AND SUPPLY SERVICES; AUTHORIZING THE EXPENDITURE OF FUNDS IN AN AMOUNT NOT TO EXCEED $1,820,000.00 FROM THE SYSTEM FUND, AND THAT SUBSEQUENT EXPENDITURES ARE PURSUANT TO AND CONTINGENT UPON BOARD APPROVAL OF SUBSEQUENT YEAR’S BUDGET WITH A LINE ITEM FOR SUCH EXPENDITURES; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A SERVICES CONTRACT EXTENSION WITH GENUINE PARTS COMPANY DBA NAPA AUTO PARTS, AND TO PAY GENUINE PARTS COMPANY DBA NAPA AUTO PARTS AN AMOUNT NOT TO EXCEED $1,820,000.00 FOR THE SERVICES CONTRACT; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System’s (the “System”) Fleet Management Department maintains 1,303 vehicles and equipment; and

WHEREAS, the City of Fort Worth and the System have an Interlocal Agreement to pursue mutually beneficial and cooperative purchasing programs pursuant to the Interlocal Cooperation Act (Chapter 791.011 of the Texas Government Code) and Section 271.102 of the Texas Local Government Code, and thereby the System is eligible to purchase services under the contract between the City of Fort Worth and Genuine Parts Company dba NAPA Auto Parts; and

WHEREAS, on May 1, 2018, by Resolution No. 18-123, the Board of Trustees approved a services contract with Genuine Parts Company dba NAPA Auto Parts in an amount not to exceed $2,115,750.00 for a period of May 1, 2018 through September 30, 2019, to include the availability of three one-year extensions; and

WHEREAS, staff will return to the Board of Trustees at the appropriate times to exercise the extensions; and
WHEREAS, the San Antonio Water System Board of Trustees desires to (i) approve a services contract extension with Genuine Parts Company dba NAPA Auto Parts in an amount not to exceed $1,820,000.00 for the period of October 1, 2019 through September 30, 2020, in connection with fleet parts management and supply services, (ii) to approve the expenditure of funds and make available an amount not to exceed $1,820,000.00 from the System Fund, and that subsequent expenditures are pursuant to and contingent upon Board approval of the subsequent year’s budget with a line item for such expenditures, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a services contract extension with Genuine Parts Company dba NAPA Auto Parts, and to pay Genuine Parts Company dba NAPA Auto Parts an amount not to exceed $1,820,000.00 for the services contract; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a services contract extension an amount not to exceed $1,820,000.00 with Genuine Parts Company dba NAPA Auto Parts for the period of October 1, 2019 through September 30, 2020, is hereby approved in connection with the fleet parts management and supply services.

2. That the expenditure of funds in an amount not to exceed $1,820,000.00 is hereby approved and to be expended from the System Fund, and that subsequent expenditures are pursuant to and contingent upon Board approval of the subsequent year’s budget with a line item for such expenditures.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a services contract extensions with Genuine Parts Company dba NAPA Auto Parts, and to pay Genuine Parts Company dba NAPA Auto Parts an amount not to exceed $1,820,000.00 in connection with the fleet parts management and supply services.

4. That Staff is hereby directed to return to the Board for approval of future contract extensions and funding.

5. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

6. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

7. This resolution becomes effective immediately upon its passage.
PASSED AND APPROVED this 4th day of September, 2019.

_____________________________________
Berto Guerra, Jr., Chairman

ATTEST:

_____________________________________
Amy Hardberger, Secretary
AGENDA ITEM NO. 21

TO: San Antonio Water System Board of Trustees

FROM: Annette Duron, Director, Operations Support, and Jeffrey J. Haby, P.E., Vice President, Production & Treatment

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF SERVICES CONTRACT IN CONNECTION WITH THE SANITARY SEWER CONDITION MONITORING PROGRAM CLEANING AND INSPECTION OF COLLECTION SYSTEM SMALL ASSETS, PACKAGE 1

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution awards a services contract to Ace Pipe Cleaning, Inc. a local, non-SMWVB contractor, in an amount not to exceed $1,792,089.30 for the period ending December 1, 2020, to perform cleaning and inspection services within the San Antonio Water System (SAWS) sewer service area in connection with the Sanitary Sewer Condition Monitoring Program Cleaning and Inspection of Collection System Small Assets, Package 1.

- SAWS is committed to perform a system wide inspection and assessment of the structural condition of its sanitary sewer assets within its wastewater collection system consistent with the Consent Decree entered into with the United States Environmental Protection Agency on October 15, 2013. This contract is intended to assist SAWS fulfill its commitment in accordance with the Technical Memorandum entitled “Condition Monitoring Plan” dated March 5, 2018.

- SAWS’ in-house crews currently clean approximately 1,200 miles of sewer mains a year and inspect approximately 300 miles of sewer mains per year using closed circuit television mostly in the smaller diameter range of less than 24 inches in diameter.

- There are approximately 5,000 miles of small diameter sewer mains in the system. This contract awards cleaning and inspecting 125 miles of designated small mains.

- This contract supplements our in-house capability to clean and inspect our small diameter sewer mains in order to improve the system hydraulic performance, to reduce sanitary sewer overflows, and to assess and document the condition of sewer mains using the National Association of Sewer Service Companies Pipeline Assessment Certification Program system.

- SAWS has established a precedent for supplementing sanitary sewer cleaning and inspection with contracted service providers.
The standard bidding process was used for this contract.

Ace Pipe Cleaning, Inc. submitted the low responsible bid of $1,792,089.30.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

Funds have been budgeted in FY 2019 and are available from the System Fund for this maintenance work. The System Fund will finance the amount of $1,792,089.30 for contract services under Company: 1000, Accounting Units: 5043700 and 5044800, Account: 511312. The SAWS bid number for this project is 19-19092. Expenditures for the subsequent year are pursuant to and contingent upon Board approval of subsequent year’s budget with a line item for such expenditures.

**SUPPLEMENTARY COMMENTS:**

SAWS staff prepared the specifications for this project. The engineer’s estimated cost is $1,500,000.00.

A bid opening was held on August 8, 2019, at 3:00 p.m. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineer’s Estimate</td>
<td>$1,500,000.00</td>
<td></td>
</tr>
<tr>
<td>Ace Pipe Cleaning, Inc.*</td>
<td>$1,792,089.30</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>Champion Cleaning Specialists, Inc.</td>
<td>$2,128,734.90</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>Taplin Group, LLC</td>
<td>$2,470,348.14</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
</tbody>
</table>

* Lowest Responsible Bidder

The bid amount represents a 19.5 percent increase from the engineer’s estimated cost.
Additionally, the overall SMWVB analysis is shown in the following table:

<table>
<thead>
<tr>
<th>Sanitary Sewer Condition Monitoring Program Cleaning and Inspection of Collection System Small Assets, Package 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ace Pipe Cleaning, Inc.</td>
</tr>
<tr>
<td>SMWVB Analysis – Board Award</td>
</tr>
<tr>
<td>SBE</td>
</tr>
<tr>
<td>MBE – African American</td>
</tr>
<tr>
<td>MBE – Asian</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
</tr>
<tr>
<td>MBE – Other</td>
</tr>
<tr>
<td>WBE – Minority</td>
</tr>
<tr>
<td>WBE – Non-Minority</td>
</tr>
<tr>
<td>SMWVB Total</td>
</tr>
</tbody>
</table>

Annette Duron  
Director  
Operations Support

Jeffrey J. Hasty, P.E.  
Vice President  
Production and Treatment

Robert R. Puente  
President/Chief Executive Officer

APPROVED:
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A SERVICES CONTRACT TO ACE PIPE CLEANING, INC. IN AN AMOUNT NOT TO EXCEED $1,792,089.30 IN CONNECTION WITH THE SANITARY SEWER CONDITION MONITORING PROGRAM CLEANING AND INSPECTION OF COLLECTION SYSTEM SMALL ASSETS, PACKAGE 1; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $1,792,089.30 FROM THE SYSTEM FUND, WITH EXPENDITURES FOR THE SUBSEQUENT YEAR TO BE PURSUANT AND CONTINGENT UPON BOARD APPROVAL OF SUBSEQUENT YEAR'S BUDGET WITH A LINE ITEM FOR SUCH EXPENDITURES; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A SERVICES CONTRACT WITH ACE PIPE CLEANING, INC., AND TO PAY ACE PIPE CLEANING, INC. AN AMOUNT NOT TO EXCEED $1,792,089.30 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) is undertaking to perform a system wide inspection and assessment of the structural condition of its sanitary sewer assets within its wastewater collection system consistent with the Consent Decree entered into with the United States Environmental Protection Agency on October 15, 2013, and in accordance with the Technical Memorandum entitled “Condition Monitoring Plan” dated March 5, 2018; and

WHEREAS, cleaning and inspection contracts have been implemented in the past; and

WHEREAS, this project includes cleaning and inspecting 125 miles of designated small mains (the “Project Work”); and

WHEREAS, the System has solicited bids for the Project Work; and

WHEREAS, Ace Pipe Cleaning, Inc., a local, non-SMWVB contractor, has submitted a bid in the amount of $1,792,089.30 for the Project Work and this bid has been determined to be the low responsible bid; and
WHEREAS, System funds in the current year’s annual budget for inspection services are required for the Project Work with expenditures for the subsequent year being pursuant to and contingent upon the Board’s approval of subsequent year’s budget with a line item for such expenditures; and

WHEREAS, the San Antonio Water System Board of Trustees desires to (i) award a services contract to Ace Pipe Cleaning, Inc. in an amount not to exceed $1,792,089.30 for the period ending December 1, 2020 for the Project Work, (ii) approve the expenditure of funds and make available an amount not to exceed $1,792,089.30 from the System Fund, with expenditures for the subsequent year be pursuant to and contingent upon Board approval of the subsequent year’s budget with a line item for such expenditures, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a services contract with Ace Pipe Cleaning, Inc., and to pay Ace Pipe Cleaning, Inc. an amount not to exceed $1,792,089.30 for the Project Work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a services contract in an amount not to exceed $1,792,089.30 for the period ending December 1, 2020 is hereby awarded to Ace Pipe Cleaning, Inc. in connection with the Sanitary Sewer Condition Monitoring Program Cleaning and Inspection of Collection System Small Assets, Package 1.

2. That the expenditure of funds in an amount not to exceed $1,792,089.30 for the Project Work is hereby approved and made available from the System Fund, and expenditures for the subsequent year shall be pursuant to and contingent upon Board approval of subsequent year’s budget with a line item for such expenditures.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a services contract with Ace Pipe Cleaning, Inc., and to pay Ace Pipe Cleaning, Inc. an amount not to exceed $1,792,089.30 for the Project Work.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.
PASSED AND APPROVED this 4\textsuperscript{th} day of September, 2019.

_______________________________
Berto Guerra, Jr., Chairman

ATTEST:

_______________________________
Amy Hardberger, Secretary
TO: San Antonio Water System Board of Trustees
FROM: Annette Duron, Director, Operations Support, and Jeffrey J. Haby, P.E., Vice President, Production and Treatment
THROUGH: Robert R. Puente, President/Chief Executive Officer
SUBJECT: AWARD OF SERVICES CONTRACT IN CONNECTION WITH THE SANITARY SEWER CONDITION MONITORING PROGRAM CLEANING AND INSPECTION OF COLLECTION SYSTEM SMALL ASSETS, PACKAGE 2

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution awards a services contract to All Points Inspection Services, Inc., a local, MBE-African American contractor, in an amount not to exceed $405,094.55 for the period ending June 1, 2020, to perform cleaning and inspection services within the San Antonio Water System (SAWS) sewer service area in connection with the Sanitary Sewer Condition Monitoring Program Cleaning and Inspection of Collection System Small Assets, Package 2.

- SAWS is committed to perform a system wide inspection and assessment of the structural condition of its sanitary sewer assets within its wastewater collection system consistent with the Consent Decree entered into with the United States Environmental Protection Agency on October 15, 2013. This contract is intended to assist SAWS fulfill its commitment in accordance with the Technical Memorandum entitled “Condition Monitoring Plan” dated March 5, 2018.

- SAWS’ in-house crews currently clean approximately 1,200 miles of sewer mains a year and inspect approximately 300 miles of sewer mains per year using closed circuit television mostly in the smaller diameter range of less than 24 inches in diameter.

- There are approximately 5,000 miles of small diameter sewer mains in the system. This contract includes cleaning and inspecting 44 miles of designated small mains.

- This contract supplements our in-house capability to clean and inspect our small diameter sewer mains in order to improve the system hydraulic performance, to reduce sanitary sewer overflows, and to assess and document the condition of sewer mains using the National Association of Sewer Service Companies Pipeline Assessment Certification Program system.

- SAWS has established a precedent for supplementing sanitary sewer cleaning and inspection with contracted service providers.
The standard bidding process was used for this contract.

All Points Inspection Services, Inc. submitted the low responsible bid of $405,094.55.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

Funds have been budgeted in FY 2019 and are available from the System Fund for this maintenance work. The System Fund will finance the amount of $405,094.55 for contract services under Company: 1000, Accounting Units: 5043700 and 5044800, Account: 511312. The SAWS bid number for this project is 19-19093. Expenditures for the subsequent year are pursuant to and contingent upon Board approval of subsequent year’s budget with a line item for such expenditures.

**SUPPLEMENTARY COMMENTS:**

SAWS staff prepared the specifications for this project. The engineer’s estimated cost is $500,000.00.

A bid opening was held on August 8, 2019, at 3:00 p.m. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidders</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Points Inspection Services, Inc.*</td>
<td>$405,094.55</td>
<td>Local/WBE-AABE</td>
</tr>
<tr>
<td>Engineer's Estimate</td>
<td>$500,000.00</td>
<td></td>
</tr>
<tr>
<td>Ace Pipe Cleaning, Inc.</td>
<td>$584,260.20</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>Taplin Group, LLC</td>
<td>$774,903.60</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Champion Cleaning Specialists, Inc.</td>
<td>$844,873.56</td>
<td>Local/Non-SMWVVB</td>
</tr>
</tbody>
</table>

* Lowest responsible bidder

The bid amount represents a 19.0 percent decrease from the engineer’s estimated cost.
Additionally, the overall SMWVB analysis is shown in the following table:

| Sanitary Sewer Condition Monitoring Program Cleaning and Inspection of Collection System Small Assets, Package 2 |
| All Points Inspection Services, Inc. |
| SMWVB Analysis – Board Award |
| SBE | 0.00% |
| MBE – African American | 0.00% |
| MBE – Asian | 0.00% |
| MBE – Hispanic | 0.00% |
| MBE – Other | 0.00% |
| WBE – Minority | 100.00% |
| WBE – Non-Minority | 0.00% |
| SMWVB Total | 100.00% |

APPROVED:

Annette Duron  
Director  
Operations Support

Jeffrey J. Haly, P.E.  
Vice President  
Production and Treatment

Robert R. Puente  
President/Chief Executive Officer
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A SERVICES CONTRACT TO ALL POINTS INSPECTION SERVICES, INC. IN AN AMOUNT NOT TO EXCEED $405,094.55 IN CONNECTION WITH THE SANITARY SEWER CONDITION MONITORING PROGRAM CLEANING AND INSPECTION OF COLLECTION SYSTEM SMALL ASSETS, PACKAGE 2; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $405,094.55 FROM THE SYSTEM FUND, WITH EXPENDITURES FOR THE SUBSEQUENT YEAR TO BE PURSUANT AND CONTINGENT UPON BOARD APPROVAL OF SUBSEQUENT YEAR'S BUDGET WITH A LINE ITEM FOR SUCH EXPENDITURES; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A SERVICES CONTRACT WITH ALL POINTS INSPECTION SERVICES, INC., AND TO PAY ALL POINTS INSPECTION SERVICES, INC. AN AMOUNT NOT TO EXCEED $405,094.55 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) is undertaking to perform a system wide inspection and assessment of the structural condition of its sanitary sewer assets within its wastewater collection system consistent with the Consent Decree entered into with the United States Environmental Protection Agency on October 15, 2013, and in accordance with the Technical Memorandum entitled “Condition Monitoring Plan” dated March 5, 2018; and

WHEREAS, cleaning and inspection contracts have been implemented in the past; and

WHEREAS, the project work includes cleaning and inspecting 44 miles of designated small mains; and

WHEREAS, the System has solicited bids for the project work; and

WHEREAS, All Points Inspection Services, Inc., a local, WBE-African American contractor, has submitted a bid in the amount of $405,094.55 for the project work and this bid has been determined to be the low responsible bid; and
WHEREAS, System funds in the current year’s annual budget for inspection services are required for the project work with expenditures for the subsequent year being pursuant to and contingent upon the Board’s approval of subsequent year’s budget with a line item for such expenditures; and

WHEREAS, the San Antonio Water System Board of Trustees desires to (i) award a services contract to All Points Inspection Services, Inc. in an amount not to exceed $405,094.55 for the period ending June 1, 2020 for the project work, (ii) approve the expenditure of funds and make available an amount not to exceed $405,094.55 from the System Fund, with expenditures for the subsequent year be pursuant to and contingent upon Board approval of the subsequent year’s budget with a line item for such expenditures, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a services contract with All Points Inspection Services, Inc., and to pay All Points Inspection Services, Inc. an amount not to exceed $405,094.55 for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a services contract in an amount not to exceed $405,094.55 for the period ending June 1, 2020 is hereby awarded to All Points Inspection Services, Inc. in connection with the Sanitary Sewer Condition Monitoring Program Cleaning and Inspection of Collection System Small Assets, Package 2.

2. That the expenditure of funds in an amount not to exceed $405,094.55 for the project work is hereby approved and made available from the System Fund, and expenditures for the subsequent year shall be pursuant to and contingent upon Board approval of subsequent year’s budget with a line item for such expenditures.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a services contract with All Points Inspection Services, Inc., and to pay All Points Inspection Services, Inc. an amount not to exceed $405,094.55 for the project work.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffectual, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.
PASSED AND APPROVED this 4th day of September, 2019.

_______________________________
Berto Guerra, Jr., Chairman

ATTEST:

_______________________________
Amy Hardberger, Secretary
TO: San Antonio Water System Board of Trustees

FROM: Nancy Belinsky, Vice President and General Counsel, and Andrea L.H. Beymer, P.E., Vice President of Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: APPROVING A SETTLEMENT AGREEMENT WITH BROWN & CALDWELL IN CONNECTION WITH THE WESTERN WATERSHED RELIEF LINE-MIDDLE SEGMENT PROJECT

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution approves a Settlement Agreement with Brown & Caldwell in connection with the Western Watershed Relief Line-Middle Segment Project.

- On March 2, 2010, by Resolution No. 10-119, the San Antonio Water System’s (the “System”) Board of Trustees (the “Board”) awarded a professional engineering contract to Brown & Caldwell (“B&C”) for the Western Watershed Relief Line – Middle Segment Project (the “Project”) in the amount of $1,157,341.00.

- In September of 2017, it was brought to the System’s attention that there was a discrepancy in B&C’s design sheets of the inlet structure invert elevations for the Project (the “Inlet Siphon Structure Elevations Discrepancy”), resulting in the structure being constructed such that the invert elevations were too high for the pipes being connected to the structure and the System incurring an additional $256,770.39 in costs.

- The System made demand upon B&C for recovery of these amounts incurred as a result of the Inlet Siphon Structure Elevations Discrepancy.

- To avoid litigation and expense concerning the Inlet Siphon Structure Elevations Discrepancy, the System and B&C have agreed to compromise and settle the Inlet Siphon Structure Elevations Discrepancy claim pursuant to the terms of the Settlement Agreement that is attached to the resolution as Attachment No. 1 (the “Settlement Agreement”). Pursuant to the terms of the Settlement Agreement, B&C will pay to the System the sum of $213,171.45, of which $89,285.00 will be paid as a credit against future construction phase services on the Project by B&C and the remaining $123,886.45 of which will be paid directly to the System.

Staff recommends that the Board approve this resolution.
FINANCIAL IMPACT:

The System will receive $213,171.45 in value. $123,886.45 will be paid in cash and will be deposited in the System Fund. $89,285.00 will be paid as a credit against future construction phase services on the Project by B&C.

Nancy Belinsky  
Vice President & General Counsel

APPROVED:

Robert R. Puente  
President/Chief Executive Officer

Andrea L.H. Béymer, P.E.  
Vice President – Engineering & Construction
 RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING A SETTLEMENT AGREEMENT WITH BROWN & CALDWELL IN CONNECTION WITH THE WESTERN WATERSHED RELIEF LINE – MIDDLE SEGMENT PROJECT; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THE SETTLEMENT AGREEMENT AND TO EXECUTE ALL DOCUMENTS AND TAKE ALL ACTIONS NECESSARY TO IMPLEMENT THE SETTLEMENT AGREEMENT; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, during construction of the Western Watershed Relief – Middle Segment Project (the “Project”), it was brought to the System’s attention that there was a discrepancy in Brown & Caldwell’s (“B&C”) design sheets of the inlet structure invert elevations (the “Inlet Siphon Structure Elevations Discrepancy”), resulting in the structure being constructed such that the invert elevations were too high for the pipes being connected to the structure and the System incurring an additional $256,770.39 in costs; and

WHEREAS, the System made demand upon B&C for recovery of these amounts incurred as a result of the Inlet Siphon Structure Elevations Discrepancy; and

WHEREAS, the System and B&C have agreed to compromise and settle the claims made by the System against B&C pursuant to the terms of the Settlement Agreement that is attached to this Resolution as Attachment 1 (the “Settlement Agreement”), pursuant to which B&C will pay to the System the sum of $213,171.45, of which $89,285.00 will be paid as a credit against future construction phase services on the Project by B&C and the remaining $123,886.45 of which will be paid in cash directly to SAWS; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to approve the Settlement Agreement with B&C; (ii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute all documents and to take all actions necessary to implement the Settlement Agreement and to perform all obligations of the System provided by the Settlement Agreement; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the Settlement Agreement with B&C is hereby approved.
2. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute the Settlement Agreement that is attached to this Resolution as Attachment 1.

3. That the President/Chief Executive Officer or his duly appointed designee is authorized to execute all documents and to take all actions that are reasonable or necessary to implement the terms of the Settlement Agreement and to perform the obligations of the System as provided by the terms of the Settlement Agreement that is attached to this Resolution as Attachment 1.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 4th day of September, 2019.

______________________________
Berto Guerra, Jr., Chairman

ATTEST:

______________________________
Amy Hardberger, Secretary

Attachment 1 – Settlement Agreement
ATTACHMENT 1

SETTLEMENT AGREEMENT AND RELEASE

This Settlement Agreement and Release (hereinafter referred to as the “Release”) is entered into by and between San Antonio Water System (“SAWS”) and Brown and Caldwell (“BC”). SAWS and BC are collectively referred to herein as the “Parties”.

I. RECITALS

This Release is made with reference to the following facts:

WHEREAS, the Parties entered into Contract No. P-10-002-DD (“Agreement”) for professional services related to the design of the Western Watershed Relief Line - Middle Segment Project, also known as W-6 Western Watershed Sewer Relief Line - Project 3 & 4 or W-6 Middle Project ("Project");

WHEREAS, during construction of the Project, the Project contractor, Spiess Construction Company, Inc., claimed that the inlet siphon structure invert elevations shown on sheet C-07 of the plans differed from the invert elevations shown for the same structure on detail sheet S-02, which the contractor alleged resulted in the structure being constructed at different elevations and required significant additional efforts, which claim was subsequently repeated, elaborated upon, and/or quantified by the Spiess Construction Company, Inc. and subsequent contractors retained by SAWS on the Project;

WHEREAS, SAWS, for its part, claimed that BC and its subconsultants were responsible and should address the aforementioned alleged inlet siphon structure elevations discrepancy issues, starting with its letter of October 9, 2017, with its further demands and damage claims contained in subsequent correspondence and communications between the Parties;

WHEREAS, BC, for its part, disputed the responsibility of BC or its subconsultants, pointing to specific information in the plans to resolve such claimed discrepancy, and other contractor obligations, but nonetheless agreed to facilitate a resolution of the matter, including in its letter of November 17, 2016, and in subsequent correspondence and communications between the Parties;

WHEREAS, the aforementioned i) contractor claims and communications concerning the alleged inlet siphon structure elevations discrepancy, ii) SAWS requests, demands, and communications concerning the alleged inlet siphon structure elevations discrepancy, and iii) BC’s responses and communications concerning the alleged inlet siphon structure elevations discrepancy, and related correspondence and communications between and among project participants to the extent regarding those subjects are collectively referred to as the “Alleged Inlet Siphon Structure Elevations Discrepancy”;

WHEREAS, SAWS and BC seek to avoid further expense, claims, and/or litigation, and have agreed to settle and compromise the claims at issue regarding the Alleged Inlet Siphon Structure Elevations Discrepancy;
NOW, THEREFORE, for and in consideration of the promises set forth in the Release and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. **SAWS’ Release of Liability.**

   1.01. In consideration of the payment of the Settlement Amount provided for in Section 2, entitled “Settlement Amount,” SAW, for itself and everyone acting on its behalf, hereby releases and forever discharges BC, its subconsultants, specifically including, but not limited to, AccuTech Consultants LLC, their insurers, and everyone acting on its/their behalf, from any and all claims, causes of action, costs, debts, liabilities, damages and demands, whether in law or in equity, known or unknown, now existing or hereafter arising, that SAWS has, or may have, against BC that were brought or could have been brought regarding the Alleged Inlet Siphon Structure Elevations Discrepancy.

   1.02. Without, in any way, limiting or expanding the scope of the foregoing, the releases set forth in Section 1.01 expressly include all existing known, and unknown claims, demands, and cause of action, pending or threatened, regarding the Alleged Inlet Siphon Structure Elevations Discrepancy for all existing, known, and unknown damages that (i) arise out of the Alleged Inlet Siphon Structure Elevations Discrepancy; or (ii) have been brought or that could have been brought regarding the Alleged Inlet Siphon Structure Elevations Discrepancy in any court, tribunal or forum, in this or any other jurisdiction, in the United States or anywhere else, including, but not limited to, all claims, demands, lawsuits, debts, accounts, covenants, agreements, actions, cross-actions, liabilities, obligations, losses, costs, expenses, remedies, and causes of action of any nature, whether in contract or in tort, or based upon fraud or misrepresentation, breach of duty or common law, or arising under or by virtue of any judicial decision, statute or regulation.

   1.03. Without, in any way, limiting or expanding the scope of the foregoing, the releases set forth in Section 1.01 expressly include any and all existing, known, and unknown claims regarding the Alleged Inlet Siphon Structure Elevations Discrepancy for any and all elements of relief or recovery of whatsoever nature recognized by the law of any jurisdiction and includes, but is not limited to, any and all (i) actual damages (whether direct, consequential, incidental, or otherwise) of any and every description, including, but not limited to, personal injury, mental anguish, pain, emotional distress, reputational loss, loss of good will, lost profits, and/or any form of economic loss; (ii) any other item of loss or injury; (iii) statutory, treble, additional, punitive, exemplary and multiple damages; (iv) legal and attorneys’ fees and expenses; (v) pre-judgment, post-judgment and any other interest; (vi) declaratory, injunctive and equitable relief; (vii) costs, fees and expenses; (viii) expert witness fees; and (ix) costs of Court.

   1.04. The foregoing releases set forth in this Section 1 expressly exclude i) any claim or action alleging breach of this Agreement and ii) any other claim or other action related to the Project that is not released under Par. 1.01-1.03 above.

2. **Settlement Amount.**

   2.01. The total consideration amount to be paid to SAWS by or on behalf of BC settle the dispute with SAWS is $213,171.45 (“Settlement Amount”), of which $89,285.00 will be
paid as a credit against Contract Amendment #7 (Attached hereto as Attachment 1) and the remaining $123,886.45 of which to will be a payment directly to SAWS. SAWS will provide tax identification documents and other information reasonably required by BC in order to issue the payment. Settlement Payment will be issued within fourteen (14) days of this agreement being fully executed and tax identification information being provided to BC.

2.02. The Parties will cooperate and execute such further supplementary documents or take additional actions which may be necessary or appropriate to give full force and effect to the basic terms and intent of the Agreement.

3. Final Compromise: No Admissions.

The Parties agree and acknowledge that this Release, including the release of liability specified in Section 1 of this Release, entitled “Release of Liability,” and the Settlement Amount specified in Section 2 of this Release, entitled “Settlement Amount,” is accepted as a full and complete compromise of the disputed claim regarding the Alleged Inlet Siphon Structure Elevations Discrepancy. The terms and conditions of this Release are not to be construed as an admission of liability or wrongdoing by either party, or as a concession by either Party as to the correctness or incorrectness of any Party’s position concerning the Alleged Inlet Siphon Structure Elevations Discrepancy. Neither the Settlement Amount nor the negotiations for this settlement (including all statements and communications) by the Parties, their attorneys, or representatives, shall be considered admissions, and no past or present wrongdoing shall be implied by such payment of the Settlement Amount or negotiations.

4. Release Inadmissible.

This Release shall not be admissible in any action, suit, or other proceeding, whatsoever, as evidence or as an admission of any claim or liability, provided, however, that any Party hereto may use all or part of this Release to the extent necessary to enforce any right conferred upon such Party by this Release or in connection with any suit alleging breach of this Release.


This Release, and any disputes arising from or in any way relating to this Release, shall be governed and construed by, and in accordance with, the laws of the State of Texas, without regard to conflicts of laws principles. Venue of any disputes arising from or in any way relating to this Release shall lie in Bexar County, Texas. The Parties expressly waive any potential objection they may have to jurisdiction in Bexar County, Texas.

6. Attorneys’ Fees.

The Parties shall bear their own expenses, costs, and attorneys’ fees incurred in connection with the Alleged Inlet Siphon Structure Elevations Discrepancy.

7. Warranty of Capacity to Execute Release.

The Parties represent and warrant that they are the sole owners of the claims they release in this Release, that no other person or entity has, or has had, any interest in the respective claims,
demands, obligations, or causes of action referred to in this Release except as otherwise set forth in this Release, that he/she has the sole right and exclusive authority to execute this Release and to receive the sums specified in it; that he/she has not sold, assigned, transferred, conveyed, or otherwise disposed of any of the claims, demands, obligations, or causes of action referred to in this Release; and he/she/it is fully authorized and competent to execute this Release.

8. **Successors and Assigns.**

   This Release shall be binding upon and inure to the benefit of the Parties hereto, and their respective affiliates, parents, and/or subsidiaries, together with their respective past and/or present predecessors, dealers, shareholders, insurers, heirs owners, officers, directors, principals, representatives, service providers, employees, agents, insurers, attorneys, whether in their official or personal capacity, each of their respective successors and assigns, and everyone acting or purporting to act on its/their behalf.

9. **Entire Agreement.**

   This Release contains the entire understanding and agreement of the Parties with regard to the matters set forth herein, and supersedes and replaces any prior understanding, agreement or statement, whether written or oral, between the Parties. No promises, inducements, or agreements have been made to either party, except as expressed herein, and this Release contains the entire agreement between the Parties.

10. **Amendment.**

    This Release may not be altered or amended except by an agreement, in writing, signed by all Parties.

11. **Reliance on Attorneys.**

    The Parties represent that their attorneys have fully explained the meaning and effect of this Release. The Parties represent that they have read and understand this Release. The Parties acknowledge that they have not relied upon any representation, written or oral, or any non-disclosure by any other Party in executing this Release, other than those statements contained in this Release. The Parties hereby disclaim any reliance on any alleged representations or non-disclosures made or alleged to have been made before or contemporaneously with execution of this Release or which in any way relates to the terms of this Release or the issues regarding the Alleged Inlet Siphon Structure Elevations Discrepancy.

12. **Severability.**

    Should any part or provision of this Release be determined to be invalid for any reason, the Parties understand and agree that the remaining portions hereof shall continue in effect.

13. **Counterparts.**

    This Release may be executed by the Parties in separate counterparts. Upon execution of a counterpart by each of the Parties, such counterparts shall be deemed one and the same Release. An authentic faxed or digitized signature shall be treated as an original.
14. **Effective Date.**

This Release shall be effective on the date it is fully executed by the Parties.

15. **Notice.**

Any notice to be provided under this Release shall be provided by CMRRR or FedEx as follows:

<table>
<thead>
<tr>
<th>As to BC:</th>
<th>As to SAWS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown and Caldwell</td>
<td>San Antonio Water System</td>
</tr>
<tr>
<td>c/o Shawn O’Leary</td>
<td>c/o Vice President &amp; General Counsel</td>
</tr>
<tr>
<td>201 North Civic Drive, Suite 300</td>
<td>2800 US Highway 281 North,</td>
</tr>
<tr>
<td>Walnut Creek, CA  94596</td>
<td>P.O. Box 2449,</td>
</tr>
<tr>
<td></td>
<td>San Antonio, Texas 78298-2449</td>
</tr>
</tbody>
</table>
ACCEPTED AND AGREED:

__________________________

DATE

Brown and Caldwell

THE STATE OF CALIFORNIA §

COUNTY OF _____________ §

BEFORE ME, the undersigned Notary Public for the State of California, on this day personally appeared __________________, known to me to be the person who executed the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and that he executed the same as his free and voluntary act and deed without any threat, force, fraud, or duress of any kind; and that he appeared in complete charge of all of his faculties and capable of executing this instrument and of understanding the significance thereof.

GIVEN under my hand and seal of office this the ________ day of _________________, 2019.

__________________________

Notary Public in and for the
State of California

My Commission Expires:
ACCEPTED AND AGREED:

_________________________
DATE San Antonio Water System

THE STATE OF TEXAS §

COUNTY OF BEXAR §

BEFORE ME, the undersigned Notary Public for the State of Texas, on this day personally appeared ____________________, known to me to be the person who executed the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and that he executed the same as his free and voluntary act and deed without any threat, force, fraud, or duress of any kind; and that he appeared in complete charge of all of his faculties and capable of executing this instrument and of understanding the significance thereof.

GIVEN under my hand and seal of office this the ________ day of _________________, 2019.

__________________________________________
Notary Public in and for the
State of Texas

My Commission Expires:

______________________
Attachment 1 to Settlement Agreement

CONTRACT AMENDMENT NO. 7
Western Watershed Relief Line - Middle Segment Project
Contract No. P-10-002-DD

This Contract Amendment No. 7 (the “Amendment”) is made and entered into as of the dates set forth beneath the signatures below, effective upon the date the effective date of the Settlement Agreement (defined below), by and between the San Antonio Water System (“SAWS”), and Brown and Caldwell (the “Consultant”).

For and in good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, SAWS and Consultant recite and agree as follows:

I.
The contract for professional engineering services for the Western Watershed Relief Line – Middle Segment Project, Contract No. P-10-002-DD, authorized by the SAWS Board Resolution No. 10-119 of the March 2, 2010 Board Meeting, between SAWS and Consultant (“Contract”), as administratively amended by Contract Amendment No. 1 on May 18, 2011, as amended by Contract Amendment No. 2 on January 10, 2012 approved by Board Resolution No. 12-011, as amended by Contract Amendment No. 3 on May 14, 2013 approved by Board Resolution No. 13-118, as administratively amended by Contract Amendment No. 4 approved on October 28, 2014, as amended by Contract Amendment No. 5 on January 5, 2016 approved by Board Resolution 16-007, as administratively amended by Contract Amendment No. 6 on June 20, 2019, is hereby administratively amended by Contract Amendment No. 7, to include additional engineering services at no additional cost to SAWS and to add Exhibit V - No Boycotting of Israel Verification, attached to this Amendment, in compliance with §2270.001 of the Texas Government Code.

II.
The additional engineering services identified in Attachment I are valued at $89,285.00 but shall be completed at no additional cost to SAWS, forming part of the bargained for consideration from Consultant to SAWS for the settlement between the Parties concerning a dispute over the inlet siphon structure elevation discrepancy identified in the Project’s RFI #40 (the “Settlement”). This amendment shall be given no effect until the effective date of the Settlement Agreement.

III.
All other terms, conditions and provisions of the original Contract shall remain in full force and effect as of the date thereof.

The individuals executing this Contract Amendment each represent and warrant to the
other party that he/she has full authority to execute this Contract Amendment on behalf of his/her respective party.

This Amendment shall be binding upon and inure to the benefit of SAWS and Consultant and their respective successors and assigns.

BROWN & CALDWELL

By: ________________________________
Name: ________________________________
Title: ________________________________
Date: ________________________________

SAWS

By: ________________________________
Name: Philip C. Campos, Jr., CPA
Title: Director – Contracting
Date: ________________________________
DRAFT CONTRACT AMENDMENT NO. 7

ATTACHMENT I

Western Watershed Relief Line- Middle Segment Project
Contract No. P-10-002-DD

1. EXHIBIT II – SCOPE OF SERVICES
Construction Phase services are amended to include the following:

IV. Construction Phase:

15. Perform any additional services identified in all of items 1 through 14 above as needed to complete construction phase of the project.

2. Insert the following to List of Exhibits. Attachments, Exhibit V - No Boycotting Israel Verification, as an attachment to the Contract:

EXHIBIT V.
NO BOYCOTTING ISRAEL VERIFICATION
Consultant agrees that it does not boycott Israel and will not do so during the term of this Contract. This provision is in compliance with §2270.001 of the Texas Government Code. SAWS agrees to comply with the United States and Texas Constitutions in consideration of whether to enforce this provision.

End of Amendment No. 7
TO: San Antonio Water System Board of Trustees

FROM: Nancy Belinsky, Vice President & General Counsel

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AUTHORIZATION FOR SETTLEMENT OF THE LAWSUIT OF EMMA GUTIERREZ AGAINST THE SAN ANTONIO WATER SYSTEM

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution authorizes the President/Chief Executive Officer and the System’s Legal Counsel to negotiate and execute a settlement agreement in connection with the lawsuit of Emma Gutierrez (the “Plaintiff”) against the San Antonio Water System (the “System”).

- Plaintiff made a claim against the System, alleging that on or about May 3, 2017, she was operating a 2006 Chevrolet Cobalt and was traveling eastbound on the 2100 block of W. Martin, in San Antonio, Texas, when a SAWS vehicle driven by a System employee collided with her while he was attempting to turn right from the left lane of W. Martin onto N. San Jacinto, which resulted in bodily injuries. Plaintiff subsequently filed a lawsuit seeking damages for bodily injuries alleged to have been sustained in the incident.

- Liability is undisputed; however, the amount of damages claimed by Plaintiff for past and future medical care expenses, past and future physical pain and mental anguish, past and future physical impairment, past and future disfigurement, loss of wages in the past and future, and all other future damages, is disputed by the System.

- The suit was mediated and settled on July 29, 2019, subject to Board approval.

- Plaintiff sought an amount of damages in excess of the jurisdictional limits of the court, but agreed to settle the claim for all personal injuries and other claims against the System for an amount totaling $62,500.00.

- The System and Plaintiff desire to resolve all differences and all outstanding claims. The System recommends settlement of this lawsuit in the amount of $62,500.00.

- The System has agreed to pay $62,500.00 to Emma Gutierrez and her attorneys, The Davis Law Firm, subject to Board approval.

Staff recommends that the Board approve this resolution.
FINANCIAL IMPACT:

Settlement of this lawsuit is for the total amount of $62,500.00, and will be paid from the System Fund. The required funding is available in FY 2019 from the System Fund budget (Company: 1000, Accounting Unit: 8111800, Account: 511510, Total 2019 amount: $62,500.00).

Nancy Belinsky
Vice President and General Counsel

APPROVED:

Robert R. Puente
President/Chief Executive Officer
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER AND THE SYSTEM’S LEGAL COUNSEL TO NEGOTIATE AND EXECUTE A SETTLEMENT AGREEMENT AND TO PAY $62,500.00 TO EMMA GUTIERREZ AND HER ATTORNEY, AND TO PERFORM THE SYSTEM’S OBLIGATIONS UNDER THE TERMS OF THE SETTLEMENT AGREEMENT; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, Plaintiff Emma Gutierrez (the “Plaintiff”) filed a lawsuit against the San Antonio Water System (the “System”), seeking damages for personal injuries as a result of an incident that occurred on or about May 3, 2017, in San Antonio, Bexar County, Texas; and

WHEREAS, Plaintiff alleged she was operating a 2006 Chevrolet Cobalt and was traveling eastbound on the 2100 block of W. Martin, in San Antonio, Texas, when a SAWS vehicle driven by a System employee collided with her while he was attempting to turn right from the left lane of W. Martin onto N. San Jacinto, which resulted in bodily injuries to Plaintiff; and

WHEREAS, the lawsuit was filed in Cause No. 2018-CI-10821, styled Emma Gutierrez v. San Antonio Water System, in the 408th Judicial District Court, Bexar County, Texas; and

WHEREAS, the liability of the System for the incident is disputed and the amount and extent of damages claimed by Plaintiff for past and future medical care expenses, past and future physical pain and mental anguish, past and future physical impairment, past and future disfigurement, loss of wages in the past and future, and all other future damages claimed by Plaintiff was disputed by the System; and

WHEREAS, Plaintiff’s claims were mediated and settled on July 29, 2019, subject to Board approval; and

WHEREAS, Plaintiff claimed an amount of damages in excess of the jurisdictional limits of the court, and she has agreed to settle all personal injury and other claims against the System for an amount totaling $62,500.00; and

WHEREAS, the nature of the facts of this case, the avoidance of further legal expense, and other relevant circumstances favor settlement of this lawsuit; and
WHEREAS, both the System and Plaintiff now desire to resolve all differences and settle all claims against the System; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to approve the settlement of the lawsuit of Emma Gutierrez against the System, (ii) to approve the System’s financial obligation of $62,500.00, which includes all alleged damages, fees and costs under the settlement, (iii) to authorize expenditures in the total amount of $62,500.00 from the System Fund for the purposes of the settlement, and (iv) to authorize the President/Chief Executive Officer and the System’s Legal Counsel to execute the settlement agreement and pay $62,500.00 to Plaintiff and her attorneys for obligations under the terms of the settlement agreement; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the settlement of the lawsuit by Emma Gutierrez against the San Antonio Water System is hereby approved.

2. That the amount authorized to settle the lawsuit, including all alleged damages, costs and fees, shall hereby consist of $62,500.00, payable to Emma Gutierrez and her attorneys, The Davis Law Firm.

3. That the amount of $62,500.00 is hereby authorized to be expended from the System Fund for the System’s obligations under the authorized settlement agreement.

4. That the President/Chief Executive Officer and the System’s Legal Counsel are hereby authorized to execute the settlement agreement between the System and Emma Gutierrez, for the System’s obligations under the terms of the settlement agreement.

5. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

6. If any section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, inoperative, or invalid.
7. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 4th day of September, 2019.

______________________________
Berto Guerra, Jr., Chairman

ATTEST:

______________________________
Amy Hardberger, Secretary
TO: San Antonio Water System Board of Trustees
FROM: Mary Bailey, Vice President, Customer Experience and Strategic Initiatives
THROUGH: Robert R. Puente, President/Chief Executive Officer
SUBJECT: APPOINTMENT OF THE RATE ADVISORY COMMITTEE

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution appoints 20 members to the San Antonio Water System Rate Advisory Committee, a special purpose advisory committee.

The San Antonio Water System (SAWS) has begun a comprehensive study of its rates, fees and charges. The purpose of the 2019 Cost of Service and Rate Design Study is to provide SAWS with information regarding the rate structure for water delivery, water resource development, recycled water, and wastewater.

In connection with this study, and consistent with past rate studies, SAWS management requests that the Rate Advisory Committee (RAC) be established. The purpose of the RAC will be to:

- Review and analyze the results of the cost of service study performed by Raftelis Financial Consultants, Inc.
- Provide input to both SAWS management and the Board regarding changes to the existing rate and fee structure and affordability programs.

SAWS staff solicited nominations for RAC members from the San Antonio City Council, various San Antonio Chambers of Commerce and neighborhood associations, and other business and community organizations. The composition of the RAC should represent a cross section of SAWS customers to ensure that all customer interests are considered when evaluating the structure of SAWS rates and fees.

A list of 20 nominees recommended for RAC membership that is attached to the resolution as Attachment 1 also identifies the Committee Chair. These nominees include a diverse mixture of SAWS customers including: residential, commercial, industrial, wholesale, recycle, inside city limits, and outside city limits.

Staff recommends that the Board approve this resolution.
FINANCIAL IMPACT:

There is no financial impact from this action.

SUPPLEMENTARY COMMENTS:

The term of the appointment of the RAC will extend until the end of the 2019 Cost of Service and Rate Design Study effort. Over the course of the effort, it is anticipated that the RAC will meet approximately ten times between September 2019 and May 2020. The committee will work closely with the selected rate consultant as well as SAWS staff.

Mary Bailey
Vice President
Customer Experience and Strategic Initiatives

APPROVED:

Robert R. Puente
President/Chief Executive Officer
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPOINTING MEMBERS TO THE RATE ADVISORY COMMITTEE; FINDING THIS RESOLUTION TO HAVE BEEN CONSIDERED PURUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) Board of Trustees (the “Board”) wishes to maintain fair and equitable rates based on the cost to provide service to our various customer classes; and

WHEREAS, the Board wishes to review the design of the rate structures and charges within the framework of the System’s policies with the last review having been conducted in 2015; and

WHEREAS, the Board desires to receive public input on rates and rate structures; and

WHEREAS, the San Antonio Water System Board of Trustees desire to appoint a Rate Advisory Committee (RAC) composed of representative customers of the System’s service areas to provide input to the Board on the rate study; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the nominated candidates provided in Attachment 1 are hereby appointed as members of the Rate Advisory Committee.

2. It is officially found, determined, and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

3. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid, or ineffective.

4. This resolution becomes effective immediately upon its passage.
PASSED AND APPROVED this 4th day of September, 2019.

______________________________________
Berto Guerra, Jr., Chairman

ATTEST:

______________________________________
Amy Hardberger, Secretary

Attachment 1 – Proposed 2019/20 Rate Advisory Committee Members
Attachment 1
Proposed 2019/20 Rate Advisory Committee Members

Committee Chair:

- Frances Gonzalez
  - Consultant/Program Officer, Asset Funders Network
  - Previous public service: Deputy and Interim Chief of Staff to the Secretary of HUD; Assistant to the Mayor for Policy – San Antonio; and Assistant City Manager – San Antonio

City Council Nominees:

- Alex Birnel
  - District 1 Nominee
  - Advocacy Manager, MOVE Texas

- Velma Willoughby-Kemp
  - District 2 Nominee
  - Community volunteer

- Steven Wurgler
  - District 3 Nominee
  - Self-employed

- Genevieve Trinidad
  - District 4 Nominee
  - Retired school aid

- Daniel Meza
  - District 5 Nominee
  - Staff member, District 5

- Ramiro Cabrera
  - District 6 Nominee
  - Retired IT Systems Security Manager

- James Smyle*
  - District 7 Nominee
  - Consultant: environment, natural resources and rural development

- Patricia Wallace
  - District 8 Nominee
  - Chief of Staff, District 8

- Joseph Yakubik
  - District 9 Nominee
  - Electrical Engineer, Dynetics, Inc.
City Council Nominees (continued):

- Raine Tanner
  - District 10 Nominee
  - Administrative Assistant, San Antonio River Authority

At Large Nominees:

- Tamara Benavides
  - SA Hotel and Lodging Association Nominee
  - Regional Director Sales & Marketing, Baywood Hotels

- Mike Chapline
  - Outside City Limits representative
  - IT Consultant

- Andy Diaz
  - People Active in Community Effort (PACE) Neighborhood Assn Nominee

- Patrick Garcia
  - SA Manufacturers Association Nominee
  - President/Owner, Division Laundry

- Victoria Keeler
  - SA Apartment Association Nominee
  - Regional Supervisor, Churchill Forge Properties

- Stephen Lara
  - Suburban City/Wholesale representative
  - Balcones Heights Councilmember
  - Architect, Marmon Mok

- Stephanie Reyes
  - SA Chamber of Commerce Nominee
  - VP, Public Policy – SA Chamber

- Steve Richmond
  - SA Restaurant Association Nominee
  - Restauranteur – Pizza Hut of San Antonio

- Vance Weynand
  - Recycled water customer
  - COPT Property Management

*Mr. Smyle was also nominated by the Greater Edwards Aquifer Alliance
TO: San Antonio Water System Board of Trustees

FROM: Mike Frisbie, P.E., Senior Vice President/Chief Operating Officer

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: PLEDGING SUPPORT FOR THE CITY OF SAN ANTONIO CLIMATE ACTION AND ADAPTATION PLAN

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution pledges support from the San Antonio Water System (SAWS) to the City of San Antonio Climate Action and Adaptation Plan (CAAP).

- In June, 2017, the City Council of the City of San Antonio passed Resolution No. 2017-06-22-031R in support of the Paris Climate Agreement and the Mayors’ National Climate Action Agenda, joining the growing list of cities taking efforts to reduce greenhouse gas and adapt to changing climate impacts.

- In December, 2017, the SA Climate Ready planning process began.

- SA Climate Ready involved a diverse coalition of leaders from business and industry, school districts, higher education institutions, neighborhood associations, the military, chambers of commerce, transit and housing authorities, public utilities, trade associations, and environmental non-profit groups and included input from the community at large, engaging thousands of residents at meetings and through surveys.

- These leaders, including staff members from SAWS, served on a Steering Committee and Technical Working Groups that met regularly during 2018 to develop the CAAP.

- In 2019, the City of San Antonio launched the development of its first CAAP, which offers a roadmap to protect San Antonio, ensuring that it remains a vibrant, thriving city for generations to come.

- The CAAP provides certain implementation strategies, some of which involve the San Antonio Water System. Strategies include reducing building and transportation energy consumption, advancing the circular economy, and educating and empowering the community.

- It is recognized that the specific mitigation and adaptation strategies described in the CAAP
were selected based on an initial analysis of greenhouse gas reduction potential and the ability to increase community resilience; however, it is acknowledged that the SA Climate Ready only serves as a framework for climate action and adaptation, and as such, additional analysis will be required for strategies prior to implementation.

- While more to do in the future, SAWS has been a nationwide and international leader in planning and implementing processes to get ahead of climate change as it impacts water issues in our community. Some of these items are addressed in the CAAP, and further detailed in SAWS 2017 Water Management Plan and 2019 Five Year Water Conservation Plan, including:
  
  o Nationwide leaders in Conservation, with tremendous community and stakeholder buy-in and international recognition
  o Leading Technology adopters in efficient customer water usage
  o Nationwide leaders in developing alternative water supplies such as Recycled Water, Aquifer Storage & Recovery, and Groundwater Desalination
  o Planning for hybrid Drought of Record to incorporate more intense drought conditions
  o Structuring SAWS rates to encourage Conservation
  o Award-winning wastewater process “Trifecta” to ensure optimal recovery of methane gas and bio-solids, as well as treated wastewater
  o Awarded membership in the Leading Utilities of the World, a global network of the world’s most successful and innovative water utilities

- Because climate action and adaptation benefits from the collective commitment of the entire community, the San Antonio Water System Board of Trustees desires to offer its support for the CAAP.

Staff recommends that the Board approve this resolution.

Mike Frisbie, P.E.
Senior Vice President/Chief Operating Officer

APPROVED:

Robert R. Puente
President/Chief Executive Officer
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES PLEDGING SUPPORT FOR THE CITY OF SAN ANTONIO’S CLIMATE ACTION AND ADAPTATION PLAN; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, in June, 2017, the City Council of the City of San Antonio passed resolution 2017-06-22-031R in support of the Paris Climate Agreement and Mayors’ National Climate Action Agenda, joining the growing list of cities taking efforts to reduce greenhouse gas and adapt to changing climate impacts; and

WHEREAS, in December, 2017, the SA Climate Ready planning process began; and

WHEREAS, SA Climate Ready involved a diverse coalition of leaders from business and industry, school districts, higher education institutions, neighborhood associations, the military, chambers of commerce, transit and housing authorities, public utilities, trade associations, and environmental non-profit groups and included input from the community at large, engaging thousands of residents at meetings and through surveys; and

WHEREAS, these leaders, including staff members from SAWS, served on a Steering Committee and Technical Working Groups that met regularly during 2018 to develop the Climate Action and Adaptation (the “CAAP”); and

WHEREAS, in 2019, the City of San Antonio launched the development of its first CAAP, which offers a roadmap to protect San Antonio, ensuring that it remains a vibrant, thriving city for generations to come; and

WHEREAS, the CAAP provides certain implementation strategies some of which involve the San Antonio Water System. Strategies include reducing building and transportation energy consumption, advancing the circular economy, and educating and empowering the community; and

WHEREAS, it is recognized that the specific mitigation and adaptation strategies described in the CAAP were selected based on an initial analysis of greenhouse gas reduction potential and the ability to increase community resilience; however, it is acknowledged that the SA Climate Ready only serves as a framework for climate action and adaptation, and as such, additional analysis will be required for strategies prior to implementation; and

WHEREAS, while more to do in the future, SAWS has been a nationwide and
international leader in planning and implementing processes to get ahead of climate change as it impacts water issues in our community. Some of these items are addressed in the CAAP, and further detailed in SAWS 2017 Water Management Plan and 2019 Five Year Water Conservation Plan, including:

- Nationwide leaders in Conservation, with tremendous community and stakeholder buy-in and international recognition
- Leading Technology adopters in efficient customer water usage
- Nationwide leaders in developing alternative water supplies such as Recycled Water, Aquifer Storage & Recovery, and Groundwater Desalination
- Planning for hybrid Drought of Record to incorporate more intense drought conditions
- Structuring SAWS rates to encourage Conservation
- Award-winning wastewater process “Trifecta” to ensure optimal recovery of methane gas and bio-solids, as well as treated wastewater
- Awarded membership in the Leading Utilities of the World, a global network of the world’s most successful and innovative water utilities

WHEREAS, because climate action and adaptation benefits from the collective commitment of the entire community, the San Antonio Water System Board of Trustees desires to offer its support for the CAAP; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the Board of Trustees does hereby pledge support for the City of San Antonio CAAP in substantially the form attached to this Resolution as Attachment I.

2. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

3. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

4. This resolution becomes effective immediately upon its passage.
PASSED AND APPROVED this 4th day of September, 2019.

______________________________
Berto Guerra, Jr., Chairman

ATTEST:

______________________________
Amy Hardberger, Secretary

Attachment I - SA Climate Ready: A Pathway for Climate Action & Adaptation (August 2019 Draft for Public Discussion)
A MESSAGE
FROM THE MAYOR

San Antonio is one of the fastest-growing cities in the nation. We are working to plan for and accommodate an estimated one million additional residents that will be living in our community by 2040. It is our collective responsibility to prepare for a future that is projected to have hotter temperatures, longer droughts and more intense rain events. That is why one of my first acts as Mayor in working with the City Council was to sign a resolution declaring San Antonio will adhere to the Paris Climate Agreement.

Throughout the SA Climate Ready process, people from across our community have helped craft a sustainable approach by examining best practices and policies concerning how we build; how we power our homes, cars, and businesses; how we travel; how we conserve water and green space; how we reduce air pollution; and, perhaps most importantly, how we take care of our most vulnerable neighbors. When it comes to climate action and adaptation, our borders do not stop at the city limits or county line. Working with stakeholders across jurisdictional lines will continue to be the way we achieve progress. With one planet to share, the work that is being done globally will benefit our way of life here in San Antonio. We must act now to join those efforts to perpetuate San Antonio’s safety and prosperity.

Our city is a welcoming and culturally diverse community where we cherish tradition and heritage while nurturing forward-looking policies that keep our home healthy and vibrant. Protecting San Antonio’s quality of life, economy, military, and historic treasures must be our leading priorities.

Mayor Ron Nirenberg
CLIMATE CHANGE IMPACTS US DAILY.
LET'S GET CLIMATE READY.
Implementation of SA Climate Ready means a more equitable, safe, affordable, and prosperous future for all San Antonians.

SA CLIMATE READY

IN 2019, as San Antonio entered its fourth century as an established municipality, the City launched the development of its first Climate Action & Adaptation Plan (CAAP). With thousands of years of rich history and culture, the San Antonio community has thrived around the river called “Yanaguana” (precious land) by the native peoples who lived here over 10,000 years ago. Today, San Antonio is the seventh most populous city in the United States and a powerhouse of economic growth in Texas. At a time of historic population growth — and climate change, the most significant threat to our community and the world — we have chosen to rise to the challenge of enhancing San Antonians’ quality of life for generations to come.

CLIMATE IMPACTS TO SAN ANTONIO

Human-caused climate change presents a global challenge. The greenhouse gases (GHGs) we release by burning fossil fuels have raised the earth’s temperature by 1.8°F since the beginning of the Industrial Era, causing a range of effects across the world: rising sea levels, expanding deserts, stronger hurricanes, acidifying oceans, and extinction of plant and animal species.

Here in San Antonio, we too have begun to feel impacts of climate change. Since the 1950’s and 60’s, our city has experienced warmer summers and winters; more extreme and frequent heat waves; an increase in days over 100 degrees; and more variable and extreme precipitation.

Climate projections show that our city’s future will likely be even hotter and drier. By 2040, we will likely experience summer maximum temperatures 4°F higher on average, 24 additional days over 100°F each year, and 3” less rain each year.

If global GHG emissions continue at current rates, climate projections for San Antonio become even more dire as the decades pass. Within the lifetimes of today’s children, as early as 2071, we could endure summer maximum temperatures 10° higher on average, 94 additional days over 100°F each year, and 8 days exceeding 110° each year if we do nothing.

Without a plan to reduce our emissions and prepare San Antonio for these impacts, our city — and our people — are at risk. Climate change threatens everything we value, the resilience of our natural resources, our physical infrastructure, our financial security and economic competitiveness, and not least our health and well-being.

This CAAP lays a roadmap to protect what we love about San Antonio, ensuring that it remains a vibrant, thriving city for generations to come.
planning process began. A community effort from start to finish, SA Climate Ready involved a diverse coalition of 90 area leaders from business and industry, school districts, higher education institutions, neighborhood associations, the military, chambers of commerce, the transit and housing authorities, public utilities, trade associations, and environmental nonprofits. These leaders served on a Steering Committee and five Technical Working Groups that met monthly throughout 2018 to develop this CAAP. Throughout the process, SA Climate Ready also solicited significant input from the community at large, engaging thousands of residents at dozens of open houses, neighborhood and stakeholder meetings, as well as at community events, and through surveys.

At its heart, SA Climate Ready sought answers to the following questions: What is San Antonio’s share of responsibility for global climate change? How can we reduce San Antonio’s GHG emissions to align with keeping global temperature increase to 1.5 degrees Celsius (2.7°F)? How do we ensure that our response is just and equitable for all?

This CAAP presents our community’s answers to these questions. So that we know the path to take to carbon neutrality, San Antonio’s community and municipal Greenhouse Gas Emissions Inventory for 2016 is included in the plan. The inventory provides a baseline for measuring our progress at reducing emissions and serves as the basis of climate action planning.

In December 2017, the SA Climate Ready plan was adopted by the City Council (2017-06-22-0031R) in support of the Paris Climate Agreement and Mayors’ National Climate Action Agenda. With this action, San Antonio joined the growing list of cities taking responsibility for their share of this global problem.

Declaring that San Antonio’s history has produced social inequities that, if unaddressed, will worsen with climate change, this section underscores our shared commitment to prepare San Antonio for climate risks and impacts.

Mayors, governors, and business leaders from across the U.S. joined the “Still In” coalition in June 2017 as a promise to world leaders that Americans would not retreat from the global pact to reduce emissions and stem the causes of climate change. The bipartisan coalition includes over 3,500 representatives from all 50 states, posing large and small businesses, mayors and governors, universities, non-profits, faith leaders, and cultural institutions. Here in the U.S., 407 cities are on the climate action list.

Reducing Greenhouse Gases outlines strategies for reducing San Antonio’s GHG emissions. It organizes strategies in six broad categories: increase carbon-free energy; reduce building energy consumption; promote biodiversity and healthy ecosystems; and educate and enable. Preparing for a Changing Climate outlines strategies to prepare San Antonio for climate risks and impacts: increase infrastructure resilience; strengthen public health systems; enhance emergency management and community preparedness; promote social, economic, and environmental justice; protect green infrastructure and ecosystems; and ensure equity in adaptation.

Implementing the Plan outlines the process for carrying out the strategies in this CAAP. Importantly, this CAAP sets forth a trajectory for achieving our mitigation and adaptation goals and that will require continued commitment on the part of the whole San Antonio community.

The ethical framework grounding the CAAP is a focus on Climate Equity. It acknowledges that San Antonio’s history has produced social inequities that, if unaddressed, will worsen with climate change. The section underlines our shared commitment to address these social inequities in the implementation of the CAAP.

Reducing Greenhouse Gases outlines strategies for reducing San Antonio’s GHG emissions. It organizes strategies in six broad categories: increase carbon-free energy; reduce building energy consumption; promote biodiversity and healthy ecosystems; and educate and enable. Preparing for a Changing Climate outlines strategies to prepare San Antonio for climate risks and impacts: increase infrastructure resilience; strengthen public health systems; enhance emergency management and community preparedness; promote social, economic, and environmental justice; protect green infrastructure and ecosystems; and ensure equity in adaptation.

Implementing the Plan outlines the process for carrying out the strategies in this CAAP. Importantly, this CAAP sets forth a trajectory for achieving our mitigation and adaptation goals and that will require continued commitment on the part of the whole San Antonio community.
Climate Change presents an enormous challenge not only environmentally, but also when considering the preservation of San Antonio’s tangible and intangible heritage. Heritage anchors social memory and cohesion, informs community identity, and instills a sense of place. This is essential in sustaining inherent resilience.

equitable climate action and presents a tool — the climate equity screening mechanism — for operationalizing this commitment.

A GRAND GOAL
Our goal is to make San Antonio carbon neutral by 2050—meaning that three decades from now, our city will contribute no net carbon into the atmosphere. This goal, though grand, is attainable. We have already made advances in energy efficiency and have begun shifting from fossil fuels toward carbon-free sources, achieving:

- A 10% reduction in total GHG emissions from 2014 to 2016, despite population and economic growth;
- Recognition in 2018 as the #7 city in the nation and first in Texas for locally installed solar photovoltaic capacity;
- Adoption of the most advanced International Energy Conservation Code (IECC) for buildings, setting the city apart as one of the most energy-efficient in the nation; and
- A savings of 771 megawatts (MW) of energy since 2009 through CPS Energy’s Save for Tomorrow Energy Plan (STEP), eliminating the need for a new fossil fuel power plant.

Building on these achievements, we will continue to harness collaborative partnerships, technology, and innovation—resources our city possesses in abundance—to realize our carbon-neutral goal.

SA Climate Ready is San Antonio’s climate action & adaptation plan to meet the present and future challenges of climate change. SA Climate Ready provides strategies for ensuring economic prosperity and quality of life.

SA Climate Ready prioritizes clean air, public health, water quality and conservation, good jobs, transportation choices, clean and secure energy and emergency preparedness.

SA Climate Ready supports market transitions, consumer options, and prepares residents, businesses, and institutions for an unpredictable climate.

SA Climate Ready identifies a process for equity and affordability to ensure that a Climate Ready San Antonio benefits all of our residents.

SA Climate Ready is grounded in best available climate science and best practices.
Climate is defined as the average weather, or more rigorously, the statistical description in terms of the mean and variability of relevant atmospheric and meteorological quantities — such as temperature, precipitation, and wind — over a period of time. The classical period for averaging these is 30 years, as defined by the World Meteorological Organization.

Climate in a narrow sense is usually defined as the weather conditions of a region averaged over a series of years. Climate in a broader sense includes long-term temporal variability of relevant atmospheric and meteorological quantities.

The climate system is the highly complex system consisting of five major components: the atmosphere, the hydrosphere, the cryosphere, the lithosphere and the biosphere and the interactions between these systems. The climate system is strongly influenced by global and regional human activities, through changes in the amount and kind of greenhouse gases in the atmosphere and by changes in land use.

Climate change encompasses both increases and decreases in temperature, as well as shifts in other climate variables. Climate change is defined as a change that is attributed to human activities that takes place over decades or longer. Climate change includes both global warming (a type of climate change; it can also be called climate warming or global warming) and other changes in climate conditions, such as changes in precipitation patterns, changes in sea level, or changes in wind patterns.

Climate projections are the results of simulations of the climate system made by running the climate models for different human-induced changes in climate conditions. Scenarios are used to project the future climate and its effects.

Climate sensitive urban growth: outdoor design and planning of urban communities is defined as a restorative model that decouples sustainability solutions that use a district scale approach to reduce existing burdens and bar additional burdens, and transforms the systems that have established, and decreases in temperature, as well as shifts in wind, temperature) when designing for future urban and transportation, as well as scope 1 and scope 3 generated within the geographic boundary of the City of San Antonio. This includes scope 1 and scope 2 emissions, factors.

Carbon neutrality: having achieved a state in which the net amount of carbon dioxide or other greenhouse gasses emitted into the atmosphere is reduced to zero because it is balanced by action to remove carbon from the atmosphere or the formations through natural or technological processes.

Biodiversity: the variety and variability of life on Earth. Biodiversity is made up of three main components: genetic diversity, species diversity, and ecosystem diversity. Ecosystem diversity is the variety and variability of all ecosystems, from the most local to the most global. Genetic diversity is the variety of genes in an organism. Species diversity is the variety of different species within an ecosystem or habitats.

Adaptation: the process of adjusting to a new state in order to avoid, moderate, or reduce harm caused by climate change. Adaptation may include both decisions made by individuals and communities, as well as policies and projects implemented by governments. Adaptation may also include decisions made by individuals and communities, as well as policies and projects implemented by governments.

Equity: means that our policy-making, service delivery, and distribution of resources are fair and just. This means that intentional policies and projects may facilitate adjustment to expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, adaptation may be a process that considers microclimates (e.g., sun, shade) to enhance or decrease value to individuals or society at large. These are services such as the changing composition of the atmosphere, the hydrosphere, the cryosphere, the lithosphere and the biosphere and the interactions between these systems.

Climate change is defined as a change that is attributed to human activities that takes place over decades or longer.
ACRONYMS & DEFINITIONS (CONT.)

preventing it from escaping into space. As the atmospheric concentrations of these gases rise, the average temperature of the lower atmosphere gradually increases, a phenomenon known as the greenhouse effect. Greenhouse gases include, for example, carbon dioxide, water vapor, and methane.

Green Infrastructure; Blue-Green Infrastructure: The interconnected set of natural and constructed ecological systems, green spaces and other landscape features. It includes planted and indigenous trees, wetlands, parks, green open spaces and original grassland and woodlands, as well as possible building and street-level design interventions that incorporate vegetation. Green infrastructure provides services and functions in the same way as conventional infrastructure. Blue-Green Infrastructure can be an important means of dealing with flooding and extreme storm events by distributing water through its network of interconnected reservoirs, wetlands, and associated (natural) open spaces along rivers. Adapted from https://www.ipcc.ch/sr15/chapter/glossary/ and Ghofrani, Z. et al. A Comprehensive Review of Blue-Green Infrastructure Concepts. International Journal of Environment and Sustainability, Vol. 6 No. 1, 2017.

Industrial Processes and Product Use (IPPU): Emissions related to industrial processes occurring within San Antonio. Note, only industrial process emissions from large facilities, i.e., those that meet EPA reporting thresholds, are included in San Antonio’s GHG inventory.

Low Impact Development: As defined by the San Antonio River Authority, Low Impact Development (LID) is a sustainable land planning and engineering design approach that manages stormwater runoff as close to where it falls as rain. Examples are rain gardens, stormwater harvesting cisterns, and permeable pavement. From https://www.sara-tx.org/lid-sustainability/low-impact-development/

Marginalized Communities: Groups that are disproportionately burdened by the impacts of climate change or that face a greater number of risks associated with climate change and other stressors. This includes people of color, indigenous groups, low-income individuals and households, children, older adults, individuals with limited English proficiency, people with pre-existing or chronic conditions, pregnant and women, people with disabilities, socially isolated individuals (e.g., homeless, housebound), and vulnerable occupational groups (e.g., outdoor workers).

Metric Tons CO₂ Equivalent (MTCO₂e): A measure used to compare the emissions from various greenhouse gases on the basis of their global warming potential, by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential. Often reported as Million metric tons CO₂ equivalent (MMTCO₂e).

Micro-Mobility: Modes of transport that are provided by very light vehicles such as electric skateboards, e-bikes, e-scooters, and docked bikes.

Mitigation: Measures to reduce the amount and speed of future climate change by reducing emissions of heat-trapping gases or removing carbon dioxide from the atmosphere.

Municipal Inventory: Natural capital can be defined as the world’s stocks of natural assets which include geology, soil, air, water and all living things. It is from this natural capital that humans derive a wide range of services, often called ecosystem services, which make human life possible. From https://naturalcapitalforum.com/about/

Natural Capital: San Antonio’s municipal inventory includes emission sources under direct control of the San Antonio City Government, including city-owned facilities, city-owned vehicles, including city-owned and operated waste emissions sources.

Ozone: A colorless gas consisting of three atoms of oxygen, readily reacting with many other substances. Ozone in the upper atmosphere protects the Earth from harmful levels of ultraviolet radiation from the Sun. In the lower atmosphere (ground-level or tropospheric ozone), ozone is an air pollutant with harmful effects on human health.

The Paris Climate Agreement (Paris Agreement): An agreement within the United Nations Framework Convention on Climate Change that brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects. The agreement’s “scaled aim” is to strengthen the global response to the threat of climate change by keeping the increase in global average temperature this century to well below 2 degrees Celsius (3.6°F) above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius (2.7°F).

Regeneration: To improve a place or system so that it is active or producing again; to grow again.

Representative Concentration Pathways (RCPs): Scenarios that include time series of emissions and concentrations of the full suite of greenhouse gases (GHGs) and aerosols and chemically active gases, as well as land use/land cover (Moss et al., 2008). The word representative signifies that each RCP provides only one of many possible scenarios that would lead to the specific radiative forcing characteristics; the term pathway emphasizes that not only the long-term concentration levels are of interest, but also the trajectory taken over time to reach that outcome (Moss et al., 2010).

Resilience: The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure, while also maintaining the capacity for adaptation, learning and transformation.

Resilience Hub: Community-serving facilities augmented to support residents and coordinate communications, resource distribution and services before, during, or after a natural or manmade hazard event.

Risk: Threats to life, health and safety, the environment, economic well-being, and other things of value. Risks are often represented as probability (likelihood) of occurrence of hazardous events or trends multiplied by the impacts (consequence) if these events or trends occur.

Scope 1 Emissions: Direct GHG emissions generated from sources within the city boundary.

Scope 2 Emissions: GHG emissions occurring from the use of grid-supplied electricity, heat, and/or cooling within the city boundary.

Scope 3 Emissions: All other GHG emissions that occur outside of the city boundary as a result of the activities taking place within the city boundary.

Transportation Demand Management (TDM): Providing travelers with travel choices, such as work location, route, time of travel, and mode, to improve travel reliability.

Urban Heat Island (UHI): Occurs when a city experiences much warmer temperatures than nearby rural areas due to the amount of heat-absorbing buildings and impervious surfaces.

Vulnerability: The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt.

Water Recycling Processes: Processes encompassing the conversion of wastewater to water through the removal of contaminants.

Weather: The state of the atmosphere with respect to wind, temperature, cloudiness, moisture, pressure, etc. Weather refers to these conditions at a given point in time (e.g., today’s high temperature), whereas climate refers to the “average” weather conditions for an area over a long period of time (e.g., the average high temperature for today’s date).

Zero Net Energy (ZNE) Buildings: Buildings that combine energy efficiency and renewable energy generation to consume only as much energy as can be produced by dedicated renewable resources over a specified time period.
A DOCUMENTED CALL TO ACTION

THREATS TO THE INSURANCE MARKET: A 2019 survey of 247 insurance actuaries identified climate change as the top emerging risk. Climate change was ranked higher than cyber damages, financial instability, and terrorism. This is reflective of a significant portion of the U.S. economy where insurance spending makes up $5 trillion annually, approximately 11% of America's GDP.

THREATS TO THE U.S. ECONOMY: The Fourth National Climate Assessment, published in November 2018 and authored by hundreds of climate scientists and 13 U.S. Federal Agencies, predicts that the U.S. economy will shrink by as much as 10% by the end of the century if global warming continues at its current pace.

THREATS TO PUBLIC HEALTH: The World Health Organization states that "The severity of the impact of climate change on health is increasingly clear." The most direct link between climate change and human health is air pollution resulting from burning fossil fuels for energy, transport, and industry. Air pollution is the second leading cause of deaths from noncommunicable diseases, leading over to 4.2 million deaths per year.

THREATS TO NATIONAL SECURITY: Climate change represents a national security threat as "Global environmental and ecological degradation, as well as climate change, are likely to fuel competition for resources, economic distress, and social discontent through 2019 and beyond."

THREATS TO BOND RATINGS: Credit rating agencies are being pushed by investors to consider climate change risk in bond ratings; with all three of the big credit rating agencies issuing guidance on municipal ratings and climate change. Municipalities that do not have adequate mitigation and adaptation plans in place will see an economic impact and "may have to increase taxes to offset the increased bond return demanded by investors."

THREAT TO WORLD HERITAGE SITES: World Heritage properties, such as the Alamo and the San Antonio Missions, "are affected by the impacts of climate change at present and in the future and their continued preservation requires understanding these impacts in order to respond to them effectively."

Governments, businesses, and organizations are recognizing the growing risks posed by climate change as well as associated costs. In 2017 alone, climate change resulted in worldwide damages of $340 billion. Local communities are in a unique position to develop greenhouse gas reduction strategies and policies that they can directly influence while leveraging investments that are already established. Cities across the globe have taken on this challenge and are proving that they can respond to climate change, increase economic growth, and prepare for a better future. In fact, 27 of the world’s largest cities have been successfully reducing their emissions at a rate of 2% per year, while their populations have grown by 1.6% per year and their economies have grown by 3% per year.

San Antonio’s history of successful sustainable initiatives provides a solid platform from which to springboard forward-thinking advancements that will continually improve the quality of life, security, and economic vitality of our community. However, implementation will rely on overcoming these potential challenges:

• **Technology:** While many current technologies can aid in the implementation of the strategies in this plan, proven technological solutions may not yet be available to meet long-term GHG reduction goals.

• **Cost:** The transition to a Climate Ready San Antonio means transforming our energy, building, and transportation sectors. As part of this transition, new policies, programs, and technologies will be required, many of which will result in associated costs. Financial modeling to support emissions reductions requires a transition to a lifecycle cost model that considers potential risks and benefits. Not only is this modeling more complicated, in many cases good data does not yet exist.

• **Consumer Options & Behavioral Change:** Humans are creatures of habit, and transitioning to new ways of traveling, buying, and acting can take time. Responding to climate change will require a change in human behavior: a reduction in consumption and a reprioritization of decision making.

Through the SA Climate Ready process, our community has concluded that it makes sense to take on these challenges. In so doing, we are preparing for a healthier and productive future for all our residents.
A TRACK RECORD OF INVESTMENTS FOR OUR FUTURE

The mitigation and adaptation strategies presented in the CAFAP provide a renewed focus towards mitigating and responding to climate change in our city. But the ideas are not new. San Antonio has a proud history of conservation, ensuring our resources are available and cost-effective for our residents. Some examples of forward-looking programs and investments include:

**Build San Antonio Green**
- Over 7,800 building projects including single-family homes, multifamily, mixed-use, and commercial projects have been certified green since 2001.
- The overall efficiency of these building projects has prevented more than 225 million pounds of CO₂.
- The overall efficiency of these building projects has led to a reduction of more than 13.1 megawatts in peak demand.

**Edwards Aquifer Protection Program**
- $247 million committed to the protection of 156,475 acres of land over the aquifer's contributing and recharge zone since 2001.
- The protected land will continue to reduce potential threats to water quality and quantity of the primary source of drinking water for San Antonio residents.
- Protects green spaces, biodiversity, and captures and stores carbon.

**Energy Efficiency Fund**
- Between 2011 and 2018, the Energy Efficiency Fund has invested by the City of San Antonio and Bexar County more than $1.5 million to avoid $762 million in costs associated with water infrastructure projects.
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- The Energy Efficiency Fund has been invested by the City of San Antonio and Bexar County since 2010.
- San Antonio has led the state in adoption of A Bas 1.4 rainfall standards, ensuring that San Antonio is better prepared for current and future rain events.
- Participation in the Bexar Regional Watershed Management (BRWM) partnership has enhanced coordination between regional partners, resulting in more efficient distribution of resources to address flood control needs in San Antonio’s watersheds. The BRWM is currently utilized as a model for future flood control planning efforts by the state of Texas.
- Howard W. Peak Greenway
  - $190 million committed since 2000.
  - 65 miles of trails completed, 24 miles in design, 14 miles currently under construction, and an additional 12 miles in planning with a shared vision of creating a “ring” around the city.
- Increases connectivity, provides recreational and commuting opportunities, reduces reliance on fossil fuel powered vehicles.

**Save for Tomorrow Energy Plan (STEP)**
- Designed to reduce the community’s demand for electricity by 771 megawatts (MW), which is equivalent to the output of a large power plant, by the end of 2020.
- Customer participation has been so successful that STEP will exceed its original MW reduction goal a year early.
- It is expected that San Antonio will reduce its electric demand by more than 800 MW, at an estimated final cost of $179 million, which is 15% less than originally forecasted.

**Tree Canopy Preservation and Mitigation Fund**
- $3.8 million expended since 2006 in support of tree preservation, tree planting, and educational activities.
- Improves air quality, helps to mitigate extreme heat impacts and manage stormwater, captures and stores carbon, supports biodiversity, and improves the quality of He and property values.

Under 1 Roof
- $5.25 million committed through Fiscal Year 2019.
- Provides funding for energy efficient roads on homes owned by tenants with incomes at or below 80% of the area median income.
- Reduces electricity consumption, heating and cooling costs, and mitigates the impacts of Urban Heat Island effects.

**Water Conservation**
- As a result of this investment, San Antonio has benefited from $762 million in avoided costs associated with water and wastewater demand. These prudent investments continue to improve resilience, support water security, and help prepare San Antonio for the future.
- The San Antonio River Walk supports conservation efforts by utilizing recycled floodwater. The need to use Edwards Aquifer water or other sources and help preserve the River Walk’s $3 billion annual economic impact to the City.

**Flood Control Projects**
- A combined total of over $2 billion in drainage infrastructure projects has been invested by the City of San Antonio and Bexar County since 2010.

**BENEFITS OF PRIVATE SECTOR ACTION**

**Increased Profitability, Reduced Costs, and Efficiency**
- Setting GHG emissions reduction targets can be beneficial, especially when aligned with cost reduction goals. This is because reducing GHG emissions can lead to greater operational efficiency and competitiveness.

**Unleash Innovation**
- Setting GHG emissions targets allows businesses to discover creative solutions to the challenge of reducing emissions. The analysis required to set targets can drive businesses to create new and unique products and services and deliver better products to their customers.

**Improve the Brand**
- Customers today are looking for their purchases to reflect their values. With a third of customers considering green and social impacts in their brand decisions, and with that number continuing to grow, it is important for companies to cement their contribution to the low-emissions future.

**Business Transformation, Lifecycle Thinking**
- Accurately assessing environmental impact requires a systems approach. Thinking about a company’s impact in a holistic way helps decision-makers understand the value trade-offs, making it easier to collaborate and business transformation.

**Preparing for Future Investments**
- Setting targets focuses a business and sets a path for the future. Accurately understanding the climate impact of business operations creates a foundation for future investment opportunities.

if a technology or solution is not available today. For many businesses, understanding the trajectory allows them to take advantage of potential investments, such as renewable energy purchases at the time when they can be most financially valuable to the bottom line.

**Business Action**

Businesses are making commitments and decisions around climate change at all levels – joining global compacts and developing local strategies. Here is a sampling of the ways that businesses are getting involved in climate action.

**Carbon Disclosure Project (CDP)**
- A global disclosure system used by businesses, investors, and cities to measure and understand environmental impact. Currently, over 7,000 companies, representing $33 trillion in assets, report on their change impacts through the CDP.

**Science-based Targets (SBTs)**
- The SBT Initiative has become the international standard for carbon mitigation targets, with over 500 companies committing, including 17% of Global Fortune 500 companies.

**Task Force on Climate-Related Financial Disclosures (TCFD)**
- TCFD manages a climate-related financial risk disclosure methodology to be used by companies to improve information to investors, lenders, insurers, and other stakeholders. Today, the TCFD has more than 300 supporters and represents a combined market capitalization of over $7 trillion.
A city’s response to climate change can be framed around two separate pathways for action: mitigation and adaptation. Mitigation activities address the underlying cause of climate change through the reduction and prevention of GHG emissions. By contrast, adaptation activities seek to increase a city’s resilience or limit the city’s vulnerability to climate change impacts.

As part of a comprehensive response to climate change, San Antonio’s CAAP creates a framework for both mitigation and adaptation. The following chapters present a detailed discussion of the strategies for both mitigation and adaptation.

The remainder of this chapter presents the baseline for the mitigation and adaptation strategies identified in the CAAP. The baseline against which mitigation and adaptation strategies are evaluated varies in the context as well as the ability to numerically quantify the captured data. For mitigation, the baseline consists of a GHG inventory, which quantitatively evaluates the GHG emissions for which the city is responsible. In terms of adaptation, the baseline includes a description of current climate and projections for changes in future climate to which a city must respond with action.

COMMUNITY GHG INVENTORY
As part of the CAAP process, the city conducted a comprehensive GHG inventory for 2016 following the U.S. Community GHG Protocol developed by the World Resources Institute (WRI), C40 Cities Climate Leadership Group, and ICLEI - Local Governments for Sustainability.24 San Antonio’s total community emissions in 2016 were 17.4 million metric tons of carbon dioxide equivalent (MtCO2e).25 Even though San Antonio’s population grew by 6% between 2014 and 2016, the city’s GHG emissions decreased by 10% during the same period. This decrease was driven primarily by CPS Energy’s shift away from carbon-intensive electricity sources (e.g., coal) and toward cleaner sources (e.g., natural gas, solar, and wind).
GREENHOUSE GAS EMISSIONS INVENTORY

SECTOR EMISSIONS
The two largest sources of GHG emissions in San Antonio are the stationary sector (energy use in buildings) and the transportation sector. Almost half (48%) of the GHG emissions captured in the 2016 GHG inventory result from energy use in buildings with an additional 38% resulting from transportation.

- **Stationary (Energy Use in Buildings)** The stationary sector includes emissions related to energy use in commercial, residential, and industrial buildings as well as emissions related to energy production and use to supply energy to San Antonio. The majority of San Antonio’s stationary emissions are related to electricity and natural gas supplied by CPS Energy. For San Antonio, emissions from electricity significantly outweigh emissions from natural gas within this sector — 87% of the emissions coming from buildings result from electricity usage.

- **Transportation** The GHG emissions captured within the transportation sector include those resulting from the combustion of fuel and consumption of grid-supplied electricity for miles traveled within San Antonio’s geographic boundary. Over 90% of San Antonio’s total emissions within the transportation sector result from private vehicles, including passenger cars, light trucks, and heavy trucks.

- **Industrial Processes and Product Use (IPPU)** GHG emissions captured within the IPPU sector are those resulting from industrial processes occurring within the geographic boundary of San Antonio. It is important to note that IPPU emissions within this inventory are only those resulting from large facilities, (i.e., those that meet EPA reporting thresholds), and emissions related to electricity and natural gas use in these same facilities are captured under the Stationary sector.

- **Waste** The waste sector accounts for emissions from all solid waste generated within San Antonio, landfills (active or closed) located within city limits, and the treatment of water and wastewater. Emissions captured within the waste sector related to closed landfills are particularly challenging to reduce; the reduction of waste emissions primarily focuses on the generation and landfilling of new waste.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Emissions</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stationary (Energy Use in Buildings)</strong></td>
<td>48%</td>
<td>Energy use in buildings (87% from electricity usage)</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td>38%</td>
<td>Private vehicles (90%)</td>
</tr>
<tr>
<td><strong>Industrial Processes and Product Use (IPPU)</strong></td>
<td>8%</td>
<td>Industrial processes (8%)</td>
</tr>
<tr>
<td><strong>Waste</strong></td>
<td>6%</td>
<td>Solid waste (2%), landfills (2%), and wastewater (0.1%)</td>
</tr>
</tbody>
</table>

The 2016 San Antonio Community GHG Inventory follows the Global Protocol for Community-Scale Greenhouse Gas Emissions (GPC). This protocol allows for selection between different reporting levels. Based on the data available, the community inventory follows the BASIC reporting level focusing on Scope 1 and 2 emissions, exceeding the requirements of this level by including the largest industrial process emissions.

**Scope 1 Emissions**: Direct GHG emissions generated from sources within the city boundary.

**Scope 2 Emissions**: GHG emissions occurring from the use of grid-supplied electricity, heat, and/or cooling within the city boundary.

**Scope 3 Emissions**: All other GHG emissions that occur outside of the city boundary as a result of the activities taking place within the city boundary.

The 2016 San Antonio Community GHG Emissions are as follows:

- **48% Stationary Energy Use in Buildings**
  - 27% Commercial and industrial buildings
  - 18% Residential buildings
  - 2% Industrial buildings
  - 1% Energy industries within the city
  - 0.2% Fugitive emissions from oil and natural gas system

- **38% Transportation**
  - 34% Private transportation, i.e., heavy trucks, light trucks, and passenger cars
  - 3% Off-road transportation
  - 0.4% Public transit
  - <0.1% Waterborne navigation

- **8% Industrial Processes and Product Use (IPPU)**
  - 8% Industrial processes occurring within the city

- **6% Waste**
  - 2% Solid waste generated in the city
  - 2% Closed landfills within the city
  - 2% Active landfills within the city
  - 0.1% Wastewater generated and treated within the city
THE IMPACT OF GLOBAL WARMING POTENTIAL

Standard GHG accounting methodologies generally track seven key Greenhouse Gases: carbon dioxide, methane, nitrous oxide, perfluorinated chemicals, hydrofluorocarbons, sulfur hexafluoride, and nitrogen trifluoride. These GHGs differ in their ability to absorb energy and the amount of time they will remain in the atmosphere, so they are all converted to a common unit for comparison: carbon dioxide equivalent (CO₂e), which is generally called the Global Warming Potential (GWP). The larger the GWP of a GHG, the higher its contribution to global warming.

The GWPs of GHGs continue to be updated as climate science evolves. The GWP values used in San Antonio’s 2016 GHG inventory come from the IPCC 5th Assessment Report (published in 2014).27 GWP values are generally considered over two time frames: 20 years and 100 years. For long-lived gases like nitrous oxide, the GWPs is virtually the same for both time frames, but for short-lived gases like methane, the 20-year GWP is significantly higher than the 100-year GWP because much of these gases have degraded by the time they reach the 100-year time frame.

Results of San Antonio’s GHG inventory are generally presented using the 100-year GWP. However, to provide further insights into the emission drivers, the City also presents the 20-year GWP. Using the 20-year GWP, the total inventory emissions change from 17.4 MtCO₂e to 19.6 MtCO₂e, which is a 12.6% increase.

In addition to the community GHG inventory, the City evaluated the GHG emissions resulting from its own municipal government operations. Evaluating these emissions separately allows us to understand the impact of our municipal operations as well as to identify opportunities for our City government to lead San Antonio’s climate action.

In total, the San Antonio City government emitted 0.46 MtCO₂e in 2016, or 3% of the total city inventory. This represents a 19% decrease from 2014.

The decrease in municipal emissions was driven by multiple factors including the reduction in carbon intensity of the electricity supplied by CPS Energy, a 6% reduction in municipal building energy use, and a reduction in emissions from landfill operations. The City has also made efforts to reduce emissions from transportation, including a 10% increase in the use of electric vehicles.

The reduction in municipal emissions has also contributed to the overall decrease in citywide emissions. The City has set a goal to reduce its total emissions by 20% by 2020 compared to 2010 levels.

The City is making significant progress towards its climate goals, and it is committed to continuing to reduce emissions and increase the use of renewable energy sources.

2016 SAN ANTONIO TOTAL COMMUNITY EMISSIONS

<table>
<thead>
<tr>
<th>Sector</th>
<th>100-YR GWP</th>
<th>20-YR GWP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Dioxide (CO₂)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Methane (CH₄)</td>
<td>28</td>
<td>84</td>
</tr>
<tr>
<td>Nitrous Oxide (N₂O)</td>
<td>265</td>
<td>264</td>
</tr>
<tr>
<td>Industrial Processes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fugitive Natural Gas Emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Industries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Recycling Processes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Energy Usage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal Emissions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The City of San Antonio is committed to reducing its emissions and is working towards its climate goals. The City has set a target of reducing its total emissions by 20% by 2020 compared to 2010 levels, and it is making significant progress towards this goal.
2016 SAN ANTONIO MUNICIPAL GHG EMISSIONS

The largest source of GHG emissions resulting from San Antonio’s municipal operations is from municipally owned landfills (61%). This is followed by buildings and facilities (22%), city-owned vehicles (11%), and streetlights and traffic signals (6%). Emissions from the solid waste sector are primarily methane, which has a GWP 28 times greater than CO₂ and is the reason why the emissions from this sector look so large compared to the others.

City-Owned Landfills

The landfill sector includes emissions (mostly methane) from closed landfills operated by the City. Seven of the nine known landfills in San Antonio are closed, but emissions are still produced from the decay of waste from previous years. San Antonio already captures methane from landfills to convert to electricity, and the emissions from closed landfills will decrease with time. There is limited additional potential to reduce these emissions today—the biggest opportunity within this sector is to limit the amount of new waste that enters open landfills.

Transportation

The municipal transportation emissions are made up of city-owned vehicles (65%) and streetlights and traffic signals (35%).

Stationary (Energy Use in Buildings)

Within the municipal buildings and facilities, the majority of emissions are related to electricity supplied by CPS Energy (82%). Emissions from supplied chilled water, natural gas, and steam make up the remainder.

2016 SAN ANTONIO MUNICIPAL GHG EMISSIONS

<table>
<thead>
<tr>
<th>GHG Emissions Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landfills</td>
<td>61%</td>
</tr>
<tr>
<td>Buildings &amp; Facilities: Electricity</td>
<td>18%</td>
</tr>
<tr>
<td>Buildings &amp; Facilities: Chilled Water/Steam</td>
<td>3%</td>
</tr>
<tr>
<td>Buildings &amp; Facilities: Natural Gas</td>
<td>1%</td>
</tr>
<tr>
<td>Transportation</td>
<td>17%</td>
</tr>
<tr>
<td>Streetlights and Traffic Signals</td>
<td>6%</td>
</tr>
<tr>
<td>Vehicle Fleet: Diesel</td>
<td>6%</td>
</tr>
<tr>
<td>Vehicle Fleet: Gasoline</td>
<td>5%</td>
</tr>
<tr>
<td>Vehicle Fleet: Other</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

San Antonio has always been hot, but San Antonio’s children are growing up in a much hotter city than their parents and grandparents. In the last seven years (2010-2017), we have had more days above 100°F than we had in any decade since record-keeping began in the 1890s. As part of the development of the CAAP, UTSA researchers completed a detailed climate analysis to understand how we can expect San Antonio’s climate to change this century. These climate projections show that our future will be hotter and drier, with severe impacts for San Antonians including more climate-related emergency room visits and even deaths. In addition, extreme heat is also connected to extreme precipitation—warmer air holds more water—so UTSA researchers predict extreme rainfall. In general, the increase in temperatures and shifts in expected precipitation are consistent with national and global trends. GHG emissions resulting from human activities: deforestation, agriculture, and fossil fuel combustion are some of the main contributors to climate change. Current GHG emissions rates are exceeding the earth’s ability to absorb these emissions, resulting in excessive amounts of heat-trapping gases in the atmosphere. Our climate is expected to continue to change resulting in a more challenging environment for all San Antonians, especially our most vulnerable citizens.

By the end of the century, San Antonio should expect to receive 3” less rain per year, a decrease of 10 percent.

2 INCHES

We will soon start to see summer nights where temperatures never drop below 80°F, reaching a total of at least 10 of these nights by the end of century.

The average number of days with more than 2” of rainfall is expected to increase from once every two years during the near-term period (2011-2040) to four times every five years by the end of-century.

DID YOU KNOW?

The average number of days with temperatures exceeding 100°F could quadruple to more than 30 days per year, and by the end of the century, we can expect to see 55-100 days with maximum temperatures above 100°F.

summer maximum temperatures are expected
to increase by more than 4°F by 2040 and by
more than 6-10°F by end-of-century.

By the end of the century, San Antonio should expect to receive 3” less rain per year, a decrease of 10 percent.
Meeting GHG emissions reductions outlined in the Paris Agreement is possible. It will require a concerted effort by all San Antonians to design and improve buildings for energy efficiency, expand clean transportation options, and reduce overall consumption. The City will support this transformation to a carbon neutral future by prioritizing our resources, enacting policies, and incentivizing change.

The need for climate action is urgent. After three steady years of decline, preliminary estimates indicate that GHG emissions in the United States rose by 3.4% in 2018. This marks the largest increase in eight years, even with a near-record number of coal plants retiring. The emissions increase is largely attributed to industrial emissions (+5.7%) and transportation emissions, including diesel for trucking and jet fuel for air travel (+3%). To meet the Paris Agreement goals, San Antonio must reduce community-wide greenhouse gas emissions a minimum 0.5 MTCO₂e per year through 2050.
The Paris Agreement sets a goal of “holding the increase in global average temperature to well below 2°C (3.6°F) above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C (2.7°F),” where pre-industrial is defined as the latter half of the nineteenth century. As of today, human activities have already warmed the planet about 1°C (1.8°F) above pre-industrial levels. At the current GHG emissions rate, the world will reach the 1.5°C (2.7°F) threshold between 2030 and 2052. Based on a special report prepared by the Intergovernmental Panel on Climate Change (IPCC) in 2018, global net emissions must be reduced 45% from their 2010 levels by 2030 and the world must reach carbon neutrality by 2050 to meet the Paris Agreement goals.

The window for climate action is rapidly closing if we are to maintain a possibility of limiting global temperature increase to 1.5°C (2.7°F). The severity of the impacts of climate change are linked to the total concentration of GHG emissions in our atmosphere; what we emit each year adds to existing concentrations and results in a multiplying effect into the future. Dramatic GHG emission reductions in the next 3-5 years will increase the likelihood of meeting the Paris Agreement goals and limit the impacts experienced through the rest of the century.

The difference between the world meeting the goal of limiting global temperature increase to 1.5°C (2.7°F) compared to 2°C (3.6°F) is considerable. The extra half-degree of warming would magnify the global impacts of climate change substantially. For example, it would:

- Increase by 10 times the number of people that will be exposed to flooding in the next 30 years.
- More than double the human population exposed to severe heat at least every five years.
- Increase the loss of coral reefs by 30% (for a total loss of 99%).
- Add 10 million people to the number that will be exposed to flooding in the next 30 years.
- Increase the number of ice-free summers in the Arctic Ocean.

WHAT IS THE RESULT OF A HALF DEGREE OF WARMING?
the fastest growing cities in the nation, San Antonio has a particular challenge of reducing emissions alongside the projected avoided the most serious climate change impacts will require significant emissions reductions in the next decade. As one of

### TO CARBON NEUTRALITY

*San Antonio's path to carbon neutrality* will require the implementation of strategies that align with the IPCC's referenced 1.5°C global pathway. The path to carbon neutrality incorporates a combination of Negative Emissions Technologies (NETs) and Carbon Capture and Storage (CCS) solutions.

#### Carbon Neutral Target

San Antonio's carbon neutral target reflects a 100% reduction in emissions from electricity frozen at 2016 levels.

#### Interim GHG Reduction Targets

<table>
<thead>
<tr>
<th>Year</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business as Usual (BAU)</td>
<td>2016 baseline</td>
<td>2025 baseline</td>
<td>2030 baseline</td>
</tr>
<tr>
<td>Total Emissions (Mton CO2E)</td>
<td>17.4</td>
<td>12.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Stationary emissions</td>
<td>7.6</td>
<td>5.3</td>
<td>3.1</td>
</tr>
<tr>
<td>Transportation emissions</td>
<td>5.9</td>
<td>4.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Industrial process emissions</td>
<td>2.3</td>
<td>1.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Water supply emissions</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Solid waste emissions</td>
<td>0.3</td>
<td>0.2</td>
<td>0.1</td>
</tr>
</tbody>
</table>

#### Pathway to Carbon Neutrality

The pathway to carbon neutrality involves a combination of strategies to reduce emissions and negative emissions from sources. The strategies are grouped into six categories:

1. Increase Carbon-Free Energy
2. Reduce Building Energy Consumption
3. Reduce Transportation Energy Consumption
4. Advance the Circular Economy
5. Promote Biodiversity and Healthy Ecosystems
6. Educate & Empower

Each strategy is further detailed on pages 34-39 of the report. The strategies are designed to align with the path to carbon neutrality and are intended to support 100% renewable energy and 0 emissions goals.

#### Business as Usual vs. Pathway

<table>
<thead>
<tr>
<th>Year</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAU (baseline)</td>
<td>2016</td>
<td>2025</td>
<td>2030</td>
</tr>
<tr>
<td>Pathway</td>
<td>2020</td>
<td>2040</td>
<td>2050</td>
</tr>
<tr>
<td>Total Community Emissions</td>
<td>17.4</td>
<td>12.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Reduction</td>
<td>39%</td>
<td>72%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The pathway to carbon neutrality includes strategies such as:

- **Increase Carbon-Free Energy**
- **Reduce Building Energy Consumption**
- **Reduce Transportation Energy Consumption**
- **Advance the Circular Economy**
- **Promote Biodiversity and Healthy Ecosystems**
- **Educate & Empower**

For each strategy, implementation partners are identified as well as whether the strategy could be implemented in the near or long term. Other values, or co-benefits, of each strategy are also identified. The strategic implementation partnership descriptions are listed, and are further detailed on pages 34-39.
COMMUNITY MITIGATION STRATEGIES

<table>
<thead>
<tr>
<th>STRATEGIES</th>
<th>LEAD / PARTNER AGENCY</th>
<th>PHASE</th>
<th>GHG</th>
<th>CONSTRAINTS</th>
<th>IN PLAN</th>
<th>AQ</th>
<th>NC</th>
<th>Q3</th>
<th>H</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>REDUCE THE CARBON INTENSITY OF SAN ANTONIO’S ENERGY SUPPLY</td>
<td>CPS ENERGY</td>
<td>NT</td>
<td>H</td>
<td>L, P, T</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>SUPPORT AND INCENTIVIZE DISTRICT-SCALE CLEAN ENERGY PROJECTS</td>
<td>CPS ENERGY</td>
<td>LT</td>
<td>L-M</td>
<td>I</td>
<td>Y</td>
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<tr>
<td>FUEL SWITCHING</td>
<td>CPS ENERGY</td>
<td>LT</td>
<td>L-M</td>
<td>I, BC</td>
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<td></td>
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<tr>
<td>COMMERCIAL &amp; MULTIFAMILY BENCHMARKING AND DISCLOSURE ORDINANCE</td>
<td>OFFICE OF SUSTAINABILITY</td>
<td>NT</td>
<td>L-M</td>
<td>I, P</td>
<td>Y</td>
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<tr>
<td>COMMERCIAL AND RESIDENTIAL ENERGY AND WATER RATING SYSTEM</td>
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<td>I, P</td>
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<tr>
<td>ZERO NET ENERGY BUILDING CODE</td>
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<td>I, P</td>
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<tr>
<td>ENERGY EFFICIENCY PROGRAMS</td>
<td>SAWWS, SARA</td>
<td>LT</td>
<td>L</td>
<td>A, BC, I</td>
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<tr>
<td>REDUCE WATER CONSUMPTION</td>
<td>SAWWS, SARA</td>
<td>LT</td>
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<td>CLEANER AND MORE EFFICIENT VEHICLE TECHNOLOGIES</td>
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<td>H</td>
<td>BC, I, T</td>
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<td>VEHICLE MILES TRAVELED (VMTS)</td>
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<td>BC, I, T</td>
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<tr>
<td>CONNECTIVITY / WALKABILITY</td>
<td>OFFICE OF SUSTAINABILITY</td>
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<td>L-M</td>
<td>I, P, BC</td>
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<td>SUSTAINABLE LAND PLANNING AND DEVELOPMENT</td>
<td>OFFICE OF SUSTAINABILITY</td>
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<td>L-M</td>
<td>I, P, BC</td>
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<tr>
<td>MOBILITY AS A SERVICE</td>
<td>OFFICE OF SUSTAINABILITY</td>
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<td>A, T, P</td>
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LEGEND

<table>
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<tr>
<th>Initiation Phase</th>
<th>Constraints</th>
<th>Co-Benefits</th>
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<tr>
<td>NT Near-term (Initiated)</td>
<td>I, P, T</td>
<td>AQ Air Quality, BC Behavior Change, NC Natural Capital, LT Long-term, Q3 Quality Jobs, H Health Outcomes, A Affordability</td>
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</tbody>
</table>

In Current City Plan* |

*Draft version of the 2020-2050 Master Climate Plan. Final version will be released in 2020.
### COMMUNITY MITIGATION STRATEGIES

**CIRCULAR ECONOMY AND EMPOWER**

- **COMMUNITY EDUCATE**
  - Explore financing mechanisms to accelerate adoption of energy efficiency.
  - Evaluate the potential to update electricity and water rate structures.
  - Incentivize businesses to set GHG reduction targets for their own operations that match or exceed the City targets.
  - Work with partner organizations to develop and implement comprehensive sustainability and GHG education and workforce training programs.

- **MATERIAL REUSE AND CIRCULARITY**
  - Develop and implement a plan for carbon capture and storage that takes advantage of all available solutions including increasing plant material, restoring the soil landscape, increasing the use of Green infrastructure, and engaging ecosystems.
  - Analyze and quantify the urban heat island (UHI) in San Antonio and develop an implementable and impactful UHI mitigation and adaptation plan with a focus on vulnerable populations and geographic and watershed features.
  - Support the development of a local circular economy to extend product lives and increase the use of recycled materials.
  - Assess and consider the potential to install and begin implementing operational-level demand response, distributed renewable generation, and energy storage.
  - Pursue zero-landfill waste practices for all construction projects.
  - Pursue zero-landfill waste practices through education, incentives, and partnerships.
  - Accept low-waste construction projects through education, incentives, and partnerships.

### GHG REDUCTION QUANTIFICATION

**RESIDENTIAL WASTE REDUCTION**

- Continue to reduce landfilled residential waste with the goal to become a zero-waste community.
- Accelerate the diversion of organics from landfills to the highest and best use.

**COMMERCIAL WASTE REDUCTION**

- Continue to reduce landfilled commercial waste.

**CONTINUE TO UPHOLD AND ADVANCE THE CIRCULAR ECONOMY**

#### LEAD & PARTNER AGENCY

- OFFICE OF SUSTAINABILITY

#### PHASE

- LT = Long Term
- M = Mid Term
- L = Short Term

#### CONSTRAINTS

- A = Affordable
- Q = Quality
- C = Capacity
- M = Max.

#### LEAD & PARTNER OFFICES

- COMMUNITY SERVICES, PARKS & RECREATION, SARA
- DEPARTMENT OF PLANNING, TRANSPORTATION & DEVELOPMENT SERVICES, OFFICE OF HISTORIC PRESERVATION
- OFFICE OF SUSTAINABILITY
- OFFICE OF HISTORIC PRESERVATION
- DRAFT 2019 REPORT | SAN ANTONIO CLIMATE READY

#### LEGEND

- GHG = GHG Reduction Potential (Total to 2030)
- Low Reduction Potential: Less than 100,000 tCO₂e by 2030
- Medium Reduction Potential: 100,000 – 1,000,000 tCO₂e by 2030
- High Reduction Potential: More than 1,000,000 tCO₂e by 2030

#### DRAFT
MUNICIPAL MITIGATION STRATEGIES

San Antonio’s municipal government will take the lead on GHG mitigation efforts within the City. While municipal government operations only account for 3% of the city’s total GHG emissions, the municipal mitigation strategies set a significant reduction goal that will allow the City to pilot approaches before implementing them in the broader community. The City of San Antonio commits to a greener and more efficient government to benefit all San Antonians and will continue to strive for excellence through implementation of City plans, including the SA Tomorrow Sustainability, Comprehensive and Multi-Modal Transportation Plans.

MITIGATION STRATEGIES

<table>
<thead>
<tr>
<th>STRATEGIES</th>
<th>LEAD DEPARTMENTS</th>
<th>PHASE</th>
<th>GHG</th>
<th>CONSTRAINTS</th>
<th>IN PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>BENCHMARKING AND PUBLIC DISCLOSURE OF BUILDING ENERGY CONSUMPTION</td>
<td>Benchmark and publicly disclose building energy and water use for municipal buildings.</td>
<td>Office of Sustainability, Finance Department</td>
<td>NT</td>
<td>L</td>
</tr>
<tr>
<td>M2</td>
<td>MUNICIPAL ENERGY POLICY</td>
<td>To reduce energy consumption, adopt an Energy Policy Ordinance for City-owned buildings and facilities.</td>
<td>Office of Sustainability, Building and Equipment Services</td>
<td>NT</td>
<td>L</td>
</tr>
<tr>
<td>M3</td>
<td>ZERO NET ENERGY BUILDINGS</td>
<td>Achieve ZNE for all municipal buildings by 2040.</td>
<td>Transportation &amp; Capital Improvements, Office of Sustainability</td>
<td>LT</td>
<td>H</td>
</tr>
<tr>
<td>M4</td>
<td>COOL/GREEN ROOFS</td>
<td>Install cool or green roofs on municipal government buildings, as appropriate.</td>
<td>Transportation &amp; Capital Improvements</td>
<td>LT</td>
<td>L</td>
</tr>
<tr>
<td>M5</td>
<td>STREETLIGHT CONVERSION</td>
<td>Convert all streetlights to LEDs with daylight sensors by 2021 and implement the recommendations of the Urban Lighting Master Plan.</td>
<td>Finance Department, CPS Energy</td>
<td>NT</td>
<td>L</td>
</tr>
<tr>
<td>M6</td>
<td>CLEANER AND MORE EFFICIENT VEHICLE TECHNOLOGIES</td>
<td>Convert all fleet passenger vehicles and small trucks to more efficient options by 2025, with a priority on electrification based on recommendations of the Electric Fleet Conversion and Infrastructure Study, currently in development. Additionally, research and pilot the electrification of heavy trucks.</td>
<td>Office of Sustainability, Building and Equipment Services, Solid Waste Management Department, Transportation &amp; Capital Improvement</td>
<td>NT</td>
<td>H</td>
</tr>
<tr>
<td>M7</td>
<td>TRANSPORTATION DEMAND MANAGEMENT</td>
<td>Reduce the GHG impact of employee commuting.</td>
<td>SA Metro Health District, Transportation &amp; Capital Improvement, Human Services</td>
<td>NT</td>
<td>L, H</td>
</tr>
<tr>
<td>M8</td>
<td>AIRPORT ACCREDITATION</td>
<td>Consider pursuing and achieving Airport Carbon Accreditation.</td>
<td>Aviation</td>
<td>LT</td>
<td>H</td>
</tr>
<tr>
<td>M9</td>
<td>PRIORITIZATION IN DECISION-MAKING</td>
<td>To encourage ongoing education and decision making around GHG reduction, include a carbon impact analysis in city projects and budgeting processes as well as consideration of City investments.</td>
<td>City Manager’s Office, Mayor and City Council, Office of Management &amp; Budget, Office of Sustainability</td>
<td>NT</td>
<td>L</td>
</tr>
<tr>
<td>M10</td>
<td>ENVIRONMENTALLY PREFERABLE PURCHASING</td>
<td>Update the City’s green purchasing policy to consider the life cycle impacts when choosing products.</td>
<td>Finance Department</td>
<td>LT</td>
<td>L</td>
</tr>
<tr>
<td>M11</td>
<td>GREEN SPECIFICATIONS</td>
<td>Reduce the GHG impact of materials specified in public works and roadway projects.</td>
<td>Transportation &amp; Capital Improvements, Finance Department</td>
<td>NT</td>
<td>L</td>
</tr>
<tr>
<td>M12</td>
<td>ZERO WASTE</td>
<td>Strive to achieve zero waste for all municipal government operations by 2030 with a focus on overall reduction, product reuse, and circularity.</td>
<td>Solid Waste Management Department, Office of Sustainability</td>
<td>LT</td>
<td>L</td>
</tr>
<tr>
<td>M13</td>
<td>GHG EDUCATION</td>
<td>Develop and implement a comprehensive sustainability and GHG education program for municipal employees.</td>
<td>Office of Sustainability</td>
<td>NT</td>
<td>L</td>
</tr>
</tbody>
</table>

LEGEND

- **GHG = GHG Reduction Potential (Total to 2030)**
  - H: High Reduction Potential: More than 10,000 tCO₂e by 2030
  - M: Medium Reduction Potential: 10,000 to 100,000 tCO₂e by 2030
  - L: Low Reduction Potential: Less than 10,000 tCO₂e by 2030
- **Co-Benefits**
  - AQ: Air Quality
  - NC: Natural Capital/Ecosystem Services
  - QJ: Quality Jobs
  - H: Health Outcomes
  - A: Affordability

**In Current City Plan**: Y = Yes

**Initiation Phase**
- NT: Near-term (Initiated by 2021)
- LT: Long-term

**Constraints**
- A: Awareness
- BC: Behavior Change
- P: Policy
- T: Technology
In recent decades, changes in climate have caused impacts on natural and human systems on all continents and across the oceans. “Impacts are due to observed climate change, irrespective of its cause, indicating the sensitivity of natural and human systems to changing climate.”

- IPCC 5th Assessment Report, 2014

ADAPTATION: PREPARING FOR A CHANGING CLIMATE

Our climate is becoming not only more extreme, but unpredictable from climate change. Projections show that in this century San Antonio will experience an increase in warm nights (>80°F), an increase in hot days (>100°F), the introduction of very hot days (>110°F), a decrease in annual rainfall, and more concentrated rainfall during short periods with an increased risk of severe flooding. What this means for our people and our city is the increased likelihood of exacerbated exposure, especially for our vulnerable populations; a greater potential for severe infrastructure damage; and the increased likelihood of negative health outcomes from vector-borne diseases and ozone exposure. The Vulnerability and Risk Assessment completed as part of the CAAP identifies twelve priority climate-related risks to be addressed through the adaptation actions that are part of this plan.

### HIGH RISKS
1. Increased exposure and risk of injury to vulnerable groups from heatwaves
2. Increased impacts from high ozone concentrations
3. Increased infrastructure damage from wildfires
4. Increased injury and mortality at low water crossings
5. Increased exposure and risk of injury to vulnerable groups from precipitation
6. Increased infrastructure damage from precipitation
7. Increased occurrence of vector-borne diseases
8. Increased need for waste and debris management
9. Reduced local food security from reduced production
10. Reduced abundance and health of native species and ecosystems
11. Increased mobility disruption for residents and City staff
12. Increased need for emergency management resources

### MEDIUM RISKS
- IPCC 5th Assessment Report, 2014
The impacts of our changing climate are already been felt across the globe. While the migration patterns described are locally and regionally specific, the climate change adaptation actions listed are general and applicable to the San Antonio region.

adaptation actions that address the need for changes to accommodate the impacts of climate change. These actions are expected to reduce the impacts of climate change on the city, its residents, and the local economy.

expected to reduce the impacts of climate change on the city, its residents, and the local economy. The adaptation actions described in this chapter will allow San Antonio to become more resilient to the impacts of climate change.

As an example, San Antonio will experience more frequent and severe heat waves, increased precipitation, and more intense and destructive wildfires. These changes will have significant impacts on the city's infrastructure, economy, and quality of life. The adaptation actions described in this chapter will help San Antonio prepare for and mitigate these impacts.

In addition to the benefits of becoming more resilient to climate change, the adaptation actions described in this chapter will also help San Antonio to improve its overall economic competitiveness and attractiveness to businesses and residents. By reducing the impacts of climate change, San Antonio will be able to attract more businesses and residents, which will help to support the local economy and improve the quality of life for all residents.

The vision for San Antonio's future is that of a resilient city, meaning a city that can maintain normal function in response to external stresses and shocks. Achieving this vision will require a multifaceted approach that includes both adaptation and mitigation actions. The adaptation actions described in this chapter are expected to reduce the impacts of climate change on the city, its residents, and the local economy.

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## ADAPTATION STRATEGIES

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<th>Risk</th>
<th>Climate Hazard</th>
<th>Benefit</th>
<th>LEAD / PARTNER AGENCIES</th>
<th>PHASE</th>
<th>RISK</th>
<th>LEAD / PERSISTENCY</th>
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<tbody>
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<td>Heatwaves</td>
<td>6</td>
<td>Office of Sustainability, Transportation &amp; Capital Improvements, Office of Emergency Management, SA Metropolitan Health District</td>
<td>Near-term (initiated by 2021)</td>
<td>1, 5</td>
<td>NT</td>
</tr>
<tr>
<td>Extreme Precipitation</td>
<td>Extreme Precipitation</td>
<td>Various (all)</td>
<td>Office of Sustainability, Transportation &amp; Capital Improvements, Office of Emergency Management, San Antonio Metropolitan Health District</td>
<td>Near-term (initiated by 2021)</td>
<td>1, 3, 5, 6, 11, 12</td>
<td>NT</td>
</tr>
</tbody>
</table>

**STRATEGIES**

1. **UTILITY RETROFIT FOR CLIMATE IMPACTS**: Focus on retrofitting existing utility systems to improve energy efficiency and reduce emissions, using available grants and other funding sources.

2. **BUILDING RETROFITS FOR VULNERABLE POPULATIONS**: Enhance mobility for low-income families, especially those with special needs, through improved public transportation and accessible housing.

3. **BUILDING RETROFITS FOR CRITICAL INFRASTRUCTURE**: Design and build new infrastructure with climate-resilient features to withstand extreme weather events, using existing grant programs.

4. **RESILIENCE IN BUILDING CODES AND PROGRAMS**: Assess opportunities to integrate resilience measures into building codes and programs, ensuring new developments meet climate change requirements.

5. **MOBILE HEALTH CLINICS**: Enhance mobile health clinics for underserved areas of the community, using existing grant programs.

6. **BUILDING RETROFITS FOR VULNERABLE POPULATIONS**: Provide support to developers to design their buildings to be resilient to climate impacts, using available grants.

7. **BUILDING RETROFITS FOR VULNERABLE POPULATIONS**: Support vulnerable populations with additional public water fountains, using existing grant programs.

8. **BUILDING RETROFITS FOR VULNERABLE POPULATIONS**: Enhance mobile health clinics for underserved areas of the community, using available grants.

9. **BUILDING RETROFITS FOR VULNERABLE POPULATIONS**: Support vulnerability as identified by the CDC Social Vulnerability Index, using existing grant programs.

10. **BUILDING RETROFITS FOR VULNERABLE POPULATIONS**: Assess and revise Heat Response Plan, ensuring it is up-to-date and reflects current climate conditions.

11. **BUILDING RETROFITS FOR VULNERABLE POPULATIONS**: Undertake risk assessment for managing the impacts of extreme heat, using available data.

12. **BUILDING RETROFITS FOR VULNERABLE POPULATIONS**: Monitor and manage climate change adaptation and mitigation plans, using existing grant programs.


14. **BUILDING RETROFITS FOR VULNERABLE POPULATIONS**: Assess and revise Heat Response Plan, ensuring it is up-to-date and reflects current climate conditions.

15. **BUILDING RETROFITS FOR VULNERABLE POPULATIONS**: Undertake risk assessment for managing the impacts of extreme heat, using available data.

16. **BUILDING RETROFITS FOR VULNERABLE POPULATIONS**: Monitor and manage climate change adaptation and mitigation plans, using existing grant programs.

17. **BUILDING RETROFITS FOR VULNERABLE POPULATIONS**: Join FEMA's Community Rating System, using available grants.

---

**LEGEND**

- **RED**: Climate Resilience
- **GREEN**: Infrastructure Resilience
- **ORANGE**: Threats & Risks
- **BLUE**: Mitigation
- **STRENGTHEN PUBLIC HEALTH SYSTEMS**
- **INCREASE INFRASTRUCTURE DEVELOPMENT SERVICES DEPARTMENT**
- **OFFICE OF SUSTAINABILITY**
- **NEIGHBORHOOD & HOUSING SERVICES**
- **SAN ANTONIO CLIMATE READY**
- **DRAFT**

---

**2019 REPORT | SAN ANTONIO CLIMATE READY**
### Mitigation Strategies

<table>
<thead>
<tr>
<th>STRATEGIES</th>
<th>LEAD / PARTNER AGENCIES</th>
<th>BENEFITS</th>
<th>RISK</th>
<th>CLIMATE HAZARD</th>
<th>Mitigation Benefit</th>
<th>PHASE</th>
<th>LEAD AGENCY</th>
<th>DRAFT</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>ENSURE WASHING SYSTEMS are used and repair and maintain as needed to prevent water loss</td>
<td>Various (all)</td>
<td>6, 11</td>
<td>Extreme Precipitation</td>
<td>Disruption to critical infrastructure, such as overhead power lines.</td>
<td>DT</td>
<td>LT</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>FOOD BOXES are distributed to at-risk households during extreme weather events</td>
<td>Various (all)</td>
<td>6, 11</td>
<td>Extreme Precipitation</td>
<td>Disruption to critical infrastructure, such as overhead power lines.</td>
<td>DT</td>
<td>LT</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>WILDLANDS are protected by establishing or enhancing firebreaks</td>
<td>Various (all)</td>
<td>6, 11</td>
<td>Extreme Precipitation</td>
<td>Disruption to critical infrastructure, such as overhead power lines.</td>
<td>DT</td>
<td>LT</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>DAMAGE COST ASSESSMENT PROCEDURE is used for extreme weather events</td>
<td>Various (all)</td>
<td>1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12</td>
<td>Heatwaves; Extreme Precipitation</td>
<td>Disruption to critical infrastructure, such as overhead power lines.</td>
<td>LT</td>
<td>LT</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>EMERGENCY PLANNING FOR VULNERABLE GROUPS includes collaboration and communication with partners</td>
<td>Various (all)</td>
<td>1, 5</td>
<td>Extreme Precipitation</td>
<td>Disruption to critical infrastructure, such as overhead power lines.</td>
<td>LT</td>
<td>LT</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>INCREASE CAPACITY ON ALTERNATE TRANSPORTATION ROUTES includes training on and use of mass transit systems and other commuter mechanisms</td>
<td>Various (all)</td>
<td>1, 3, 4, 5, 6, 10</td>
<td>Various (all)</td>
<td>Extreme Precipitation</td>
<td>LT</td>
<td>LT</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>WILDFIRE MITIGATION includes the creation of fuel breaks and other strategies to reduce wildfire risk</td>
<td>Various (all)</td>
<td>12</td>
<td>Various (all)</td>
<td>Extreme Precipitation</td>
<td>LT</td>
<td>LT</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>WILDFIRE SIMULATION AND SURVEILLANCE TOOLS include using emerging technologies to improve the City's ability to conduct fire simulations and response planning</td>
<td>Various (all)</td>
<td>1, 5</td>
<td>Extreme Precipitation</td>
<td>Disruption to critical infrastructure, such as overhead power lines.</td>
<td>LT</td>
<td>LT</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>COMPLIANCE REGULATIONS TO VALUE LEADERSHIP AND RISK ASSESSMENT</td>
<td>Various (all)</td>
<td>1, 5</td>
<td>Extreme Precipitation</td>
<td>Disruption to critical infrastructure, such as overhead power lines.</td>
<td>LT</td>
<td>LT</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>MARKETS are used to generate revenue and support community infrastructure</td>
<td>Various (all)</td>
<td>1, 5</td>
<td>Extreme Precipitation</td>
<td>Disruption to critical infrastructure, such as overhead power lines.</td>
<td>LT</td>
<td>LT</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>WASTE / DEBRIS SURVEY AND RESPONSE includes the management of waste and debris after extreme weather events</td>
<td>Various (all)</td>
<td>1, 5</td>
<td>Extreme Precipitation</td>
<td>Disruption to critical infrastructure, such as overhead power lines.</td>
<td>LT</td>
<td>LT</td>
<td></td>
</tr>
</tbody>
</table>
## Adaptation Strategies

### Local Crop Diversification
Work with agriculture experts to identify and test more drought- and pest-resistant crop options for local food production in San Antonio and support wildlife that provides ecosystem services that enhance agriculture production.

### State of the Food System Fund
Fund and hire a Food Policy Coordinator to develop a State of the Food System report to understand extent to which food supply chain is resilient (SA Tomorrow, FSS, FS6).

### Pursue Urban Agriculture Opportunities
Assess pilot urban agriculture projects, such as Million San Juan Capistrano, for potential duplication on other properties and incentives and provide resources to facilitate urban agricultural uses on vacant or underutilized land, including City-owned and other public land (SA Tomorrow, FSS).

### Urban Agriculture Training Program
Develop urban agriculture training programs to train new urban farmers in climate-resilient agriculture and business practices (including low-carbon food production and processing) (SA Tomorrow, FSS).

### Controlled Environment Agriculture
Consider opportunities for controlled-environment agriculture (hydroponics, aquaculture, etc.) to increase local production of food that is less energy and water intensive and protected from climate extremes.

### Incentivize Local Food Production
Increase local food production through various incentive programs, e.g., through provision of rebates for the purchasing of equipment to enable precision farming/machine harvesting resilient to extreme weather conditions, rebates for on-farm chicken keeping, etc.

### Support and Enhance Community Garden Network
Provide resources to ensure the viability of neighborhood-based gardens that contribute to local food production and beneficial pollinator habitat.

### Business Resiliency Assessment
Engage with the local business community to determine how to best undertake a vulnerability assessment (in a confidential, anonymous manner) to consider wide ranging impacts of a changing climate to business continuity, economic growth, and unintended consequences.

### Climate Resilience Education and Outreach
Initiate a climate education campaign for businesses and property owners, including details about how to make built and natural infrastructure more resilient to existing and projected changes in climate (SA Tomorrow, G81) for residents and businesses. Highlight successful projects through resiliency tours.

### Equity Assessment of Sustainability Programs
Work with the Office of Equity to ensure existing and future sustainability programs and initiatives prioritize vulnerable populations and equitable outcomes.

### Prioritization of Vulnerable Residents
Work with partners to identify vulnerable individuals and groups, e.g., homebound individuals, disabled, elderly, etc. to prioritize adaptation actions.

### Anti-Displacement Measures
Develop measures to prevent displacement to ensure vulnerable groups, small businesses, and existing residents can stay in their homes/districts and benefit from resilience measures.

### LEAD & PARTNER OFFICES

<table>
<thead>
<tr>
<th>RISK</th>
<th>CLIMATE HAZARD</th>
<th>MITIGATION BENEFIT</th>
<th>LEAD &amp; PARTNER AGENCIES</th>
<th>PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Various (Drought, Heatwaves, Extreme Precipitation)</td>
<td>Local Crop Diversification</td>
<td>FOOD POLICY COUNCIL OF SAN ANTONIO, San Antonio Food Bank, the Nature Conservancy of Texas, IBI Conservation International</td>
<td>LT</td>
</tr>
<tr>
<td>9</td>
<td>Various (All)</td>
<td>State of the Food System Fund</td>
<td>OFFICE OF SUSTAINABILITY</td>
<td>LT</td>
</tr>
<tr>
<td>9</td>
<td>Various (All)</td>
<td>Pursue Urban Agriculture Opportunities</td>
<td>FOOD POLICY COUNCIL OF SAN ANTONIO, Office of Sustainability, Parks &amp; Recreation, Green Spaces Alliance of South Texas, San Antonio Food Bank</td>
<td>LT</td>
</tr>
<tr>
<td>9</td>
<td>Various (All)</td>
<td>Urban Agriculture Training Program</td>
<td>FOOD POLICY COUNCIL OF SAN ANTONIO, San Antonio Food Bank</td>
<td>LT</td>
</tr>
<tr>
<td>9</td>
<td>Various (All)</td>
<td>Controlled Environment Agriculture</td>
<td>FOOD POLICY COUNCIL OF SAN ANTONIO, San Antonio Food Bank</td>
<td>LT</td>
</tr>
<tr>
<td>9</td>
<td>Various (All)</td>
<td>Incentivize Local Food Production</td>
<td>FOOD POLICY COUNCIL OF SAN ANTONIO, San Antonio Food Bank</td>
<td>LT</td>
</tr>
<tr>
<td>9, 10</td>
<td>Various (All)</td>
<td>Support and Enhance Community Garden Network</td>
<td>FOOD POLICY COUNCIL OF SAN ANTONIO, Office of Sustainability, Parks &amp; Recreation, Green Spaces Alliance of South Texas, Parks &amp; Recreation, SAWS, Development Services Department</td>
<td>LT</td>
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<tr>
<td>1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12</td>
<td>Various (All)</td>
<td>Business Resiliency Assessment</td>
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<tr>
<td>1, 3, 4, 5, 6, 10</td>
<td>Various (All)</td>
<td>Climate Resilience Education and Outreach</td>
<td>OFFICE OF SUSTAINABILITY</td>
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<tr>
<td>1, 5</td>
<td>Various (All)</td>
<td>Equity Assessment of Sustainability Programs</td>
<td>OFFICE OF EQUITY</td>
<td>NT</td>
</tr>
<tr>
<td>1, 5</td>
<td>Various (All)</td>
<td>Prioritization of Vulnerable Residents</td>
<td>OFFICE OF EMERGENCY MANAGEMENT</td>
<td>NT</td>
</tr>
<tr>
<td>1, 5</td>
<td>Various (All)</td>
<td>Anti-Displacement Measures</td>
<td>NEIGHBORHOOD &amp; HOUSING SERVICES</td>
<td>LT</td>
</tr>
</tbody>
</table>

### LEAD Agency Leading the Initiative

- OFFICE OF SUSTAINABILITY
- OFFICE OF EQUITY
- OFFICE OF EMERGENCY MANAGEMENT
- NEIGHBORHOOD & HOUSING SERVICES
Both climate action and adaptation demand the collective commitment of the entire community.

IMPLEMENTING THE PLAN

San Antonio’s response to climate change is already underway. Between 2014 and 2016, the city reduced GHG emissions by 10%, and in early 2019, the City received a financial jump start through support from the Bloomberg American Cities Climate Challenge, which pledged up to $2.5 million in staff and technical resources to support near-term climate action in San Antonio.

Successful implementation of the CAAP will require collective awareness, action, and participation from all members of San Antonio’s community. The specific mitigation and adaptation strategies described in this plan have been selected based on initial analysis of greenhouse gas reduction potential and the ability to increase community resilience. However, SA Climate Ready only serves as a framework for climate action and adaptation, and as such, additional analysis is required for strategies prior to implementation.

Implementation criteria will include the following analysis based upon applicability, strategy type, and data availability:

- **Strategy Costs:** Potential fiscal costs by sector; Co-benefits; Cost avoidance; Cost per ton of CO₂e reduction; Funding mechanisms, if needed.
- **Technological Feasibility:** Consideration of proposed technology or strategy against technological constraints; Assessment of the carbon footprint or lifecycle emissions of specific technologies being proposed compared to other options; Reliability or proposed technology to meet expected performance.
- **Timeline:** For both implementation and resulting emissions reductions.
- **Equity:** Assessment to determine potential impacts on vulnerable populations.
ANNUAL PLANNING WITH KEY INSTITUTIONAL PARTNERS

COMMUNITY ENGAGEMENT

Diverse Stakeholder Convene Groups Analysis Benefit Cost-Assessment

GOVERNANCE

A CoSA CAFP Executive Team will be established to provide strategic direction and ensure overall organizing alignment on work related to the CAFP including execution of the City’s Climate Action and Adaptation Goals. The CAFP Executive Team will serve as a cross-functional and interdepartmental team to manage activities related to the CAFP including execution of the City’s Climate Action and Adaptation Goals. Diverse perspectives and expertise are critical for successful implementation of the CAFP.

The Office of Sustainability will:

• Direct the completion of a full GHG inventory and update of the CAAP. This committee will provide an annual report to City Council on committee activities and subcommittee meetings.
• Provide annual updates on progress towards the SA Climate Ready goals in the City’s budgeting, capital improvement, and institutional project plans.

IMPLEMENTATION PROCESS

Reporting

• Reporting CAFP metrics through the SA Tomorrow Sustainability dashboard and through the annual State of Sustainability report. The CAFP metrics will be used to track progress towards the SA Climate Ready goals.

ANNUAL PLANNING

• Reporting CAFP metrics through the SA Tomorrow Sustainability dashboard and through the annual State of Sustainability report. The CAFP metrics will be used to track progress towards the SA Climate Ready goals.

INSTITUTIONAL PARTNERS

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A CoSA CAFP Delivery Team will be led by the Office of Sustainability and be responsible for institutional partners to execute the CAFP. This group will be responsible for institutional partners to execute the CAFP. This group will serve as a cross-functional and interdepartmental team to manage activities related to the CAFP including execution with current and future organizational goals.

The Office of Sustainability will:

• Provide annual updates on progress towards the SA Climate Ready goals in the City’s budgeting, capital improvement, and institutional project plans.

COMMUNITY ENGAGEMENT

To ensure representation of a diversity of sectors and perspectives, the CAFP will include representatives from community, business, and institutional partners.

Prior Strategies Identified

• Key Stakeholders, including scientific and trade leaders, business and institutional partners, and community leaders always have access to basic metrics around goal progress. Likewise, continued community engagement and robust outreach around climate education will ensure continued awareness and input throughout plan implementation.

CLIMATE ACTION

In general, this advisory committee composition will reflect ongoing collaborative planning with the charge of working collaboratively on implementing the CAFP. The group will be established to ensure continued awareness and input throughout plan implementation.

specific responsibilities include:

• Bringing diverse stakeholder opinions to the table, with a specific focus on marginalized communities to ensure an equity-centered approach.
• Piloting the Climate Equity Screening Tool, through review of implementation actions to ensure proper identification, tracking, and reporting climate equity metrics.
• Ensuring climate equity consideration is brought forth in all actions and policy reviewed through the Technical and Community Advisory Committee.

A CAFP Technical and Community Advisory Committee will be established to provide strategic direction and ensure overall organizing alignment on work related to the CAFP including execution of the City’s Climate Action and Adaptation Goals. Diverse perspectives and expertise are critical for successful implementation of the CAFP.

The CAFP Advisory Committee will serve as a cross-functional and interdepartmental team to manage activities related to the CAFP including execution with current and future organizational goals.

Specific responsibilities include:

• Key stakeholders, including scientific and trade leaders, business and institutional partners, and community leaders always have access to basic metrics around goal progress. Likewise, continued community engagement and robust outreach around climate education will ensure continued awareness and input throughout plan implementation.

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• Key stakeholders, including scientific and trade leaders, business and institutional partners, and community leaders always have access to basic metrics around goal progress. Likewise, continued community engagement and robust outreach around climate education will ensure continued awareness and input throughout plan implementation.
Equity means that our policy-making, service delivery, and distribution of resources account for the different histories, challenges, and needs of the people we serve. Equity differs from equality, which treats everyone the same despite disparate outcomes. (City of San Antonio, Equity Office, 2017)

Due to these different histories and challenges, not all community members are contributing equally to climate change, and not all community members have the same resources or capabilities to protect themselves from or adapt to climate impacts. A climate equity framework prioritizes the communities burdened the most by climate change, those that contribute the least to climate change, and those most socially vulnerable to climate change.

Marginalized communities experience heightened risk and increased sensitivity to climate change and have fewer resources to cope with, adapt to, or recover from climate impacts. In the coming decades, we expect the projected changes in San Antonio’s climate to negatively impact all residents, especially those living in heat-prone and flood-prone areas of the city and those who work outside. However, marginalized communities possess the following characteristics that make them disproportionately more vulnerable under San Antonio’s changing climate:

1. Increased vulnerability to heat-related illnesses, respiratory illnesses, or vector-borne diseases
2. Reduced mobility due to flooding, extreme heat and related impacts to transportation infrastructure
3. High exposure to GHG emission sources and environmental pollution
4. Lack of representation in local government
5. Lack of information and economic resources to respond to environmental and climate threats

Equity is at the heart of our CAAP. As such, we aim to ensure San Antonio’s smallest and most marginalized communities are meaningfully engaged in climate planning and implementation and that policymakers have the tools to prioritize equitable outcomes.

SAN ANTONIO’S COMMITMENT TO CLIMATE EQUITY

In the City of San Antonio, we recognize our responsibility for driving systemic change that eliminates inequities. Understanding the historical legacies, structures, and policies that have resulted in and continue to perpetuate racial and economic inequities in San Antonio can assist in understanding why some communities are more burdened by the effects of climate change than others.

Government plays a key role in addressing local climate action, just as it bears some of the responsibility for driving systemic change that eliminates inequities. Understanding the historical legacies, structures, and policies that have resulted in and continue to perpetuate racial and economic inequities in San Antonio can assist in understanding why some communities are more burdened by the effects of climate change than others.

What Does Climate Equity Mean for San Antonio?

Developed by the Climate Equity Technical Working Group. The definition will be updated as continued climate equity discussions occur through plan implementation.

Recognizing History to Address the Future

To address climate impacts and the resulting risks and uncertainties, San Antonio’s Climate Action and Adaptation Plan (CAAP) looks back at the city’s history and aligns with the United Nations Framework Convention on Climate Change (UNFCCC)

1. Actively seek, include, and prioritize direction from these communities.
2. Prioritize benefits to these communities.
3. Reduce existing burdens and barriers to these communities.

Climate Change Impacts:

Impacts, primarily in the form of heat and flooding, are projected to affect all communities in San Antonio. However, marginalized communities experience higher risks and are disproportionately impacted by climate change. Differences in infrastructure, income, race, and other factors can result in disproportionate outcomes.

1. Increased vulnerability to heat-related illnesses, respiratory illnesses, or vector-borne diseases
2. Reduced mobility due to flooding, extreme heat and related impacts to transportation infrastructure
3. High exposure to GHG emission sources and environmental pollution
4. Lack of representation in local government
5. Lack of financial means to respond to environmental and economic stresses

Equity is at the heart of our CAAP. Equitable outcomes require clear, focused implementation of the climate equity framework and intentional policies and projects to mitigate or adapt to climate change. San Antonio’s CAAP is being guided by a Climate Equity Working Group to ensure that everyone’s voices are heard and that the city adopts policies that prioritize climate equity.

San Antonio’s Climate Action and Adaptation Plan

San Antonio’s Climate Action and Adaptation Plan (CAAP) is a comprehensive strategy designed to help the city reduce greenhouse gas emissions and adapt to the impacts of climate change. The CAAP is guided by the Climate Equity Working Group, which ensures that San Antonio’s actions benefit everyone.

1. Climate change affects everyone, but not all people are impacted equally. Across the world and right here in San Antonio, many people are more burdened by climate change than others.
2. Climate equity means that the policy-making, service delivery, and distribution of resources account for the different histories, challenges, and needs of the people we serve. Equity differs from equality, which treats everyone the same despite disparate outcomes.
3. Marginalized communities experience heightened risk and increased sensitivity to climate change and have fewer resources to cope with, adapt to, or recover from climate impacts.
4. San Antonio’s Climate Action and Adaptation Plan (CAAP) is being guided by the Climate Equity Working Group to ensure that everyone’s voices are heard and that the city adopts policies that prioritize climate equity.

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Latino residents as “definitely declining” or “hazardous” as a means to deny home loans to people living in these communities, which continues today.

In San Antonio, marginalized communities are particularly burdened due to historic and current inequities in housing, health care, education, criminal justice, and other quality-of-life outcomes that have made them particularly vulnerable to a changing climate. Specifically, housing discrimination and segregation, neglected infrastructure, and a lack of investment in public amenities exemplify the structural and institutional forms of racism contributing to current inequities and increased climate vulnerabilities.

As discussed above, the Screening Tool (pages 58-59) will be continually refined and tested to ensure clear equity gains, centered on five climate equity themes:

1. **Access and Accessibility**
   - Increased access to jobs, housing, transportation, funding, education, healthy foods, and clean air

2. **Affordability**
   - Lower / more predictable costs related to basic living needs (e.g., housing, food, utilities, healthcare, transportation, etc.) for marginalized communities

3. **Cultural Preservation**
   - Respecting and honoring cultural relevance & history

4. **Health**
   - Increased health (physical and mental) for vulnerable communities

5. **Safety and Security**
   - Mitigation of potential threats as well as access to critical lifelines, when (or before) threats are experienced

The vision: defining climate equity in San Antonio

The C40 Climate Ready is part of a broader shift towards new models and institutionalizing equity in city services, programs, and policies. The C40’s climate equity approach will guide the city’s consideration of equity in its climate policies and programs to achieve more environmentally and economically just outcomes for San Antonians.
### Theme 1: Access and Accessibility

**Desired Outcome:** Results in increased access to jobs, housing, transportation, funding, education, healthy foods, and clean air for vulnerable populations.

<table>
<thead>
<tr>
<th>SAMPLE SUPPLEMENTAL QUESTIONS</th>
<th>IMPACT: Does it have the ability to positively/negatively impact or have no impact on the desired outcome? (Include explanation.)</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Could this expand access to healthy/clean transportation systems, such as walking paths, bike routes, and public transit?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this increase amenities and walkability in traditionally underserved geographic/neighborhoods?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this reduce food insecurity in low-income areas by increasing access to healthy, local food sources?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this increase access to information around climate, i.e. impacts, benefits, and programs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this increase access to quality parks/greenspaces in the most vulnerable communities?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this increase opportunities for living wage jobs in the same zip code as people live?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Will this offer workforce or support training programs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other considerations?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUMMARY:**

### Theme 2: Affordability

**Desired Outcome:** Results in lower/more predictable costs related to basic living needs (housing, food, utilities, healthcare, transportation, etc.) for vulnerable populations.

<table>
<thead>
<tr>
<th>SAMPLE SUPPLEMENTAL QUESTIONS</th>
<th>IMPACT: Does it have the ability to positively/negatively impact or have no impact on the desired outcome? (Include explanation.)</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Could this reduce the number of families that are cost burdened by housing + transportation (defined as spending more than 33% of income on H+T)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this limit displacement of residents and small businesses when surrounding property values rise?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this increase energy price stability?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this reduce barriers to homeownership?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does this offer inclusive financing strategies that prioritize the most income-burdened populations?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this increase quality affordable (30-60% AMI) housing stock?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other considerations?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUMMARY:**

### Theme 3: Cultural Preservation

**Desired Outcome:** Respecting/honoring cultural relevance and history.

<table>
<thead>
<tr>
<th>SAMPLE SUPPLEMENTAL QUESTIONS</th>
<th>IMPACT: Does it have the ability to positively/negatively impact or have no impact on the desired outcome? (Include explanation.)</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does this acknowledge/respect/ honor the culture, historic assets, and traditions of communities of color?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does this negatively impact the existing cultural structure?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does this increase social cohesion (engagement and connection) within or to the community?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other considerations?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUMMARY:**

### Theme 4: Health

**Desired Outcome:** Results in increased health (physical and mental) for vulnerable populations.

<table>
<thead>
<tr>
<th>SAMPLE SUPPLEMENTAL QUESTIONS</th>
<th>IMPACT: Does it have the ability to positively/negatively impact or have no impact on the desired outcome? (Include explanation.)</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Could this reduce ground-level ozone and improve air quality?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this extend expected longevity for vulnerable populations and result in reduced disparity in expected longevity?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this reduce asthma-related hospital visits?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this reduce Urban Heat Island effects?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this reduce standing water in areas of reduced drainage and resulting vector-borne disease?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this improve walkability of communities and access to greenspaces?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this reduce stress, anxiety, and depression, i.e. increase mental health?</td>
<td></td>
<td></td>
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<tr>
<td>Other considerations?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUMMARY:**

### Theme 5: Safety & Security

**Desired Outcome:** Results in mitigation of potential threats to vulnerable populations and increased access to critical lifelines when (or before) threats are experienced.

<table>
<thead>
<tr>
<th>SAMPLE SUPPLEMENTAL QUESTIONS</th>
<th>IMPACT: Does it have the ability to positively/negatively impact or have no impact on the desired outcome? (Include explanation.)</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Could this result in improved flooding infrastructure, responses to flooding, and evacuation routes?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this increase access to essential services such as hospitals, police, and fire?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this improve notification and/or preparation for disasters?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this reduce areas focused on vulnerable zip codes?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this increase safety and security in the community?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this reduce urban heat island effects?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other considerations?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUMMARY:**
METHODOLOGY

This appendix includes summaries of the various methodologies used in the development of the CAAP. In many cases, more detailed methodologies can be found in the companion reports, including the 2016 GHG Emissions Inventory, the 2018 Climate Projections for the City of San Antonio, and the 2019 Vulnerability and Risk Assessment.

1. GHG Inventory

The 2016 San Antonio GHG Inventory includes inventories at two scales: the Community Inventory and the Municipal Inventory. These inventories are developed using separate, best-practice accounting protocols and have overlapping, yet distinct scopes and boundaries. The community inventory includes all emissions sources within San Antonio’s geographic boundary, whereas the municipal inventory includes only the emissions from sources under direct control of the City Government. The municipal inventory is a subset of the community inventory; all municipal emissions sources are included in the community inventory.

The municipal inventory is meant to be illustrative only and should not be added to the community inventory total, as that would result in a double-counting of the municipal government emissions sources.

GEOGRAPHIC BOUNDARY: Both the community and municipal inventories use the administrative boundary of the City of San Antonio as their geographic boundary. All emissions included in this inventory relate to actions inside this geographic boundary. This geographic boundary is particularly important in relation to the emissions from CPS Energy, a municipal utility serving the City of San Antonio and surrounding areas. CPS Energy is unique from other municipal inventories in that the utility is not under direct control of the city government.

In 2016, CPS Energy was responsible for total emissions of 11.3 MtCO₂e. From electricity generation, the Local Government Operations Protocol (LGOP), which provides a methodology for accounting for emissions from municipal inventories, only the emissions from electricity generation related to Scope 2 emissions within the City of San Antonio’s geographic boundary are included in the GHG inventory totals (7.1 MtCO₂e).

COMMUNITY GHG INVENTORY PROTOCOL:
The 2016 San Antonio Community GHG Inventory was assembled according to the Global Protocol for Community-Scale Greenhouse Gas Emissions (GPC), a reporting standard developed for cities by the World Resources Institute (WRI), C40 Cities Climate Leadership Group, and ICLEI-Local Governments for Sustainability (ICLEI). The GHG inventory data was collected in a reporting tool that was developed for Sustainability (ICLEI). The municipal inventory follows the BASIC reporting level, exceeding the requirements of this level by including the largest industrial process emissions.

The community inventory is an accounting of GHG emissions resulting from process and activities occurring within the geographic boundary of the City of San Antonio, which in 2016 comprised a population of just under 1.5 million. The community inventory includes emissions from electricity and natural gas usage in buildings; vehicular transportation within city boundaries; waste including solid waste and wastewater; energy production and energy use in energy industries and industrial processes. The community inventory data was collected using the City Reporting and Information System (CIRIS) tool developed by C40 Cities.

MUNICIPAL GHG INVENTORY PROTOCOL:
To understand the impact of city government operations, San Antonio completed a detailed inventory of GHG emissions resulting from city government operations. The 2016 San Antonio Municipal Greenhouse Gas Inventory follows the LGOP, developed by ICLEI-Local Governments for Sustainability (ICLEI). The municipal inventory includes emissions from electricity and natural gas usage in city-owned facilities, streetlights and traffic signals, city-owned vehicles, as well as city-owned and operated landfills. The municipal inventory is collected in a reporting tool that was developed for the City as part of the 2014 inventory, with updates to reflect new data and added sector emissions.

Municipal emissions are also included in the community inventory in the appropriate sectors. The municipal inventory is meant to be illustrative only and should not be added to the community inventory.
In accordance with the GPC protocol, CPS Energy was from renewables, 32% from nuclear, and 45% from coal, resulting in an emissions factor of 0.42 kg CO₂e / kWh.

The SA Climate Ready CAAP directly addresses GHG reductions for the portion of CPS Energy’s emissions attributable to electricity use within the geographic boundary of the City of San Antonio. However, any reductions in the carbon intensity of CPS Energy's emissions will apply to the entirety of the CPS Energy service area as the same emission factor will be used to calculate all of CPS Energy’s emissions, regardless of location.

**ACKNOWLEDGEMENT OF UNCERTAINTY:** A GHG inventory contains a level of uncertainty due to the natural presence of uncertain elements within the data collection process and the climate science involved in the GHG calculations. The results of the inventory should be interpreted with the acknowledgment of a degree of uncertainty. Though there is some uncertainty, the GHG inventory results can provide helpful information to the City of San Antonio to assist in the development of policy and community change.

**3. The Mitigation Goal: Paris-Compliance**

In 2018 the Intergovernmental Panel on Climate Change (IPCC) released the “Special Report: Global Warming of 1.5°C.” This long awaited report provides clarity around the global emissions reductions required to keep global warming below 1.5°C. For reduction pathways that are technically feasible currently, i.e. include no or limited overshoot of 1.5°C, the report states that “global anthropogenic CO₂ emissions decline by about 45% from 2010 levels by 2030, reaching net zero around 2050.” as illustrated in the 1.5°C pathway graphic on page 64. To limit global warming to below 2°C, “CO₂ emissions are projected to decline by about 23% by 2030 in most pathways and reach net zero around 2070.”

The pathway to reach carbon neutrality can take many forms, but the science agrees on the fact that in order to limit global warming to 1.5°C or even 2°C “requires rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems.”

**APPENDIX I**

**METHODOLOGY**

Because GHGs differ in their ability to absorb energy and their lifetime in the atmosphere, their impacts are converted to a common unit: carbon dioxide equivalent (CO₂e); this conversion is conducted using the gas-specific global warming potential (GWP). The larger the GWP, the more a particular GHG warms the Earth over a particular timeframe. The standard GWP is calculated from activity data using emissions factors based on specific emission factors.

**DATA COLLECTION:** Developing a GHG inventory for a city requires the employment of a calculation-based methodology because GHG emissions cannot be directly measured at their source. A calculation-based methodology converts GHG-inducing activities into emissions based on specific emission factors.

**ELECTRICITY EMISSIONS FACTOR:** The electricity emissions factor used in the 2016 San Antonio GHG inventory reflects the CO₂ intensity of CPS Energy’s fuel mix. In 2016, 13% of the electricity supplied by CPS Energy was from renewables, 32% from nuclear, 28% from natural gas and 29% from coal, resulting in an emissions factor of 0.42 kg CO₂e / kWh.

The SA Climate Ready CAAP directly addresses GHG reductions for the portion of CPS Energy’s emissions attributable to electricity use within the geographic boundary of the City of San Antonio. However, any reductions in the carbon intensity of CPS Energy’s emissions will apply to the entirety of the CPS Energy service area as the same emission factor will be used to calculate all of CPS Energy’s emissions, regardless of location.

**ACKNOWLEDGEMENT OF UNCERTAINTY:** A GHG inventory contains a level of uncertainty due to the natural presence of uncertain elements within the data collection process and the climate science involved in the GHG calculations. The results of the inventory should be interpreted with the acknowledgment of a degree of uncertainty. Though there is some uncertainty, the GHG inventory results can provide helpful information to the City of San Antonio to assist in the development of policy and community change.

**2. Business as Usual GHG Emissions**

Quantifying the impacts of GHG reduction strategies requires an understanding of the baseline, or what would happen without intervention, defined as the Business as Usual (BAU) scenario. For San Antonio, as one of the fastest-growing cities in the nation, this means a significant growth in GHG emissions.

For the purpose of evaluating the CAAP strategies, the BAU scenario:

- Includes expected population growth, which is expected to increase at 2.16% annually, adding 1 million residents to the city by 2040.
- Includes expected improvements in the efficiency of appliances and vehicles as projected by the EIA and DOE.
- Includes reductions in emissions from closed landfills, which will naturally decrease as waste decays.
- Note: new solid waste and wastewater emissions are expected to grow with population growth.
- Does not include the expected reductions in the carbon intensity of the energy supplied by CPS Energy, which is expected to steadily decrease through 2040 as outlined in the Flexible Path.

The carbon reductions forecasted to be achieved by CPS Energy are quantified as part of the carbon mitigation strategies.

**3. The Mitigation Goal: Paris-Compliance**

In 2018 the Intergovernmental Panel on Climate Change (IPCC) released the “Special Report: Global Warming of 1.5°C.” This long awaited report provides clarity around the global emissions reductions required to keep global warming below 1.5°C. For reduction pathways that are technically feasible currently, i.e. include no or limited overshoot of 1.5°C, the report states that “global anthropogenic CO₂ emissions decline by about 45% from 2010 levels by 2030, reaching net zero around 2050.” as illustrated in the 1.5°C pathway graphic on page 64. To limit global warming to below 2°C, “CO₂ emissions are projected to decline by about 23% by 2030 in most pathways and reach net zero around 2070.”

The pathway to reach carbon neutrality can take many forms, but the science agrees on the fact that in order to limit global warming to 1.5°C or even 2°C “requires rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems.”
GHG MITIGATION POTENTIAL: The CURB tool was used to estimate most of the mitigation strategies, but some could not be modeled through the tool. For those strategies, the consultant team relied on expert knowledge and qualitative approaches to estimate the potential benefit of each action. The evaluation and assessment of the potential benefit of each action used a qualitative approach based on expert judgment and input from the Technical Working Groups and Steering, the City of San Antonio, and Bexar County.

Defining questions were developed in coordination with the Technical Working Groups to ensure consistency of interpretation. The evaluation of the potential benefit of each action used a qualitative approach based on expert judgment and input from the Technical Working Groups and Steering, the City of San Antonio, and Bexar County.

The benefits that are above and beyond the direct GHG impact are referred to as co-benefits. Co-benefits can range from increased human health outcomes such as asthma, obesity, and diabetes to increased income such as increased median household income. Co-benefits to San Antonio staying in San Antonio for economic reasons such as job growth and improved air quality compliance, as defined by the EPA.

Defining questions were developed in coordination with the Technical Working Groups to ensure consistency of interpretation. The evaluation of the potential benefit of each action used a qualitative approach based on expert judgment and input from the Technical Working Groups and Steering, the City of San Antonio, and Bexar County.

The benefits that are above and beyond the direct GHG impact are referred to as co-benefits. Co-benefits can range from increased human health outcomes such as asthma, obesity, and diabetes to increased income such as increased median household income. Co-benefits to San Antonio staying in San Antonio for economic reasons such as job growth and improved air quality compliance, as defined by the EPA.
METHODOLOGY CONT.

- Could this reduce impacts that result in low quality of life, i.e. traffic congestion and limited access to needed resources, such as food?
- Could this increase the mental health and quality of life of residents?

Affordability (A)
- Could this mean increased affordability of goods and services for San Antonio residents?
- Could this reduce household costs, i.e. household utility bills for San Antonio residents?
- Could this address affordability disparities?

6. Vulnerability/Risk Assessment

The CAAP Vulnerability and Risk Assessment characterizes the key climate-related vulnerabilities faced by the City of San Antonio and categorizes the highest priority vulnerabilities into low, medium, and high risks based on both the likelihood and consequence of their impacts. Potential climate impacts are determined in accordance with the most recent climate projections for the City of San Antonio.68 as well as data collected from multiple City departments, other local government agencies, and quasi-governmental partners. This assessment is an update to the city’s previous vulnerability assessment completed in 2016.

SCOPE: The Vulnerability and Risk Assessment primarily focuses on the identification of climate-related impacts from a municipal government perspective, including vulnerabilities and risks to city operations, staff, assets, and infrastructure, as well as a scan of impacts to the wider community. It is important to note that the wider community impacts are assessed in terms of the potential vulnerabilities and risks to city government (e.g. more frequent extreme temperatures would significantly impact vulnerable populations, which would require additional resources, staff, and response capabilities from a municipal perspective).

FRAMEWORK: The Vulnerability and Risk Assessment follows a best-practice methodology outlined in the Guide and Workbook for Municipal Climate Adaptation published by ICLEI.69 The framework lays out distinct methodologies to assess climate-related vulnerabilities and risks.

VULNERABILITY: Vulnerability describes the susceptibility of a particular service, asset, or community to the negative impacts of climate change. Vulnerability is assessed on a scale of 1-5 and is determined by combining numerical ratings for sensitivity and adaptive capacity, where sensitivity refers to the potential effects a climate impact may have on the functionality of a service, asset, or community and adaptive capacity refers to the ability of a service, asset or community to adapt to those potential impacts.

RISK: Risk refers to the combination of a hazard’s likelihood and consequence, as summarized by the following function:

\[
\text{Risk} = \text{Likelihood} \times \text{Consequence}
\]

Likelihood refers to whether the impact is reoccurring or a single event and can be described as:
- Rare: Unlikely to occur in the next 25 years, or has a close-to-zero probability in any year.
- Unlikely: Could occur once in 10-25 years, or has a low but greater than zero probability in any year.
- Possible: Could occur once in 10 years, or has a probability <50% in any year.
- Likely: Could occur once per year, or has a 50/50 chance in any year.
- Almost certain: Could occur several times per year, or has a probability >50% in any year.

Consequence is defined as the magnitude of a particular impact and can be categorized as:
- Negligible: Appearance of threat but no harm, minor disruption or stress, no damage.
- Minor: Serious near-misses/minor injuries, isolated but noticeable examples of reversible decline/disruption.
- Moderate: Small number of injuries, general decline in economic performance/services/environmental health, reversible with intense effort.
- Catastrophic: Large number of injury/loss of life/widespread failure/irrecoverable damage.

Based on the combined likelihood and consequence ratings, risks are then categorized into high, medium, and low levels:
- High: Requires actions and delegation to senior operational management.
- Medium: Requires actions, review and reporting by relevant managers who are explicitly assigned to handling the risk.
- Low: Remains under review with existing control measures unless it becomes more severe.

DATA COLLECTION: To complete the Vulnerability and Risk Assessment, the project team collected data from multiple sources using a variety of methods. Interviews were conducted with representatives from approximately 20 city departments and partner organizations. The team also compiled and analyzed data from over 100 external sources and authoritative reports. Feedback on vulnerabilities and risks was also solicited from CAAP Technical Working Groups.

ACKNOWLEDGMENT

On August 14, 2019, the SA Climate Ready Steering Committee convened to discuss the August 2019 Draft of the Climate Action and Adaptation Plan. At this meeting they were presented with the summary of a meeting of the two SA Climate Ready Technical Working Groups held on August 12, 2019 and asked to come to consensus on various aspects of the plans. While there was consensus on the majority of items, the following items were not agreed upon by the full committee for inclusion in the 2019 Climate Ready Plan.

Community Strategy #1 - Reduce the Carbon Intensity of San Antonio’s Energy Supply
- The path to carbon neutrality should not be solely connected to the CPS Energy Flexible Path.
- CPS Energy should utilize renewable energy by 2050.
- NoA should develop an Energy Resource and Rate Planning Group.

Community Mitigation Strategy #4 - Commercial and Multifamily Benchmarking and Disclosure Ordinance
- Change to voluntary and utilize incentives for compliance.

Community Mitigation Strategy #9 - Cleaner and More Efficient Vehicles, Technologies
- Change to include carbon-free vehicles, electrification, and to set a target date of carbon neutrality by 2050.

San Antonio’s Path to Carbon Neutrality
- Linear pathways is not aggressive enough.
- Update to be consistent with C40 Cities methodology for developed countries.
- Stationary emissions reduction targets need to be more aggressive.
PUBLIC ENGAGEMENT SUMMARY

PHILOSOPHY AND OBJECTIVES
Building a community plan requires input from all voices in our community—gathering ideas and understanding community priorities. The CAAP process sought to bring these diverse perspectives to the table, allowing community members to shape this critical community plan.

The CAAP Public Engagement Plan set two overarching goals for community engagement:

- **Goal #1:** To engage a geographically and demographically diverse sample of San Antonians throughout the planning process with a goal to achieve demographic representation.
- **Goal #2:** To foster valuable engagement of San Antonians on climate mitigation and adaptation strategies. The CAAP is meant to create a dialogue around the issues and opportunities San Antonio faces on its path toward becoming a climate responsive and resilient community.

To achieve these goals, the Office of Sustainability employed a diversity of engagement methods throughout the planning process, including:

- Public meetings and open houses
- Social media campaigns
- Surveys
- CAAP Steering Committee and Technical Working Group meetings
- Email Notifications
- Targeted stakeholder meetings
- SA Climate Ready website (https://saclimateready.org/)

Equity and inclusion were critical priorities of the CAAP engagement approach. Through targeted engagement, the CAAP aimed to reach marginalized communities, including communities of color, residents living in or near poverty, and groups with limited English language skills. Through the support of the Urban Sustainability Directors Network (USDN), the City of San Antonio also hosted a Climate Equity Fellow, whose work focused on increasing the City’s level of engagement with marginalized residents. Zip codes in City Council districts 1 through 5 were focus areas for these engagement activities based on an assessment of the Distressed Communities Index (DCI), Life Expectancy, Tree Canopy, Urban Heat Island, Food Risk, and Race.

WHAT WE HEARD
CAAP public engagement officially kicked off on December 7, 2017 at an event at the USA downtown campus where renowned climate scientist Dr. Katherine Hayhoe presented to 275 people. Over the course of the next year-and-a-half, the City and partners hosted more than 300 events, reached over 10,000 San Antonians, and collected over 2,800 feedback responses on the draft CAAP.

Feedback was also collected from the community in the form of open comments during public events, in-person meetings, phone calls, emails, letters, surveys, and the SA Climate Ready website. Five key themes emerged from community member and stakeholder open comments on the draft CAAP:

- General support for the plan or specific topics / measures within the plan.
- A call for the end of fossil fuels, specifically for electricity production. Most comments also mentioned a timeline of 2030 or sooner for this action.
- Concerns around the lack of detailed cost analysis, i.e. the plan not specifically stating the price tag of implementing each of the measures in the CAAP and a lack of cost analysis around the potential impacts of climate change.
- A call for emissions reductions to be prioritized and enacted as soon as possible.
- Concern about the effect of extreme weather events on the city.

Steering Committee and Technical Working Group Meetings
Steering Committee and Technical Working Group meetings were held monthly between March 2018 and December 2018. These meetings were open to the public and streamed live via Facebook, and community members were encouraged to provide public comments.

Community Events
Community events constituted the majority of CAAP engagement. Public meetings and open houses were held at libraries, community centers, schools, and other neighborhood gathering spaces. Over the course of the engagement process almost 6,000 community members attended a total of 92 community events.

Surveys
CAAP surveys were made available to the public through the SA Climate Ready website, via email, and at community engagement events in both English and Spanish.

TOTAL CAAP ENGAGEMENT (as of May 20, 2019)

<table>
<thead>
<tr>
<th># of Business Events</th>
<th># of Community Events</th>
<th># of Targeted Stakeholder Events</th>
<th># of Total Events to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>105</td>
<td>201</td>
<td>354</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th># of Business Event Attendees</th>
<th># of Community Event Attendees</th>
<th># of Targeted Stakeholder Event Attendees</th>
<th># of Total Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>541</td>
<td>6,412</td>
<td>4,465</td>
<td>11,418</td>
</tr>
</tbody>
</table>
PUBLIC ENGAGEMENT SUMMARY

As of August 20, 2019, a total of 6,332 surveys were completed through the CAAP process.

• Planning for All: Now & Tomorrow (1,530)
• Vision & Priorities for a Climate Ready SA (984)
• Let’s Get Climate Ready (914)
• Draft Plan Feedback (2,904)

A selection of the results from these surveys is shared throughout the remainder of this Appendix.

PLANNING FOR ALL: NOW & TOMORROW (1,530 RESPONSES)

Do you agree that damage to our climate is primarily caused by human activity?

- Yes
- No
- I Don’t Know

Survey respondents indicated the following areas of concern as their top five regarding damage to our climate.

- Extreme Heat (66%)  
- Reduced Water Security (64%)  
- Severe Drought (63%)  
- Health Impacts (60%)  
- Extreme Storms (56%)

VISION & PRIORITIES: CLIMATE READY (984 RESPONSES)

Survey respondents indicated the following top five elements as part of their vision of a Climate Ready SA.

- More Green Space & Trees (42%)  
- More Renewable Energy (38%)  
- More Sidewalks (37%)  
- Cleaner Rivers & Streams (35%)  
- Improved Air Quality (34%)

Survey respondents indicated the following top five priorities for the SA Climate Ready planning process.

- Education & Outreach (54%)  
- A Fair & Equitable Plan (51%)  
- A Plan that is Implemented (49%)  
- Diverse Community Representation (47%)  
- Transparent Reporting of Plan Implementation (44%)
**APPENDIX II**

**PUBLIC ENGAGEMENT SUMMARY**

**CONT.**

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**LET’S GET CLIMATE READY (914 RESPONSES)**

Please rate your willingness to pay more on your utility bills to support cleaner energy for San Antonio. One star means “I am not willing at all;” 5 stars mean “I am very willing.”

**You would pay up to 5 percent more on your utility bills for cleaner energy**

<table>
<thead>
<tr>
<th>% of Responses</th>
<th>5 Star Answer</th>
<th>4 Star Answer</th>
<th>3 Star Answer</th>
<th>2 Star Answer</th>
<th>1 Star Answer</th>
<th>Did Not Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>45%</td>
<td>19%</td>
<td>15%</td>
<td>7%</td>
<td>9%</td>
<td>6%</td>
<td></td>
</tr>
</tbody>
</table>

**You would pay between 5 and 10 percent more for cleaner energy**

<table>
<thead>
<tr>
<th>% of Responses</th>
<th>5 Star Answer</th>
<th>4 Star Answer</th>
<th>3 Star Answer</th>
<th>2 Star Answer</th>
<th>1 Star Answer</th>
<th>Did Not Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>23%</td>
<td>20%</td>
<td>23%</td>
<td>12%</td>
<td>15%</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>

**You would pay more than 10 percent more for cleaner energy**

<table>
<thead>
<tr>
<th>% of Responses</th>
<th>5 Star Answer</th>
<th>4 Star Answer</th>
<th>3 Star Answer</th>
<th>2 Star Answer</th>
<th>1 Star Answer</th>
<th>Did Not Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>9%</td>
<td>20%</td>
<td>18%</td>
<td>31%</td>
<td>7%</td>
<td></td>
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</tbody>
</table>

Knowing the energy and water costs before purchasing or renting a home would affect my decision. One star means “strongly disagree;” 5 stars mean “strongly agree.”

<table>
<thead>
<tr>
<th>% of Responses</th>
<th>5 Star Answer</th>
<th>4 Star Answer</th>
<th>3 Star Answer</th>
<th>2 Star Answer</th>
<th>1 Star Answer</th>
<th>Did Not Answer</th>
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**Please rate each factor in your decision to purchase or car-share an electric vehicle rather than a gas vehicle. One star means “not at all important;” 5 stars mean “very important.”**

**Length of time to charge the vehicle**

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**Mileage range per charge**

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**Cost of electric vehicle(s)**

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**Number and location of available recharging stations**

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**Equity: People who are most impacted by climate change should be included in defining solutions. One star means “strongly disagree;” 5 stars mean “strongly agree.”**

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<tr>
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PUBLIC ENGAGEMENT SUMMARY

CONT.

DRAFT PLAN
FEEDBACK (2,303 RESPONSES)

How important do you believe it is to implement the CAAP’s mitigation goals and strategies (1 being not important, 5 being very important)?

- Increase Carbon-Free Energy
  - Work with CPS Energy to move towards cleaner energy sources.
- Reduce Building Consumption
  - Superfund and develop policies that promote energy efficiency in our buildings.
- Reduce Transportation Consumption
  - Increase transportation options and promote cleaner, more efficient vehicles.
- Increase Resilience
  - Develop strategies that reduce waste, promote recycling, and encourage composting.
- Promote Biodiversity and Healthy Ecosystems
  - Protect and improve public natural ecosystems.
- Educate and Enable Citizens
  - Provide education and resources to the community and help prepare for a changing climate.

% of Responses

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<tr>
<th>Goal</th>
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<td>4) Increase Resilience</td>
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<td>5) Promote Biodiversity and Healthy Ecosystems</td>
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<td>6) Educate and Enable Citizens</td>
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DRAFT PLAN
FEEDBACK (2,303 RESPONSES)

How important do you believe it is to implement the CAAP’s adaptation goals and strategies (1 being not important, 5 being very important)?

- Increase Infrastructure Resilience
  - Ensure our infrastructure is prepared to withstand the effects of climate change like flooding and extreme heat.
- Strengthen Public Health Systems
  - Protect and improve the long-term health of our community from the effects of climate change like heat waves and extreme weather.
- Enhance Emergency Management and Community Preparedness
  - Ensure our City is prepared to handle climate emergencies and natural disasters.
- Promote, Restore and Protect Green Infrastructure and Ecosystems
  - Taking an active role in protecting the health of our existing ecosystems.
- Protect Local Food Security
  - Protect and enhance local food supply and access.
- Increase Resilience and Outreach
  - Educate our community about how to adapt to a changing climate.
- Ensure Equity in Adaptation
  - Ensure that we are including and prioritizing vulnerable community members as we adapt to a changing climate.

% of Responses

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DRAFT
THE DEMOGRAPHICS

Demographically and geographically diverse engagement was a core goal of the CAAP stakeholder outreach process. As such, data was collected throughout the engagement process to support the Office of Sustainability in understanding what voices were successfully being collected in engagement activities and where focused activities were needed to fill gaps. No engagement process will be 100% representative of a community, but through demographic analysis the Office of Sustainability was able to secure input from a diversity of community voices. Detailed demographic data was collected for all four surveys and the demographics of the survey respondents were compared to overall demographics for the City of San Antonio through the following graphs.

COMPARISON OF SURVEY RESPONDENTS TO SAN ANTONIO POPULATION

BY ETHNICITY

- African American/Black
- American Indian, Native Alaskan, Native Hawaiian
- Asian
- Hispanic/Latino(a)
- White/Caucasian
- Two or more races
- Other

COMPARISON OF SURVEY RESPONDENTS TO SAN ANTONIO POPULATION

BY GENDER

- Female
- Male

COMPARISON OF SURVEY RESPONDENTS TO SAN ANTONIO POPULATION

BY HOUSEHOLD INCOME

- <$25k
- $25-$49k
- $50-$74k
- $75-$99k
- >$100k
CLIMATE EQUITY INDICATORS

The extent to which marginalized communities face hardships resulting from historical inequities is not always top of mind. The following charts, from the National Equity Atlas, serve as a reminder of the economic inequities experienced in San Antonio that place our marginalized communities at greater risk of climate-related impacts. Working with local climate and social equity leaders, key climate equity indicators will be identified and tracked as part of plan implementation.

Median Wages Equitable wages would reflect differences in education, training, and experience but would not vary systematically by race. In 2015, San Antonio had a significant difference in median wages, with workers of color earning $7 less than the median hourly wage for White workers. Residents on limited incomes are more vulnerable and less able to adapt to climate change in terms of costs associated with energy, mobility, health issues, and the ability to respond to natural disasters.

Asthma Rates Many of our marginalized communities are more likely to suffer from health impacts, such as asthma, which will be exacerbated by reduced air quality as a result of a changing climate.

Neighborhood Poverty People who live in high-poverty neighborhoods have less access to jobs, services, high-quality education, parks, safe streets, and other essential ingredients of economic and social success that are the backbone of strong economies. In 2015, San Antonio’s White population had the lowest concentration of people living in high poverty neighborhoods, while both the Black and Latino populations had over 8% of their populations living in high-poverty neighborhoods.

APPENDIX III
POTENTIAL MITIGATION STRATEGY DETAILS

Much of the input the community offered during the CAAP development process centered around detailed implementation opportunities, i.e. programs, incentives, and policies to deliver on the GHG reduction goals. These detailed actions were gathered from the community, as well as from best practices, and were evaluated by city staff and consultants to ensure that GHG reduction goals would be met through comprehensive strategy implementation. The tables captured in this appendix present the proposed implementation actions from this process, outlining steps for San Antonio to take in order to deliver on the mitigation goals and strategies outlined in the CAAP. As discussed in previous sections, strategies will be further evaluated prior to implementation and additional strategies may be identified in future plan updates.

### IMPLEMENTATION COMMUNITY

<table>
<thead>
<tr>
<th>STRATEGIES</th>
<th>IMPLEMENTATION ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Increase Carbon-Free Energy</strong></td>
<td>✓ Reduce generation from all fossil fuel sources, with an aggressive focus on eliminating coal sources. Technological, economic, and reliability variables will be evaluated.</td>
</tr>
<tr>
<td>2. <strong>Reduce the Carbon Intensity of San Antonio’s Energy Supply</strong></td>
<td>✓ Increase the penetration of renewable or other carbon-free resources to supply a minimum of 50% of San Antonio’s energy capacity by 2040 and 100% by 2050.</td>
</tr>
<tr>
<td>3. <strong>Support and Incentivize District-Scale Clean Energy Projects</strong></td>
<td>✓ Work with CPS Energy to incentivize the adoption of district-scale installations, such as community solar, and district heating and cooling.</td>
</tr>
<tr>
<td>4. <strong>Reduce generation from all fossil fuel sources, with an aggressive focus on eliminating coal sources. Technological, economic, and reliability variables will be evaluated.</strong></td>
<td>✓ Continue energy planning between the City, CPS Energy, key stakeholders, and the general public to ensure continued collaboration towards carbon reduction goals.</td>
</tr>
<tr>
<td>5. <strong>Increase the penetration of renewable or other carbon-free resources to supply a minimum of 50% of San Antonio’s energy capacity by 2040 and 100% by 2050.</strong></td>
<td>✓ Evaluate and implement energy storage and load shifting technologies to support efforts to develop a more resilient grid to maximize the penetration of renewable generation.</td>
</tr>
<tr>
<td>6. <strong>Continue energy planning between the City, CPS Energy, key stakeholders, and the general public to ensure continued collaboration towards carbon reduction goals.</strong></td>
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**LEGEND**

- Near-term (Initiated by 2021)
- Long-term
Reduction of Transportation Energy Consumption

9. Cleaner and More Efficient Vehicle Technologies

10. Vehicle Miles Traveled (VMTs)

Connectivity / Walkability

11. Connectivity / Walkability

Sustainable Land Planning and Development

12. Sustainable Land Planning and Development

Mobility as a Service

13. Mobility as a Service

Commercial Waste Reduction

14. Commercial Waste Reduction

Residential Waste Reduction

15. Residential Waste Reduction

Organics Division

16. Organics Division

Material Reuse and Circularity

17. Material Reuse and Circularity

Reduced-Landfill Construction

18. Reduced-Landfill Construction

**IMPLEMENTATION ACTIONS**

- Invest in new electric vehicle charging infrastructure throughout the city.
- Develop EV group purchase programs.
- Accelerate the adoption of carbon-free vehicular transportation in all sectors through education and incentives.
- Address the barriers to electric vehicle ownership with a priority focus on equity.
- Transition financial investments from prioritizing SOVs to those prioritizing carbon-free transit.
- Develop high-capacity rapid transit infrastructure to connect VIA Metropolitan Transit Regional Centers.
- Explore the development of vehicle-free zones within the Regional Transit Centers and special disability districts focused on Transit-Oriented Development and affordable housing.
- Reduce parking spaces by nullifying parking regulations, unbundling parking costs from rent, and allowing parking space requirements to be met through alternative approaches demonstrated to reduce parking demand and GHG emissions (e.g., online car sharing, bicycle parking, providing transit passes).
- Incorporate the Housing and Transportation (H+T) Affordability Index into transportation and community planning.
- Support and incentivize Transportation Demand Management programs and policies, including supporting efforts developed by partner agencies and stakeholders in the community that will function to reduce VMTs, such as VIA’s Vision 2040 Plan and AAMPO’s Alamo Commutes program.
- Expand protected micro-mobility infrastructure, e.g., sidewalks and bike lanes, and implement the Complete Streets Ordinance.
- Develop standards for connectivity and walkability in all neighborhoods.
- Pilot sprawl repair in existing developments.
- Design and construct a human-powered transportation network connecting key job, housing, service nodes, and green spaces via on- and off-road trails and protected bike lanes.
- Identify potential EcoDistrict sites of opportunities.
- Incentivize development that meets minimum metrics for density, connectivity, and affordability.
- Consider innovative solutions to housing and transportation that recognize the needs of the most vulnerable members of the San Antonio community, focusing on communities that provide affordable housing with access to quality jobs.
- Sharpen and explore financial incentives to support building reuse.
- Develop solutions for City residents to compare the GHG impacts of all transportation options.
- Evaluate the GHG impacts of new transportation technologies, such as connected, autonomous vehicles and drones.
- Embrace technological applications that advance integrated transportation, routing and payment system for all modes of transportation, focusing on “first mile, last mile” modes.
- Incentivize and work with businesses to move away from single-use, disposable items.
- Work with businesses to accelerate recycling efforts, utilizing CDS’s Re Works SA Commercial Recycling Program.
- Incentivize innovative zero-waste solutions, for example, provide incentives for the establishment of a zero waste grocery store.
- Encourage waste certifications for all commercial facilities.
- Encourage the increased diversion of residential waste from landfills by enhancing the pay-as-you-throw rate structure to provide a strong financial incentive to reduce landfilled waste and investigate financial structures that account for the true cost of waste, including the GHG impact.
- Identify specific recycling targets for specific commodities based on GHG reduction potential.
- Fund significant ongoing education on what can be composted or recycled.
- Encourage the highest and best use of diverted organics by developing streams for organics that are usable for human or animal consumption, or other economically viable purposes.
- Support diversified solutions for low-carbon organics diversion, such as private-public partnerships and reliable processors that expand collection to all City residents and businesses.
- Incentivize a market for local compost and mulch for landscaping uses.
- Explore the potential for the use of organics in anaerobic digesters for energy production.
- Establish a marketplace for local, existing/recycled products, including manufacturing by-products.
- Incentivize local manufacturers who develop solutions to extend product life spans for local solutions.
- Develop a deconstruction policy to encourage reuse of building materials.
- Develop education programs around reduced-landfill waste practices.
- Offer incentives to encourage an increase in reduced-landfill construction practices.
- Encourage the development of markets for the reuse of construction waste.
- Partner with local industry organizations, such as the San Antonio General Contractors Association.
**Implement Action: Carbon Capture and Storage**

- Implement a plan for carbon capture and storage within the City boundaries, including a carbon capture and storage baseline for the City.
- Develop a tracking mechanism to monitor around carbon capture and storage.

**Implement Action: Urban Heat Island**

- Green areas and ecosystem services for these benefits, which support urban systems.
- The City's overall climate action plan.

**Implement Action: Ecological Planning and Climate Sensitive Design**

- Implement strategies that also incorporate climate-sensitive design.
- Continue to implement the latest international code requirements and support updates to the City's building code.

**Implement Action: GHG Education and Training**

- Develop a comprehensive education platform that crosses socio-economic classes to serve all ages, races, and incomes to result in a San Antonio population that is well-informed about climate change and GHG-related topics and ensure a workforce that can support the City's evolving green economy. Topics include:
  - How will climate change affect San Antonio?
  - What can be composted or recycled?
  - How to reduce consumption and impact related to transportation and building energy use?
  - What are the actions you can take today?
  - What are the job training/skills that are needed to support the green economy transition?

**Implement Action: SA Tomorrow Plans**

- Develop a platform for ongoing discussions between the City and businesses around climate issues and progress towards mitigation and adaptation goals.
- Offer detailed education around developing GHG reduction targets.
- Develop a recognition program for businesses with proven GHG reductions.
- Recognize sustainability practices embraced by businesses within the Legacy Business Program, which celebrates San Antonio businesses in operation 20 years or more that contribute to the history, culture, and authentic identity of San Antonio.

**Implement Action: Electric and Water Rate Structures**

- Evaluate time-of-use, tiered, and/or EV charging rates for all San Antonio energy users to encourage energy efficiency and reduce peak load.
- Identify and employ price signals to encourage energy and water conservation and ensure these resources are used when they are greener, i.e. when the grid is supplied by low-carbon sources.

**Implement Action: GHG Reduction Quantification**

- Identify the methodology that the City will use to complete a comprehensive scope 3 assessment.
- Develop a quantification system for tracking scope 3 GHG emissions.
- Develop priority actions to reduce the carbon impact of scope 3 GHG emissions.

**Implement Action: Business Incentives**

- Develop a regional climate council.
- Work with local businesses and their key partners to share best practices and work towards regional mobility and energy goals.
- Partner with Bexar County, area municipalities, and other key partners to share best practices and work towards regional mobility and energy goals.
- Support and incentivize the use of pervious cover, taking into consideration site constraints and the pervious coverage needs of priority growth areas, in the SA Tomorrow Regional Centers or other target areas, for the development of undeveloped land and infill or redevelopment projects.

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## IMPLEMENTATION MUNICIPAL

<table>
<thead>
<tr>
<th>STRATEGIES</th>
<th>IMPLEMENTATION ACTIONS</th>
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| **Reduce Building Energy Consumption** | ✓ Evaluate the potential to install sub-meters for any buildings where energy and water use cannot currently be disaggregated.  
✓ Develop and implement an Energy Policy Ordinance to standardize requirements around energy operations and occupant behaviors such as temperature set points, HVAC run times, personal appliance restrictions, as well as demand management and green heating requirements.  
✓ Develop an implementation plan to generate or purchase renewables to cover municipal electricity consumption.  
✓ Explore the potential benefits of renewable thermal energy to cover municipal building energy consumption.  
✓ Set a standard for maximum Energy Use Intensity (EUI) for all buildings, based upon building type and function.  
✓ Develop a ZNE Policy for municipal buildings that may include multiple options for compliance.  
✓ Produce renewable power at municipal buildings and facilities.  
✓ Purchase renewable power to cover remaining energy use.  
✓ When feasible, install green or cool roofs on new or existing buildings to reduce heat absorption, thereby reducing building energy consumption associated with heating and cooling. |
| M1 Benchmarking and Public Disclosure of Building Consumption | |
| M2 Municipal Energy Policy | |
| M3 Zero Net Energy (ZNE) Buildings | |
| M4 Cool/Green Roofs | |
| **Reduce Transportation Energy Consumption** | ✓ Complete the conversion of streetlights to energy-efficient LEDs.  
✓ Explore opportunities to incorporate smart city technology to assist with energy-saving objectives, as well as other potential benefits, such as EV charging, temperature sensors, or air quality monitoring.  
✓ Update the municipal government vehicle procurement policy to ensure all new vehicle purchases support efficiency and carbon reduction objectives.  
✓ Explore the potential of increasing the use of cleaner and more efficient vehicles, with a priority on electrification based on the recommendations of the Electric Fleet Conversion and Infrastructure Study, currently in development, for commuting through a government financing plan for leasing these vehicles.  
✓ Encourage alternative scheduling, i.e., work from home one day a week, telecommuting, carpooling, or compressing work weeks.  
✓ Incentivize the use of low-carbon transit solutions such as subsidizing bus passes and/or car or van-pooling opportunities.  
✓ Pursue Airport Carbon Accreditation for the San Antonio International Airport. |
| M5 Streetlights | |
| M6 Cleaner and More Efficient Fleet Vehicles | |
| M7 Transportation Demand Management | |
| M8 Airport Accreditation | |
| **Advance the Circular Economy** | ✓ Develop a process for city budgeting, project development, and other decision-making to assess GHG impacts and potential co-benefits.  
✓ Review the Environmentally Preferable Purchasing Policy to identify opportunities to capture existing contracts currently not meeting policy objectives.  
✓ Develop criteria to encourage the selection of durable, long-lasting products, with low embodied energy with the goal of reducing emissions resulting from municipal operations.  
✓ Determine the viability of utilizing low-carbon, locally produced, and recycled-content materials in public works and roadway projects. Where cost-effective, require the use of products with reduced GHG emissions.  
✓ Develop an education program to increase awareness and bring about immediate GHG emission reductions within municipal government operations and create long-term change within the larger community, through education around:  
- Climate science  
- CoSA programs, focusing on “what you can do”  
- Community engagement opportunities.  
✓ Require zero waste for municipal construction projects by 2030.  
✓ Revise CoSA’s Green Events Ordinance to require reduced waste for all city sponsored events. |
| M9 Prioritization in Decision-Making | |
| M10 Environmentally Preferable Purchasing | |
| M11 Green Specifications | |
| M12 Zero Waste | |
| **Educate & Empower** | |
| M13 GHG Education | |
REFERENCES

SA CLIMATE READY

1. San Antonio was established May 1, 1718.
2. IPCC (2018). Global warming of 1.5°C.
7. https://www.weare1in10.com/

THE CASE FOR ACTION

12. https://apps.who.int/bitstream/handle/10962/276405/WHO-CCO2.17.2-EN.pdf?ua=1
17. https://www.globalclimateactionsummit.org/27-cities-have-reached-peak
19. https://www.sanantonio.gov/NHSD/Programs/repair
22. https://sciencebasedtarget.org/

GREENHOUSE GAS INVENTORY & CLIMATE PROJECTIONS

25. In 2016, CPS Energy was responsible for total emissions of 11.3 MtCO2e from electricity generation. Per the LGOP reporting method, only the emissions from electricity generation that are accounted for by Scope 2 usage within the City of San Antonio’s geographic boundary are included in the GHG inventory totals [7.1 MTCO2e]. As a municipal plan, the SA Climate Ready Climate Action and Adaptation Plan (CARAP) addresses GHG reduction for “Energy emissions within the City of San Antonio jurisdictional boundary.
28. Municipal emissions are also included in the community inventory, so municipal emissions should not be added to the community inventory total, as that would result in a double-counting of the municipal government emissions sources.
31. National Oceanic and Atmospheric Administration

MITIGATION: REDUCING GREENHOUSE GASES

37. https://www.ipcc.ch/sr15/chapter/summary-for-policy-makers
38. Interim targets were developed by modeling the expected emissions that would result from implementing the carbon mitigation measures outlined in the plan using The Climate Action for Urban Sustainability (CUB) tool developed by the World Bank Group. These estimates were considered against a top-down view of how San Antonio must reduce emissions to get to the 2030 goal of carbon neutrality, and in some cases were adjusted slightly to develop the most appropriate sectoral targets for 2030.
40. https://www.saw.org/
41. https://www.sanantonio.gov/historicPrograms/Decommission
42. https://salomorrow.com/

ADAPTATION: PREPARING FOR A CHANGING CLIMATE

46. EPA’s Multi-Model Framework for Quantitative Sectoral Impacts Analysis: https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=OAP&dirEntryId=33595
51. SA Hazard Mitigation Plan (HMAP). Section 8: Wildfire. ICIC.
52. City of San Antonio Community Wildfire Protection Plan (CWPP), 2016
54. https://www.noaa.gov/media-release/noaa-study-suggests-10-degree-fahrenheit-values
55. Changing Climate, Changing Communities: Guide and Workbook for Municipal Climate Adaptation, ICIC and Workbook for Municipal Climate Adaptation, ICIC.

APPENDIX III: CLIMATE EQUITY INDICATORS

56. http://www.sanantonio.gov/historic/Programs/Repair
57. https://www.bloomberg.org/program/environment/challengeforlovewaver
59. https://www.sanantonio.gov/StrategicPlan
60. http://www.sanantonio.gov/historic/Programs/Repair

APPENDIX IV: POTENTIAL MITIGATION STRATEGY DETAILS

64. CPS Energy developed the ReliEx Path, or “Relax Path” in 2018 as a guide to plan for, develop, and/or install new energy sources through 2040 (https://cspenergy.com/ReliExPath/). Between 2018 and 2040, the Relx Path projects an increase in renewable energy capacity from 22% to 50%, while energy from gas and coal decline from 60% to 20% of total generation.
65. https://www.ipcc.ch/sr15/chapter/summary-for-policy-makers
69. Changing Climate, Changing Communities: Guide and Workbook for Municipal Climate Adaptation, ICIC.

APPENDIX V: METHODOLOGY

APPENDIX III: CLIMATE EQUITY INDICATORS

70. http://www.sanantonio.gov/historic/Programs/Repair
71. http://www.sanantonio.gov/historic/Programs/Repair

APPENDIX V: METHODOLOGY

73. https://www.energystar.gov/
75. http://www.alamocomutes.org/
SA Climate Ready is San Antonio’s plan to meet the present and future challenges that come with a changing climate. Mitigation measures address the needs of all residents while supporting the systems that advance our City’s resiliency.
TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE MULTIPLE SEWERSHED PACKAGE 7A PROJECT

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to SAK Construction, LLC, a local, non-SMWVB contractor, in an amount not to exceed $4,229,084.10 in connection with the Multiple Sewershed Package 7A Project.

- The contract that is the subject of the attached resolution will, if approved, authorize work required by the Consent Decree between the San Antonio Water System, the United States of America, and the State of Texas that was lodged in the United States District Court for the Western District of Texas on July 23, 2013.

- This contract will be used to rehabilitate approximately 4,833 feet of 24-inch through 48-inch sewer mains by cured-in-place-pipe method. This will address sewer mains in need of repair based on condition assessment and will also rehabilitate or replace associated manholes.

- SAK Construction, LLC has submitted the lowest responsible bid of $4,229,084.10.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement Program. The water work is included in the Wastewater Core Business budget line item. The amount is $4,229,084.10 for wastewater related construction work under job number 17-4559.
SUPPLEMENTARY COMMENTS:

Arcadis, U.S., Inc. prepared the bid proposal and specifications for this project. The engineer’s estimated construction cost for this project was $5,600,000.00.

A bid opening was held on July 22, 2019 at 10:00 AM. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAK Construction, LLC*</td>
<td>$4,229,084.10</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>PM Construction &amp; Rehab, LLC dba IPR South Central</td>
<td>$4,922,351.75</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Texas Pride Utilities, LLC</td>
<td>$5,215,757.12</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Engineer’s Estimate</td>
<td>$5,600,000.00</td>
<td></td>
</tr>
<tr>
<td>Cruz Tec, Inc.</td>
<td>$5,944,112.25</td>
<td>Local/MBE-Hispanic</td>
</tr>
</tbody>
</table>

*Lowest Responsible Bidder

The bid amount represents a 24.48 percent decrease from the engineer’s estimated construction cost.

Additionally, the overall SMWVB analysis is shown in the following table:

<table>
<thead>
<tr>
<th>Multiple Sewershed Package 7A</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAK Construction, LLC</td>
</tr>
<tr>
<td>SMWVB Analysis – Board Award</td>
</tr>
<tr>
<td>SBE</td>
</tr>
<tr>
<td>MBE – African American</td>
</tr>
<tr>
<td>MBE – Asian</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
</tr>
<tr>
<td>MBE – Other</td>
</tr>
<tr>
<td>WBE – Minority</td>
</tr>
<tr>
<td>WBE – Non–Minority</td>
</tr>
<tr>
<td><strong>Total SMWVB</strong></td>
</tr>
</tbody>
</table>
Award of Construction Contract
Multiple Sewershed Package 7A Project

Gail A. Hamrick-Pigg, P.E.
Director
Pipelines Engineering

APPROVED:

Robert R. Puente
President/Chief Executive Officer

Andrea L.H. Beymer, P.E.
Vice President
Engineering and Construction

Attachments:
1. Project Area Map
2. Project Site Map
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO SAK CONSTRUCTION, LLC IN AN AMOUNT NOT TO EXCEED $4,229,084.10 IN CONNECTION WITH THE MULTIPLE SEWERSHED PACKAGE 7A PROJECT; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $4,229,084.10 FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH SAK CONSTRUCTION, LLC, AND TO PAY SAK CONSTRUCTION, LLC AN AMOUNT NOT TO EXCEED $4,229,084.10 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, this contract will be used to rehabilitate sewer mains in need of repair based on condition assessment; and

WHEREAS, the San Antonio Water System (the “System”) has solicited bids for the project work; and

WHEREAS, SAK Construction, LLC, a local, non-SMWVB contractor, is declared the lowest responsible bidder and has submitted the low responsible bid of $4,229,084.10 for the project work; and

WHEREAS, System funds in the amount of $4,229,084.10 are required for the project work; and

WHEREAS, the amount of $4,229,084.10 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to SAK Construction, LLC in an amount not to exceed $4,229,084.10 in connection with the Multiple Sewershed Package 7A Project, (ii) to approve the expenditure of funds and make available an amount not to exceed $4,229,084.10 from the Project Fund, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a construction contract with SAK Construction, LLC, and to pay SAK Construction, LLC an amount not to exceed $4,229,084.10 for the project work; now, therefore:
BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in an amount not to exceed $4,229,084.10 is hereby awarded to SAK Construction, LLC who is determined to be the lowest responsible bidder in connection with the Multiple Sewershed Package 7A Project.

2. That the expenditure of funds in an amount not to exceed $4,229,084.10 for the project work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with SAK Construction, LLC, and to pay SAK Construction, LLC an amount not to exceed $4,229,084.10 in connection with the Multiple Sewershed Package 7A Project.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 4th day of September, 2019.

__________________________________________
Berto Guerra, Jr., Chairman

ATTEST:

__________________________________________
Amy Hardberger, Secretary
TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE W-1 LEON CREEK: HWY 151 TO HWY 90 – LOWER SEGMENT PROJECT

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to BRH-Garver Construction, LP, a non-local, non-SMWVB contractor, in an amount not to exceed $18,781,893.40 in connection with W-1 Leon Creek: Hwy 151 to Hwy 90 – Lower Segment Project (the “Project”).

- The contract that is the subject of the attached resolution will, if approved, authorize work required by the Consent Decree between the San Antonio Water System (the “System”), the United States of America, and the State of Texas that was lodged in the United States District Court for the Western District of Texas on July 23, 2013.

- The Project is associated with a capacity constraint that causes Sanitary Sewer Overflows (SSOs) in the vicinity of Swiss Oaks Drive near Leon Creek. The SSOs are currently being addressed under most flow conditions via a temporary bypass diverting flows from the existing 42-inch sewer main to Medio Creek Water Recycling Center. Completion of the Project will allow for removal of that temporary bypass.

- The Project will replace and upsize about two and a half miles of 42-inch and 54-inch gravity sewer main with 72-inch and 78-inch gravity sewer main along Leon Creek. The sewer mains are in the western sewershed and extend from U.S. Highway 90 to an existing 66-inch sewer pipeline approximately 2,500 feet east of Pinn Road.

- Request for Competitive Sealed Proposals procurement method was used to select the construction contractor. This method allows selection of a contractor based on proposals that offer the “best value” to the System. Best value is determined by score and ranked by weighted criteria published in the solicitation. BRH-Garver Construction, LP submitted the best value proposal for $18,781,893.40.

Staff recommends that the Board approve this resolution.
FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement Program. This work is included in the Wastewater Core Business, Main Replacement - Sewer budget line item. The amount is $18,781,893.40 for wastewater related construction work. The job number is 15-4508 for construction.

SUPPLEMENTARY COMMENTS:

Pape-Dawson Engineers, Inc. prepared the plans and specifications for this project under their professional services contract. The engineer’s estimated construction cost was $14,415,632.96.

Competitive sealed proposals were received on July 25, 2019 at 2:00 PM. BRH-Garver Construction, LP provided the best value to the System based on the following criteria and weighting:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Qualifications and Experience</td>
<td>20%</td>
</tr>
<tr>
<td>Quality, Reputation, and Ability to Deliver Projects on Schedule and within Budget</td>
<td>25%</td>
</tr>
<tr>
<td>Project Approach (including Delivery Schedule)</td>
<td>15%</td>
</tr>
<tr>
<td>Price</td>
<td>30%</td>
</tr>
<tr>
<td>SMWVB</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The following proposals were submitted:

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRH-Garver Construction, LP*</td>
<td>$18,781,893.40</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>S.J. Louis Construction of Texas, Ltd.</td>
<td>$17,289,444.15</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>McKee Utility Contractors, Inc.</td>
<td>$15,295,000.00</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td><strong>Engineer’s Estimate</strong></td>
<td><strong>$14,415,632.96</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Best Value Proposal

The price proposal represents a 30.3 percent increase from the estimated construction cost. This contract has 610 days for construction completion. The System’s engineering staff will inspect the work.
Additionally, the overall SMWVB analysis is shown in the following table:

<table>
<thead>
<tr>
<th>W-1 Leon Creek: Hwy 151 to Hwy 90 – Lower Segment Project</th>
<th>BRH-Garver Construction, LP</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMWVB Analysis – Board Award</td>
<td></td>
</tr>
<tr>
<td>SBE</td>
<td>3.73%</td>
</tr>
<tr>
<td>MBE – African American</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE – Asian</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
<td>2.70%</td>
</tr>
<tr>
<td>MBE – Other</td>
<td>0.00%</td>
</tr>
<tr>
<td>WBE – Minority</td>
<td>13.58%</td>
</tr>
<tr>
<td>WBE – Non-Minority</td>
<td>0.00%</td>
</tr>
<tr>
<td>SMWVB Total</td>
<td>20.01%</td>
</tr>
</tbody>
</table>

Gail A. Hamrick-Pigg, P.E.  
Director  
Pipelines

Andrea L.H. Beymer, P.E.  
Vice President  
Engineering and Construction

Robert R. Puente  
President/Chief Executive Officer

Attachments:
1. Project Area Map
2. Project Site Map
SAN ANTONIO WATER SYSTEM
PROJECT AREA MAP
ATTACHMENT I

W-1 LEON CREEK HWY 151 TO HWY 90 LOWER SEGMENT

LEGEND

★ PROJECT SITE

□ EDWARDS AQUIFER RECHARGE ZONE
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO BRH-GARVER CONSTRUCTION, LP IN AN AMOUNT NOT TO EXCEED $18,781,893.40 IN CONNECTION WITH THE W-1 LEON CREEK: HWY 151 TO HWY 90 – LOWER SEGMENT PROJECT; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $18,781,893.40 FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH BRH-GARVER CONSTRUCTION, LP, AND TO PAY BRH-GARVER CONSTRUCTION, LP AN AMOUNT NOT TO EXCEED $18,781,893.40 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, this contract will be used to replace sewer mains in need of upsizing based on capacity; and

WHEREAS, the San Antonio Water System (the “System”) has solicited competitive sealed proposals for the project work; and

WHEREAS, BRH-Garver Construction, LP, a non-local, non-SMWVB contractor, has submitted a price proposal in the amount of $18,781,893.40 for the project work and this proponent has been determined to be the most qualified; and

WHEREAS, System funds in the amount of $18,781,893.40 are required for the project work; and

WHEREAS, the amount of $18,781,893.40 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to BRH-Garver Construction, LP in an amount not to exceed $18,781,893.40 in connection with the W-1 Leon Creek: Hwy 151 to Hwy 90 – Lower Segment Project, (ii) to approve the expenditure of funds and make available an amount not to exceed $18,781,893.40 from the Project Fund for the project work, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a construction contract.
contract with BRH-Garver Construction, LP, and to pay BRH-Garver Construction, LP an amount not to exceed $18,781,893.40 for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in an amount not to exceed $18,781,893.40 is hereby awarded to BRH-Garver Construction, LP, who is determined to be the most qualified, in connection with the W-1 Leon Creek: Hwy 151 to Hwy 90 – Lower Segment Project.

2. That the expenditure of funds in an amount not to exceed $18,781,893.40 for the project work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with BRH-Garver Construction, LP, and to pay BRH-Garver Construction, LP an amount not to exceed $18,781,893.40 in connection with the W-1 Leon Creek: Hwy 151 to Hwy 90 – Lower Segment Project.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperable or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffectual, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffectual.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 4th day of September, 2019.

__________________________
Berto Guerra, Jr., Chairman

ATTEST:

__________________________
Amy Hardberger, Secretary
TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION MANAGEMENT SERVICES CONTRACT IN CONNECTION WITH THE W-6 UPPER SEGMENT: HIGHWAY 90 TO SW MILITARY DRIVE SEWER MAIN PROJECT

Board Action Date: September 4, 2019

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction management services contract to CAS Consulting and Services, Inc., a local, MBE-Asian firm, in an amount not to exceed $8,233,406.00 in connection with the W-6 Upper Segment: Highway 90 to SW Military Drive Sewer Main Project (the “Project”).

- The contract that is the subject of the attached resolution will, if approved, authorize work that is required by the Consent Decree between the San Antonio Water System (the “System”), the United States of America, and the State of Texas that was lodged in the United States District Court for the Western District of Texas on July 23, 2013.

- The Project will address a capacity constraint in the western sewershed and is necessary to comply with the United States Environmental Protection Agency Consent Decree. This Project consists of constructing approximately 26,370 feet of 104-inch sanitary sewer pipeline as well as approximately 2,560 feet of 60-inch gravity sanitary sewer pipeline. It extends from a point just south of Southwest Military Drive, by Leon Creek, to a point at the intersection of U.S. Highway 90 and Leon Creek.

- A Request for Qualifications was issued on June 21, 2019. A total of four firms submitted statements of qualifications for this solicitation. CAS Consulting and Services, Inc. was selected based on the System’s professional services selection process.

- Basic services to be provided include constructability review during design phase, value engineering, full time daily on-site inspection, risk management, correspondence and document control using Contract & Project Management System, review contractor’s submittals and shop drawings, review payment applications, quality assurance testing, progress meetings, independent professional survey for quality control, final inspections, and testing services related to the Project. Basic services on this project add up to an amount not to exceed $7,989,925.00.
Award of Construction Management Services
W-6 Upper Segment: Highway 90 to SW Military Drive Sewer Main Project

- Supplemental services are discipline specific support including, but not limited to additional engineering, geology, and cost estimating support. Supplemental services on this project add up to an amount not to exceed $243,481.00.

- The total fee for construction management services is not to exceed $8,233,406.00.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement Program. This work is included in the Wastewater Core Business, Main Replacement – Sewer budget line item. The amount is $8,233,406.00 for sewer related engineering work. The job number is 19-4519.

**SUPPLEMENTARY COMMENTS:**

Four firms responded to the Request for Qualifications. CAS Consulting and Services, Inc. was selected through the System’s Architect/Engineer Selection procedure as a qualified consultant. The submitting firms are as follows:

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS Consulting and Services, Inc.*</td>
<td>Local/MBE-Asian</td>
</tr>
<tr>
<td>Freese and Nichols, Inc.</td>
<td>Local/Non–SMWVB</td>
</tr>
<tr>
<td>Parsons Transportation Group, Inc.</td>
<td>Non-Local/Non–SMWVB</td>
</tr>
<tr>
<td>Vanir Construction Management, Inc.</td>
<td>Local/MBE-Hispanic/Non-SBE</td>
</tr>
</tbody>
</table>

*Selected Firm
Award of Construction Management Services
W-6 Upper Segment: Highway 90 to SW Military Drive Sewer Main Project

CAS Consulting and Services, Inc. proposed to use the following sub-consultants for services on this contract:

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Percent of Fee</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black and Veatch Corp.</td>
<td>22.00%</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>AG</td>
<td>CM, Inc.</td>
<td>1.00%</td>
</tr>
<tr>
<td>Balcones Geotechnical, LLC</td>
<td>3.00%</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>Encotech Engineering Consultants SA, Inc.</td>
<td>1.00%</td>
<td>Local/MBE-Asian</td>
</tr>
<tr>
<td>Integrated Testing and Engineering Company of San Antonio dba InTEC</td>
<td>3.00%</td>
<td>Local/WBE-Asian</td>
</tr>
<tr>
<td>S Jackson CCM Group, LLC dba ICMS</td>
<td>11.00%</td>
<td>Local/WBE-AABE</td>
</tr>
<tr>
<td>Subterranean Solutions, LLC</td>
<td>2.00%</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>SWCA, Inc. dba SWCA Environmental Consultants</td>
<td>3.00%</td>
<td>Local/Non-SMWVB</td>
</tr>
</tbody>
</table>

Additionally, the overall SMWVB analysis is shown in the following table:

<table>
<thead>
<tr>
<th>W-6 Upper Segment: Highway 90 to SW Military Drive Sewer Main Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS Consulting and Services, Inc.</td>
</tr>
<tr>
<td>SMWVB Analysis – Board Award</td>
</tr>
<tr>
<td>SBE</td>
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<tr>
<td>MBE – African American</td>
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<tr>
<td>MBE – Asian</td>
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<td>MBE – Hispanic</td>
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<td>MBE – Other</td>
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<td>WBE – Minority</td>
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<td>WBE – Non–Minority</td>
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<td>SMWVB Total</td>
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Award of Construction Management Services

W-6 Upper Segment: Highway 90 to SW Military Drive Sewer Main Project

Gail A. Hamrick-Pigg, P.E.
Director
Pipelines

APPROVED:

Robert R. Puente
President/Chief Executive Officer

Andrea L.H. Beymer, P.E.
Vice President
Engineering and Construction

Attachments:
1. Project Area Map
2. Project Site Map
SAN ANTONIO WATER SYSTEM
PROJECT AREA MAP
ATTACHMENT I

W-6 UPPER SEGMENT: HIGHWAY 90 TO
SW MILITARY DRIVE SEWER MAIN PROJECT

LEGEND

★ PROJECT SITE

Edwards Aquifer Recharge Zone
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

W-6 UPPER SEGMENT: HIGHWAY 90 TO
SW MILITARY DRIVE SEWER MAIN PROJECT

LEGEND
- PROJECT LIMITS
- Edwards Aquifer Recharge Zone
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION MANAGEMENT SERVICES CONTRACT TO CAS CONSULTING AND SERVICES, INC. IN AN AMOUNT NOT TO EXCEED $8,233,406.00 IN CONNECTION WITH THE W-6 UPPER SEGMENT: HIGHWAY 90 TO SW MILITARY DRIVE SEWER MAIN PROJECT; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $8,233,406.00 FROM THE PROJECT FUND FOR THE PROJECT ENGINEERING WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION MANAGEMENT SERVICES CONTRACT WITH CAS CONSULTING AND SERVICES, INC., AND TO PAY CAS CONSULTING AND SERVICES, INC. AN AMOUNT NOT TO EXCEED $8,233,406.00 FOR THE PROJECT ENGINEERING WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) requires construction management services (the “project engineering work”) related to the W-6 Upper Segment: Highway 90 to SW Military Drive Sewer Main Project (the “Project”); and

WHEREAS, CAS Consulting and Services, Inc., a local, MBE-Asian firm, was selected through the System’s Architect/Engineer Selection Procedure for the project engineering work; and

WHEREAS, a contract in an amount not to exceed $8,233,406.00 is to be awarded to CAS Consulting and Services, Inc.; and

WHEREAS, the amount of $8,233,406.00 is available from the Project Fund for the project engineering work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction management services contract to CAS Consulting and Services, Inc. in an amount not to exceed $8,233,406.00 in connection with the W-6 Upper Segment: Highway 90 to SW Military Drive Sewer Main Project, (ii) to approve the expenditure of funds and make available an amount not to exceed $8,233,406.00 from the Project Fund for the project engineering work, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute
a construction management services contract with CAS Consulting and Services, Inc., and to pay CAS Consulting and Services, Inc. an amount not to exceed $8,233,406.00 for the project engineering work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction management services contract in an amount not to exceed $8,233,406.00 is hereby awarded to CAS Consulting and Services, Inc. in connection with the W-6 Upper Segment: Highway 90 to SW Military Drive Sewer Main Project.

2. That the expenditure of funds in an amount not to exceed $8,233,406.00 for the project engineering work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction management services contract with CAS Consulting and Services, Inc., and to pay CAS Consulting and Services, Inc. an amount not to exceed $8,233,406.00 for the project engineering work.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 4th day of September, 2019.

__________________________________________
Berto Guerra, Jr., Chairman

ATTEST:

_______________________________
Amy Hardberger, Secretary