

# RIVERSIDE PUBLIC UTILITIES

## Board Memorandum

**BOARD OF PUBLIC UTILITIES**

**DATE:** NOVEMBER 5, 2018

**ITEM NO:** 6

**SUBJECT:** WORK ORDER NO. 1524839 FOR MAGNOLIA SUBSTATION DEMOLITION IN THE AMOUNT OF \$110,000

**ISSUE:**

Approve Work Order No. 1524839 for the demolition of the Magnolia Substation in the amount of \$110,000.

**RECOMMENDATION:**

That the Board of Public Utilities approve Work Order No. 1524839 for the demolition of the Magnolia Substation in the amount of \$110,000.

**BACKGROUND:**

The Electric System Master Plan recommended converting all remaining 4kV distribution to 12kV distribution to improve efficiency of, modernize, and replace ageing assets. On December 7, 2012, the Board of Public Utilities (Board) approved the Magnolia-Plaza Reliability Project (MPRP). The Magnolia-Plaza Reliability project was delivered to facilitate the conversion of remaining 4kV circuits served out of the Magnolia Substation, and facilitate the retirement and removal of the Magnolia Substation.

All of the improvements for the Plaza Substation were completed in March 2017. The conversions and distribution feeder work was completed on May 6, 2018, and the decommissioning of the Magnolia Substation was successfully completed in June 2018. Upon approval of Work Order No. 1524839, the demolition of the Magnolia Substation is anticipated to begin in November 2018.



*Magnolia Substation (Pre-Retirement)*

The Magnolia Substation was placed into service in 1949. The Substation reached the end of its useful life, and it was considered the oldest substation in the Riverside Public Utilities' electric grid. It is located

east of Central Avenue's 91 Freeway eastbound off-ramp and, until its retirement, provided power for 1,000 customers. These customers are now being served by the new power substation transformer no. 5 placed into service as part of the MPRP at the Plaza Substation which is located at Elizabeth Street and Magnolia Avenue.



*Power Transformer No. 5 at Plaza Substation*

## **DISCUSSION:**

The demolition of the Magnolia Substation will include the removal and disposal of all the equipment, foundations, and structures above and below ground level as deemed practical. Once the removal efforts are completed, the site will be graded and leveled as needed. The existing perimeter fence, landscaping, and driveway will be maintained for security, aesthetics, and access until the property is repurposed or sold.

The requested Work Order total also includes the testing of the soil for any contaminants, which will be performed by an environmental firm. Depending on the testing results, staff may need to return to the Board to request additional funds to complete the mitigation actions.

Power was transferred to the Magnolia Substation over two 33kV sub-transmission lines from the Freeman Substation and the Riverside Substation. RPU will demolish, remove, and dispose of all the equipment related to the Freeman-Magnolia sub-transmission line, such as, the power auto transformer, circuit breaker, and above and below grade structures at the Freeman Substation to allow for future improvements.



*Equipment and Structures to Remove at Freeman Substation*

Equipment removal at the Riverside Substation will not take place at this time as the remaining equipment and structures do not hinder normal operations or future site improvements. The Riverside Substation equipment removal will be part of future 4-12kV conversion projects.

The project management and engineering will be performed by RPU engineering staff. The environmental study will be performed by a consultant firm from the consultant panel. The demolition and restoration work will be performed by RPU field forces.

The project and capital expenditure breakdown are proposed as follows:

<b>Project and Capital Expenditure Breakdown</b>		
Work Type	Performed by:	Amount (\$)
Project Management and Engineering	RPU Engineering Staff	\$40,000
Environmental Study	Environmental Consultant	\$20,000
Electrical Work	RPU Field Forces	\$50,000
<b>Work Order Total:</b>		<b>\$110,000</b>
<b>Anticipated Completion Date:</b>		<b>January 2019</b>

**FISCAL IMPACT:**

The total fiscal impact is \$110,000. Sufficient funds are available in Public Utilities Account No. 6100000-424220.

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Approved by: Al Zelinka, FAICP, City Manager  
Approved as to form: Gary G. Geuss, City Attorney

Certifies availability of funds: Aileen Ma, Interim Utilities Assistant General Manager/Finance & Administration

Attachment: Project Site Map

Attachment 1: Project Site Map

