WATER | ENERGY | LIFE

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES **DATE: APRIL 8, 2024**

SUBJECT: **REQUEST FOR PROPOSAL NO. 1850 – DESIGN-BUILD AGREEMENT WITH AUBREY SILVEY ENTERPRISE INC., OF BREMEN, GEORGIA, FOR THE HUNTER SUBSTATION REPLACEMENT PROJECT, FOR A TERM OF 40 MONTHS FROM DATE SPECIFIED IN THE NOTICE TO PROCEED ONCE ISSUED BY CITY, IN THE AMOUNT OF $54,434,074.23, PLUS 10% CONTINGENCY IN THE AMOUNT OF $5,443,407; BUDGET TRANSFERS TO HUNTER SUBSTATION ACCOUNT; WORK ORDER NO. 2420403 IN THE AMOUNT OF $62,327,000**

ISSUES:

Consider awarding a Design-Build Agreement with Aubrey Silvey Enterprise Inc. of Bremen, Georgia, for the Hunter Substation Replacement Project, for a term of 40 months from date specified in the Notice to Proceed once issued by City, in the amount of $54,434,074.23 plus a 10% change order authority in the amount of $5,443,407; authorize budget transfers from multiple capital improvement accounts to the Hunter Substation account for a total amount of $62,327,000; and approve the capital expenditure for Work Order No. 2420403 in the amount of $62,327,000.

RECOMMENDATIONS:

That the Board of Public Utilities:

1. Approve the capital expenditure for Work Order No. 2420403 in the amount of $62,327,000 which includes all design, construction, construction support, contract administration, inspection, and construction change order authority costs for the Hunter Substation Replacement Project;

That the Board of Public Utilities recommend that the City Council:

2. Award a Design-Build Agreement for Request for Proposal No. 1850 for the Hunter Substation Replacement Project with Aubrey Silvey Enterprise Inc. of Bremen, Georgia, for a term of 40 months from date specified in the Notice to Proceed once issued by City, in the amount of $54,434,074.23;

3. Authorize a 10%, or $5,443,407, change order authority for the contract with Aubrey Silvey Enterprise Inc., for Request for Proposal No. 1850 Hunter Substation Replacement Project;

4. Authorize a budget transfer of $12,512,000 from Public Utilities' Electric Recurring projects, $15,815,000 from Public Utilities' Electric Overhead projects, $23,350,000 from Public Utilities' Electric Underground projects, and $10,650,000 from Public Utilities' Electric

Substation Account No. 6130000-470601 to Public Utilities' Hunter Substation Replacement Account No. 6130100-470699; and

5. Authorize the City Manager, or his designee, to execute any documents necessary to effectuate the contract described herein, as well as the ability to make minor and non-substantive changes in alignment with all purchasing policies.

BACKGROUND:

The Hunter Substation is an electrical distribution substation that was commissioned in 1960 and is one of the oldest substations in the Riverside Public Utilities (RPU) electric system. The existing substation is located in Ward 1, at 1731 Marlborough Avenue, near the intersection of Chicago and Columbia Avenues. The Hunter Substation provides electric service to approximately 4800 customers comprised of residents and businesses within the Hunter Industrial Park and Northside communities north of the 215/60/91 Freeway interchange. RPU operates and maintains 15 electrical substations within its service area.

The Hunter Substation is in dire need of replacement to meet RPU's goal of providing safe and reliable electric service to the community. The average age of the substation equipment is over 40 years old and beyond its useful life. In 2014, an electric circuit breaker, which had exceeded its design life, failed in service, and resulted in a near miss incident. In addition, a seismic study conducted in April 2013 found the majority of the substation structures beyond rehabilitation, recommending electrical equipment replacement and the replacement of the majority of existing substation structures. The seismic rehabilitation work was identified as an infrastructure project in the 2023 Local Hazard Mitigation Plan for the City of Riverside and for the County of Riverside. The existing substation 69kV bus structures and configuration pose electrical reliability and safety risks that need to be addressed.

Existing High Profile Hunter Substation

In addition, the electrical capacity of the existing Hunter Substation is at its maximum design capacity. The 10-year load forecast in the surrounding area is projected to add 20-25 megawatts

of new load. The existing Hunter Substation does not have the electrical capacity or physical space to serve the forecasted load. Transferring electrical loads to nearby substations is not possible due to the limited capacity of adjacent substations. As such, demolishing the existing substation to make room to construct a new substation is not a viable option because electric service to existing customers must be maintained. Also, the design of the low-profile substation requires a larger space for its footprint. Following an assessment by the RPU-Electric Engineering team, it has been concluded that constructing a replacement substation at a new location is the necessary course of action in order to maintain reliable service to the community.

Engineering staff researched possible sites for the construction of the new Hunter Substation and identified the property adjacent to the existing substation as the most suitable location.

Board & Council Actions

On February 12, 2018, the Board of Public Utilities (Board) voted to recommend that the City Council approve a Purchase and Sale Agreement for the acquisition of 1.38 acres of land for the Hunter Substation Replacement Project. The new substation will be constructed on the acquired land, so that existing facilities can remain in service during construction and reduce the impact on customers.

On February 27, 2018, the City Council approved the acquisition of 1.38 acres of land located at 1395 Chicago Avenue, Assessor's Parcel Number 210-060-033, for the Hunter Substation Replacement Project for a sale price of $615,000.

Acquired Land for new Substation adjacent to the existing Hunter Substation

On January 14, 2019, the Board approved Work Order No. 1826767 in the amount of $2,000,000 to develop the preliminary design, prepare California Environmental Quality Act (CEQA) documents, and hire a consultant to act as an owner engineer throughout the Hunter Substation Replacement Project.

On March 9, 2021, the City Council unanimously adopted a Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP) and approved the Hunter Substation Replacement Project.

On August 28, 2023, the Board voted to recommend that the City Council conduct a public hearing and receive input related to the electric utility five-year plan proposal and adopt a Resolution approving the electric utility five-year rate plan proposal.

On September 19, 2023, the City Council adopted a Resolution approving and establishing FY 2023/2024 – 2027/2028 electric rates to be effective January 1, 2024. The presentation included the Capital Improvement Plan budgets and expenditures from fiscal years 2018-2023 and proposed capital projects to be funded by the Electric Fiver Year plan proposal. The Hunter Substation Replacement project was identified to be funded with carryovers and/or using a portion of the Substation Project Category funding in the 2023 5-Year Rate Plan. It is important to note that no additional capital improvement funds were identified in the five-year Electric rate plan as adopted by the City Council.

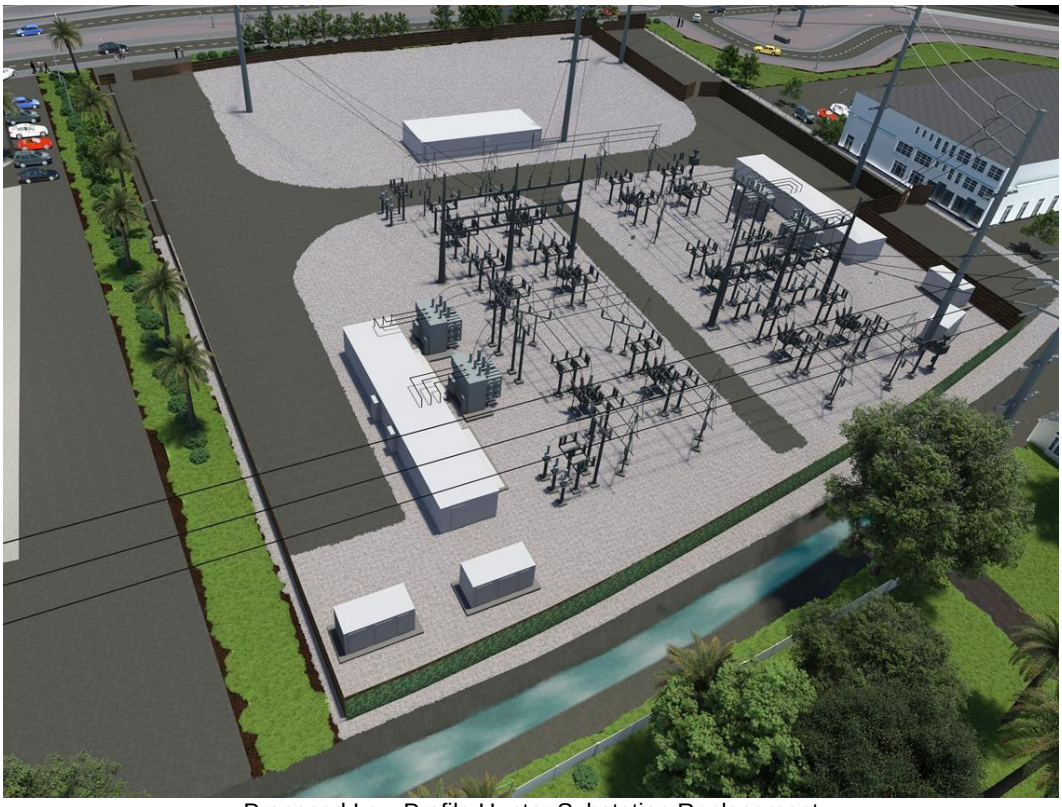
DISCUSSION:

The Hunter Substation Replacement Project is a design-build project where the selected vendor will be responsible for the complete design of the substation, procurement of all equipment and materials, construction of the new substation and demolition of the existing substation and collaborate with RPU staff for commissioning of the new substation. The new substation will be built on the adjacent land to the existing substation. During construction, the existing substation will remain in service to maintain reliable power to RPU's customers. After the cutover to the new substation, the existing substation will be demolished.

The new substation will be built as a low-profile breaker and half substation to improve seismic, reliability and maintenance. The existing four sub-transmission lines will be reconfigured to terminate at the new structures. The substation will have four transformers with a total planned capacity of 125 MVA. New distribution vaults and underground structures will be installed inside and outside of the substation to tie to the existing distribution circuits and support future 12kV circuits. Five new distribution circuits will be added to accommodate future loads and alleviate overloading of neighboring Riverside and University substations. The new substation will have added capacity to serve future loads and have contingency to address N-1 scenarios of losing transformers. The expected life of the new substation is 50 years.

Although most of RPU's construction projects are based on a Design-Bid-Build method, it was determined that for such a large project, the Design-Build approach would be beneficial and cost effective. The design-build project delivery approach has the potential to provide reduced design time and efforts, improve overall project delivery schedule, address innovative solutions early to challenges during construction, reduce exposure to Contractor claims and set define cost early. The timely construction of the Hunter Substation Replacement Project is an important aspect of the overall project delivery to ensure that RPU will have the capacity to continue to provide electric service to existing and new business development projects in the Northside and surrounding

areas, including but not limited to The Exchange Development, Transwestern Project, Trujillo Adobe Project, Northside Agricultural Innovation Center, UCR North District Phase 2, and RUSD STEM Education Center.



Proposed Low Profile Hunter Substation Replacement

Solicitation Process and Contractor Selection

Request for Proposal No. 1850 was posted on the City's online bidding system, Planet Bids on July 26, 2023, seeking prospective companies to provide design-build services for the new Hunter Substation Replacement Project. As a crucial step for potential bidders to understand the project scope and site specifics, a mandatory pre-bid meeting was conducted at the site on August 24, 2023, with 46 prospective bidders in attendance. The RFP notification is summarized in the following table.

RFP No. 1850 Bidding Notification Summary Table

Action	Number of Vendors
Vendors Notified	1346
Vendors Who Downloaded the RFP (include manufactures and sub-contractors)	112
Questions and Answers Received	65
Addenda Submitted	8
Proposals Received	2

On November 15, 2023, RFP No. 1850 closed with a total of 2 responses. Upon further research as to why the City did not receive additional bidder responses, it was stated that companies currently have limited resources to dedicate to such a substantial project given the scope of the project. The Purchasing Division's review found the two vendors to be responsive and responsible. Under the guidance of the Purchasing Division, four City staff members evaluated the proposals. After careful evaluations of both proposals, Purchasing staff recommended

awarding to Aubrey Silvey Enterprise Inc.'s as they are the highest rated proposer and offered the best value for the City. The total points and rankings are summarized in the table below. Aubrey Silvey Enterprise Inc.'s proposed cost was below the engineer's estimated amount of $59,000,000.

Evaluation Results Table

Selection Criteria	**Max Score**	**Aubrey Silvey Enterprise Inc.**	**Energy Services West, LLC**
Business History and Performance	150	123.75	116.25
Design and Management Outline, Qualification of Key Personnel	150	118.13	128.63
Technical Proposal & Equipment Documents, Warranty Service Proposal, Engineering Design Proposal	300	212.25	266.25
Costs Scores	400	400	322.25
Total Score	1000	854.13	833.38
Rank		**1**	2

Design-Build Entity	**City Location**	**Proposal Amount**	**Rank**
Aubrey Silvey Enterprise Inc.	**Bremen, GA**	**$54,434,074.23**	**1**
Energy Services West, LLC	Spokane Valley, WA	$67,567,455.67	2

- *Engineer's Estimate* *$59,000,000*

This item follows Purchasing Resolution 23914, Article Nine: Acquisition of Design-Build Services, Section 900. Policy. Acquisition of Design-Build Services shall be completed in conformance with Section 1114 of the City Charter and Chapter 1.07 of the City Municipal Code. To the extent not inconsistent with the City Charter and Municipal Code, the provisions of this Resolution, as amended from time to time, shall apply to all Design-Build Public Works Projects. All Design-Build Services, regardless of Procurement dollar amount and approval limits for each Awarding Entity, shall follow the selection process and process outlined in Chapter 1.07 of the City Municipal Code.

The Purchasing Manager concurs that the recommended action complies with Purchasing Resolution No. 23914.

Project Specific and Details

The project's civil and structural work will involve grading the site, laying foundations, fabricating, and welding steel structures, as well as constructing and reinforcing a decorative block wall using masonry and rebar. The design-build firm is required to adhere to established construction and material testing standards for these activities. To ensure adherence to these standards, RPU will engage an external agency to conduct inspections and material testing. The team will seek the Board's approval for the selection and appointment of the inspection agency before initiating the construction work.

As part of RPU's adoption of intelligent software and migration plan to enhance accuracy and efficiency in drawing production, the design-build entity's drawings will be redrawn/converted to RPU's standard format. This effort shall be executed by a different contractor, who has the required technical drafting experience with utility intelligent circuit software adopted by RPU Engineering. Once a contractor has been identified, RPU staff plans to return to the Board for City Council award recommendation and approval at the appropriate time for such professional

services.

The project/fiscal breakdown is as follows:

Project Breakdown			
Work Type	**Performed By:**	**Amount ($)**	**Percent of Total**
Design-Build Services per RFP No. 1850	Aubrey Silvey Enterprise Inc.	$54,434,075	87.3%
Inspection Services during Construction	Consultant Panel/Others (at later time)	$550,000	0.9%
Drafting Services Utilizing Intelligent Software	Consultant Panel/Others (at later time)	$700,000	1.1%
Project Management and Engineering	RPU - Engineering Labor	$299,518	0.5%
Inspection, Factory Testing, Field Testing and Commissioning	RPU - Crews Labor	$500,000	0.8%
Material for 15 kV Distribution Conductors	RPU - Central Store Materials	$400,000	0.6%
Contract Contingency (10%)	Aubrey Silvey Enterprise	$5,443,407	8.7%
Work Order Total:		**$62,327,000**	**100%**
Reimbursements			None
Anticipated Start Date:			**July 2024**
Anticipated Duration:			**40 months (January 2028)**

The table above identifies the type of work, who will perform the work and the estimated cost for each category. If needed, additional services valued at more than $50,000 will be solicited through the formal procurement process and brought before the Board and City Council for consideration and a request for approval. Design, procurement, construction and commissioning for this project are expected to transpire in the next four fiscal years FY 2024/2025 - 2027/2028.

STRATEGIC PLAN ALIGNMENT:

This item contributes to **Strategic Priority No. 6 Infrastructure, Mobility and Connectivity and Goal No. 6.2** – Maintain, protect, and improve assets and infrastructure within the City's built environment to ensure and enhance reliability, resiliency, sustainability, and facilitate connectivity.

The item aligns with EACH of the five cross-cutting threads as follows:

1. **Community Trust** – Riverside Public Utilities is transparent and makes decisions based on sound policy, inclusive community engagement, involvement of RPU Board & Commissions, and timely and reliable information. This project aims to address the aging infrastructure and vulnerability of the existing Hunter Substation, which serves approximately 4,700 customers in the Hunter Industrial Park and Northside communities north of the 215/60/91 Freeway interchange, and nearby areas.

2. **Equity** – Riverside supports advancing fair treatment, recognition of rights, and equitable distribution of services to ensure every member of the community has equal access to share the benefits of community progress. The general public and businesses in this area will benefit from a new electrical substation that will provide reliable and high-quality

electrical service. In addition, this project is in line with the 2023 Local Hazard Mitigation Plan for the City of Riverside and Riverside County, aiming to enhance electrical service reliability, safety, and efficiency for all members of the community.

3. **Fiscal Responsibility** – Riverside is a prudent steward of public funds and ensures responsible management of the City's financial resources while providing quality public services to all. Fiscal responsibility for this project was achieved by utilizing parameters that attested the qualifications and experience of the proposers during the evaluation process. Moreover, the proposal cost was a major factor in the criteria when evaluating proposals, while providing best value and timely project delivery to ensure that RPU would have the capacity to serve existing and new business growth in the area. Finally, RPU will provide the 12kV power cables and terminators to reduce overall project cost for material that is standard to RPU.

4. **Innovation** – The newly constructed station will feature state-of-the-art Substation Automation Systems (SAS), relay protection for both 69kV and 12kV systems, along with additional auxiliary control systems, adhering to the latest standards in the industry. In addition, the engineering design of Hunter Substation will utilize 3D modeling and smart circuit software to enhance the precision and consistency of the drawings.

5. **Sustainability & Resiliency** – The Hunter Substation Replacement Project's new equipment is designed to enhance sustainability and resiliency, ensuring dependable and safe operations during field maintenance while delivering electrical services to the community. These upgrades are aimed at advancing grid modernization and ensuring long-lasting reliability. Additionally, the project will bolster perimeter security through the construction of a new masonry wall around the facility, complemented by an advanced electronic surveillance system to safeguard RPU assets within the station.

FISCAL IMPACT:

The total project fiscal impact is $62,327,000. Budget transfers are required from the listed below Public Utilities' Electrical Capital accounts to the Public Utilities' Hunter Substation Replacement Capital Account No. 6130100-470699.

Project Category	Transfer From Capital Account:	To New Hunter Sub. Account	Budget Transfer Amount
Recurring	6130000-470601 – Distribution Line	6130100-470699	$1,105,000
Recurring	6130000-470603 – Line Rebuilds	6130100-470699	$850,000
Recurring	6130000-470620 – Major Transmission Line	6130100-470699	$527,000
Recurring	6130000-470633 – Major Feeders	6130100-470699	$880,000
Recurring	6130000-470657 – Biogas to Energy	6130100-470699	$6,900,000
Recurring	6130000-470672 – SCADA	6130100-470699	$2,250,000
Overhead	6130100-470623 – GO 165 Upgrades	6130100-470699	$5,850,000
Overhead	6130100-470644 – 4/12 kV Conversions	6130100-470699	$9,200,000

Overhead	6130100-470638 – Neighborhood Street Light	6130100-470699	$765,000
Underground	6130100-470603 – Line Rebuilds	6130100-470699	$3,940,000
Underground	6130100-470624 – GO 165 Upgrades	6130100-470699	$6,540,000
Underground	6130100-470635 – Cable Replacement	6130100-470699	$12,870,000
Substation	6130100-470608 – System Substation Mod.	6130100-470699	$340,000
Substation	6130100-470616 – Sub. Bus and Upgrades	6130100-470699	$1,170,000
Substation	6130100-470632 – Substation Transformer	6130100-470699	$9,140,000
New Hunter Substation Account Total:			**$62,327,000**

Over the last couple of years, RPU Engineering staff in collaboration with the RPU executive management team have been planning for the implementation of the Hunter Substation Replacement Project. It was evaluated and determined that this project was of high priority and that funding and budget transfers from existing accounts were required. Although some projects in the Recurring, Overhead, and Underground categories were delayed during Fiscal Year 2023/24, it is important to note that no developer driven projects were impacted. Staff have continued to work closely with the development community to ensure that new business and load-growth developer driven projects were a priority for RPU. It is also important to recognize that the replacement of the existing Hunter substation is essential to continue to serve the existing community and be ready for load-growth due to building and transportation electrification initiatives.

Projects related to underground Conduit and Cable replacements, Plaza Substation 4-12kV Voltage Conversions, Battery Charger Upgrades, Streetlight Replacements, and Overhead Inspections were delayed during Fiscal Year 2023/24. These and additional projects are now ready for bidding and construction and will be presented to the Board at the beginning of the upcoming Fiscal Year 2024/25 for consideration. Sufficient funds will be available to complete these projects in the upcoming fiscal year. These projects will be done in a timely manner to avoid impacting system reliability and quality of electric service to the community.

Prepared by: Daniel Honeyfield, Utilities Assistant General Manager/Energy Delivery
Approved by: Todd M. Corbin, Utilities General Manager
Certified as to availability of funds: Kristie Thomas, Finance Director/Assistant Chief Financial Officer
Approved by: Rafael Guzman, Assistant City Manager
Approved as to form: Phaedra A. Norton, City Attorney

Attachments:
1. Project Site Map
2. Award Recommendation Letter
3. Design-Build Agreement
4. Presentation