



# RIVERSIDE PUBLIC UTILITIES

## Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: OCTOBER 28, 2019

GENERAL MANAGER'S REPORT

ITEM NO: 18

# Riverside Public Utilities

## Open Work Orders Greater than \$200,000

As of January 31, 2019

**Riverside Public Utilities**  
**Open Capital Work Order Summary Report - Electric Fund**  
**September-19**

Project / Subproject or WO	Project Description	Board Approval Date	Board Approved Estimate <sup>(1)</sup>	Project Estimate <sup>(2)</sup>	Year to Date Total as of 9/30/2019	Life to Date Total as of 9/30/2019	Available Balance	Last Activity Date	Job Status (Based on Proj. Est.)		Project Status
									% Spent	% Completed	

**Open Work Orders/Projects with Budgeted or Actual expenditures > \$200,000**

**OVERHEAD**

Various	GO-165 Pole Replacements - Citywide	09/25/17	1,125,000	1,125,000	-	844,775	280,225	Various	75%	100%	Project completed, pending final billing
Various	GO-165 Pole Replacements - Citywide	08/27/18	2,227,000	2,227,000	-	1,150,921	1,076,079	Various	52%	0%	In construction.
Various	GO-165 Pole Replacements - Citywide	06/10/19	2,301,305	2,301,305	-	-	2,301,305	Various	0%	0%	Pending start date
080022 / 01	Wood Streets Streetlights Phase I <sup>(5)</sup>	10/18/13	1,909,600	1,909,600	-	1,792,642	116,958	06/14/18	94%	95%	Completed, pending as-builts.
1503112	Plaza substation - Circuit 450	01/28/19	2,174,000	2,174,000	129,515	1,109,548	1,064,452	09/05/19	51%	60%	In construction.
1521822	Plaza Substation - Circuit 456	09/18/15	933,000	933,000	3,159	1,133,093	(200,093)	07/25/19	121%	95%	Completed, pending as-builts.
1523553	Wood Streets Streetlights Phase 2	02/13/17	2,300,000	2,300,000	-	2,122,524	177,476	01/31/19	92%	95%	Completed, pending as-builts.
1708708	Plaza Sub 4/12kV Conversion Circuit 441	08/12/19	2,038,000	2,038,000	917	55,319	1,982,681	08/22/19	3%	0%	Design Complete, Pending construction
1708710	Plaza Substation - Circuit 458	04/09/18	1,170,000	1,170,000	-	665,196	504,804	06/17/19	57%	95%	Completed, pending as-builts.
1808449	Plaza Substation - Circuit 448	07/09/18	973,000	973,000	196	538,739	434,261	08/10/19	55%	90%	In construction.
1808451	Plaza Substation - Circuit 443	03/29/18	415,000	415,000	11,467	376,022	38,978	08/16/19	91%	95%	Completed, pending as-builts.
<b>Subtotal of OVERHEAD</b>					<b>17,565,905</b>	<b>145,253</b>	<b>9,788,779</b>	<b>7,777,126</b>			

**UNDERGROUND**

1409723	Canyon Crest Area 1E	11/06/15	1,175,000	1,175,000	-	1,032,476	142,524	02/08/18	88%	95%	Completed, pending closure (litigation resolved)
1505212	Canyon Crest Area 1F (Phase 2)	01/28/19	1,430,000	1,430,000	20,563	1,374,708	55,292	08/15/19	96%	95%	Completed, pending as-builts.
1713398	Canyon Crest Area 1F (Phase 1)	01/08/18	739,000	739,000	-	743,429	(4,429)	03/21/19	101%	100%	Completed, pending as-builts.
1724058	Canyon Crest Area 2 Cable Rejuvenation Project	03/25/19	746,000	746,000	-	360,286	385,714	09/11/19	48%	95%	Pending as-built and final payment
1833153	Conduit and Structure Installation for the Cable Replacement Project	09/23/19	740,000	740,000	-	26,217	713,783	11/01/18	4%	0%	Pending Board approval on 9/23/19
<b>Subtotal of UNDERGROUND</b>					<b>4,830,000</b>	<b>20,563</b>	<b>3,537,116</b>	<b>1,292,884</b>			

**SUBSTATION**

1407577	Metal Gate Replacement	04/09/18	337,699	337,699	656	34,967	302,732	09/05/19	10%	5%	In design
1601400	Springs, Freeman and Mt. View	07/25/16	5,530,000	5,530,000	437,249	5,448,860	81,140	09/17/19	99%	99%	Construction Completed-pending as-builts
1603079	Springs & Orangecrest Equip. Replacement Proj.	02/19/16	1,700,000	1,700,000	-	1,459,558	240,442	06/27/19	86%	60%	In construction
1808341	Substation Utility Storage Facility	06/11/18	407,385	407,385	36,866	239,680	167,705	09/05/19	59%	5%	In design

**Riverside Public Utilities**  
**Open Capital Work Order Summary Report - Electric Fund**  
**September-19**

Project / Subproject or WO	Project Description	Board Approval Date	Board Approved Estimate <sup>(1)</sup>	Project Estimate <sup>(2)</sup>	Year to Date Total as of 9/30/2019	Life to Date Total as of 9/30/2019	Available Balance	Last Activity Date	Job Status (Based on Proj. Est.)		Project Status
									% Spent	% Completed	
1814007	Substation Capacitor Upgrade Project	01/22/18	5,306,000	5,306,000	108,384	4,134,470	1,171,530	09/05/19	78%	15%	Completed construction of 2 capacitors
1816163	Substation Automation Upgrade Project	02/26/18	2,027,679	2,027,679	9,995	1,141,157	886,522	09/05/19	56%	40%	7 substations are in design - RERC Design Completed,Casa, Plaza & University Constructions are completed
1817274	Vista Substation	02/26/18	836,175	836,175	-	782,757	53,418	06/30/19	94%	99%	Construction is completed. In the process of closing the wo.
1822052	Harvey Lynn Substation Site Expansion	10/22/18	2,100,000	2,100,000	181,105	1,380,017	719,983	09/11/19	66%	60%	PO's will be issued next month to contractors.
1826061	Riverside power plants Arc Flash Mitigation	06/11/18	497,000	497,000	1,048	18,541	478,459	09/05/19	4%	3%	In design
1826998	Multi-Substation Circuit Breaker Remote Racking Project	11/26/18	619,000	619,000	3,041	461,795	157,205	09/05/19	75%	99%	Construction complete pending as-built
1826767	Hunter Substation Replacement Project	01/14/19	2,000,000	2,000,000	218,680	408,165	1,591,835	09/17/19	20%	10%	Preliminary design
1816638	Freeman Substation & Mt. View Substation	05/14/18	4,202,827	4,202,827	138,945	3,816,432	386,395	09/11/19	91%	95%	Construction completed-pending as-builts and standards development
1822318	Multi Substation Transformer Upgrade/ Recondition	06/25/18	3,082,617	3,082,617	6,463	2,619,604	463,013	09/05/19	85%	90%	In construction
1810532	Freeman Switchgear and Transformer Upgrade	11/05/18	5,463,000	5,463,000	141,358	227,662	5,235,338	09/05/19	4%	3%	Completed 80% of phase 1 design
1906356	Multi Substation - 69kV Circuit Breakers Replacement	09/23/19	3,500,000	3,500,000	337	26,062	3,473,938	09/05/19	1%	1%	Planning stage. Design Consultant has been selected and award is pending on a future Board Meeting.
1927285	La Colina Switchgear 3&4 Replacement Project	06/10/19	480,000	480,000	268	4,766	475,234	09/10/19	1%	0%	Board approved WO
1927495	Plaza & Riverside Line Relay Replacement Project	06/10/19	492,000	492,000	2,777	2,777	489,223	09/05/19	1%	0%	Board approved WO
<b>Subtotal of SUBSTATION</b>					<b>38,581,382</b>	<b>1,287,171</b>	<b>22,207,270</b>	<b>16,374,112</b>			

**RECURRING/OBLIGATION TO SERVE**

070016 / 07	Tract 29596 Krameria Ave <sup>(4)</sup>	07/20/07	500,000	500,000	-	468,292	31,708	03/13/14	94%	95%	In construction.
1024305	Electric SCADA System Upgrades	07/01/11	2,938,307	2,938,307	-	2,737,329	200,978	08/10/16	93%	99%	Completed, pending closure.
1309568	Distribution Automation Program	01/18/13	960,000	960,000	-	685,860	274,140	06/30/19	71%	65%	In construction.
1423748	Freeman Substation to Orangecrest Substation	10/22/18	1,265,000	1,265,000	30,179	260,655	1,004,345	09/11/19	21%	1%	In design phase
1503115	Freeman-Kaiser-Harvey Lynn	12/18/15	300,000	300,000	-	226,521	73,479	12/27/18	76%	50%	Drilling contractor meeting w/crews, pending start date
1518525	Jurupa Avenue - New Tract 28987	11/06/15	320,000	320,000	2,074	15,814	304,186	09/05/19	5%	0%	On-hold.
1524282	Land Mobile Radio (LMR) system (Electric Portion)	09/26/16	3,000,000	1,650,000	-	1,692,952	(42,952)	04/26/19	103%	95%	Completed, pending closure.
1611216	Citywide Streetlight L.E.D. Conversion	07/25/16	1,150,000	1,150,000	-	708,934	441,066	09/05/19	62%	70%	In design.

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									% Spent	% Completed	
1709454	12 kV Electrical Feeders for the California Air Resources Board Project	01/14/19	757,000	757,000	186,108	425,176	331,824	09/05/19	56%	1%	Design completed, In construction
1711020	Fiber Management System and Professional Services Project	08/26/19	650,000	650,000	374	29,244	620,756	09/05/19	4%	5%	Board approved 8/26/19, pending PO
1719921	Magnolia Avenue	04/24/17	2,189,489	2,189,489	-	1,915,191	274,298	09/11/19	87%	95%	Completed, pending as-builts.
1722321	Norte Vista Sidewalk Improvements Project	02/12/18	888,000	888,000	75,988	742,721	145,279	09/05/19	84%	80%	In construction.
1725687	Wells-Arlanza Sidewalk Improvements Project	01/08/18	460,000	460,000	-	418,894	41,106	06/01/19	91%	95%	In construction.
1819765	Canyon Crest Areas 3 and 4 for Cable Rejuvenation	07/22/19	1,479,000	1,479,000	1,025	33,390	1,445,610	08/22/19	2%	0%	Board approved 7/22/19, pending PO
1822537	Smart Grid Communication System Project	07/22/19	459,000	459,000	623	25,730	433,270	09/05/19	6%	5%	Board approved. In the process of issuing PO to consultant.
1917203	Auto Center Reliabilty Project	04/22/19	250,000	250,000	57,781	92,763	157,237	09/19/19	37%	12%	Board approved. On hold
<b>Subtotal of RECURRING/OBLIGATION TO SERVE</b>					<b>16,215,796</b>	<b>354,151</b>	<b>10,479,466</b>	<b>5,736,330</b>			
<b>System Automation</b>											
1619634	Operational Data Management System - Electric	06/12/17	4,907,000	2,474,500	11,390	2,494,800	(20,300)	09/10/19	101%	70%	Seeking approval to extend consultant contract for project years 4 & 5 for additonal integration and development
1707248	Advanced Metering Infrastructure - Electric	06/12/17	3,660,000	1,450,000	35,871	273,476	1,176,524	09/16/19	19%	10%	Planning stage of project; preparing for Alpha proof-of-concept
1911437	Citywide Geographic Information System Tech. Upgrade Project	12/10/18	1,206,521	480,000	-	-	480,000	12/10/18	0%	1%	Board approval 12/10/18
1914017	Cyber Security Upgrade Project RERC and Springs	03/25/19	220,024	220,024	-	179,491	40,533	06/17/19	82%	10%	Board approved 4/25. Equipment on hand.
1916742	Phase 1 LED Conversion	06/24/19	8,560,000	8,560,000	-	280	8,559,720	02/27/19	0%	0%	Waiting Special Provisions,Draft from Benya
1718078	Streetlight Replacement Proj- Phase 3	07/22/19	1,849,000	1,849,000	3,147	102,836	1,746,164	09/05/19	6%	50%	Board approved 7/22 Pending Council approval on 8/6
<b>Subtotal of SYSTEM AUTOMATION</b>					<b>15,033,524</b>	<b>50,408</b>	<b>3,050,883</b>	<b>11,982,641</b>			
<b>OTHER PROJECT</b>											
1104202	CIS Replacement	06/01/12	9,200,000	8,859,000	-	8,706,391	152,609	06/24/19	98%	95%	Completed, pending closure.
<b>Subtotal of OTHER PROJECT</b>					<b>8,859,000</b>	<b>-</b>	<b>8,706,391</b>	<b>152,609</b>			
<b>RTRP</b>											
642975	Riverside Transmission Reliability Project (RTRP)	01/20/06	42,605,521	42,605,521	1,620,688	35,243,813	7,361,708	09/11/19	83%	15%	In design.
2001119	Tracking work related to RTRP	08/26/19	585,000	585,000	-	-	585,000	07/02/19	0%	0%	Est. start November 2019
<b>Subtotal of RTRP</b>					<b>43,190,521</b>	<b>1,620,688</b>	<b>35,243,813</b>	<b>7,946,708</b>			

**Riverside Public Utilities**  
**Open Capital Work Order Summary Report - Electric Fund**  
**September-19**

Project / Subproject or WO	Project Description	Board Approval Date	Board Approved Estimate <sup>(1)</sup>	Project Estimate <sup>(2)</sup>	Year to Date Total as of 9/30/2019	Life to Date Total as of 9/30/2019	Available Balance	Last Activity Date	Job Status (Based on Proj. Est.)		Project Status
									% Spent	% Completed	

**GRAND TOTAL ELECTRIC FUND - Open Work Orders**

**144,276,128      3,478,234      93,013,718      51,262,410**

**Notes:**

- (1) Board approved estimate is the total approved amount of the work order which can include operating & maintenance costs as well as combined Electric & Water projects.
- (2) Project estimate reflects Electric capital portion only.
- (4) Work includes both WO 0704432 & 0704434
- (5) Work includes both WO 809099 & 0809101

Items in BLUE represent work orders with no activity in the last 60 days.

**Riverside Public Utilities**  
**Open Capital Work Order Summary Report - Water Fund**  
**September-19**

Project / Subproject or WO	Project Description	Board Approval Date	Board Approved Estimate <sup>(1)</sup>	Project Estimate <sup>(2)</sup>	Year to Date Total as of 09/30/2019	Life to Date Total as of 09/30/2019	Available Balance	Last Activity Date	Job Status (Based on Proj. Est.)		Project Status
									% Spent	% Completed	

Open Work Orders/Projects with Budgeted or Actual expenditures > \$200,000

**DISTRIBUTION PIPELINE**

1507007	Jasmine and Columbus	10/03/14	679,000	679,000	5,447	52,714	626,286	02/13/19	8%	0%	On-hold.
1615173	Water Cust. Development - 58 Magnolia Ctr.	(3)	(3)	237,767	-	262,912	(25,145)	03/31/18	111%	90%	Completed, pending as-builts/mapping Final grade not set. FF still need to set final domestic services and vaults, after Public Works final grading.
1726679	Iowa Ave 12-inch Water Main Extension	09/24/18	353,000	353,000	259,638	303,732	49,268	08/22/19	86%	90%	Blow off hydrants and air valve need final placement once final grade complete. Waiting for UCR for right-of-way approval.
1905091	Iowa Ave 12-inch Water Main Extension	09/24/18	269,000	269,000	77,879	77,879	191,121	06/20/19	29%	90%	
<b>Subtotal of DISTRIBUTION PIPELINE</b>											
				<b>1,538,767</b>	<b>342,963</b>	<b>697,237</b>	<b>841,530</b>				

**DISTRIBUTION FACILITIES**

1402756	Mission Inn Booster Station Project	09/23/19	2,120,000	2,120,000	59,115	168,959	1,951,041	09/05/19	8%	5%	Bid Award scheduled for Board Approval - 9/23/19
1403310	Mission Inn Rezoning Pipeline Project	09/23/19	3,625,000	3,625,000	78,414	223,761	3,401,239	09/05/19	6%	5%	Bid Award scheduled for Board Approval - 9/23/19
1524282	Land Mobile Radio (LMR) system (Wtr Portion)	09/26/16	3,000,000	1,350,000	-	1,283,051	66,949	04/26/19	95%	95%	Completed, pending commissioning.
1706279	Wells & Cypress Water Main Replacement	06/24/19	2,450,000	2,450,000	293,776	474,744	1,975,256	08/22/19	19%	10%	Under construction by City Forces
1904589	Potable Water Emergency Interconnection with the City of Norco	03/25/19	340,000	340,000	75,013	75,013	264,987	08/20/19	22%	30%	In construction.
<b>Subtotal of DISTRIBUTION FACILITIES</b>											
				<b>9,885,000</b>	<b>506,318</b>	<b>2,225,528</b>	<b>7,659,472</b>				

**TRANSMISSION PIPELINE**

1903811	Iowa Avenue Transmission Main Replacement	10/22/18	2,140,000	2,140,000	1,859,819	1,859,819	280,181	08/08/19	87%	100%	Complete - Pending Closure
<b>Subtotal of TRANSMISSION PIPELINE</b>											
				<b>2,140,000</b>	<b>1,859,819</b>	<b>1,859,819</b>	<b>280,181</b>				

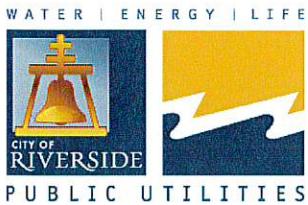
**Riverside Public Utilities**  
**Open Capital Work Order Summary Report - Water Fund**  
**September-19**

Project / Subproject or WO	Project Description	Board Approval Date	Board Approved Estimate <sup>(1)</sup>	Project Estimate <sup>(2)</sup>	Year to Date	Life to Date	Available Balance	Job Status		Project Status
								(Based on Proj. Est.)	% Spent	
<b>WATER SUPPLY</b>										
1722078	Jackson St - Phase 1 & 2 Water Sites Retrofit	04/24/17	434,370	434,370	144,067	241,587	192,783	09/11/19	56%	34% In design
<b>Subtotal of WATER SUPPLY</b>										
					<b>434,370</b>	<b>144,067</b>	<b>241,587</b>	<b>192,783</b>		
<b>WELL PROJECTS</b>										
1709464	Warren 4R Potable Water Well	09/08/19	788,474	788,474	-	99,289	689,185	09/08/19	13%	50% In the final equipping phase
<b>Subtotal of WATER SUPPLY</b>										
					<b>788,474</b>	<b>-</b>	<b>99,289</b>	<b>689,185</b>		
<b>SYSTEM AUTOMATION</b>										
1619634	Operational Data Management System - Water	05/09/16	4,907,000	1,332,500	141,449	1,342,492	(9,992)	09/10/19	101%	70% In implementation phase.
1707248	Advanced Metering Infrastructure - Water	06/12/17	3,660,000	460,000	-	-	460,000	09/16/19	0%	2% Project on hold
1909378	SCADA	06/24/19	1,550,222	1,550,222	56,487	56,487	1,493,735	08/08/19	4%	5% In Design
<b>Subtotal of SYSTEM AUTOMATION</b>										
					<b>3,342,722</b>	<b>197,936</b>	<b>1,398,979</b>	<b>1,943,743</b>		
<b>OTHERS</b>										
1202806	Riverside North Aquifer Storage & Recovery	10/07/11	1,800,000	1,800,000	-	447,714	1,352,286	07/01/17	25%	10% Environmental phase led by SBVWD
1504840	Santa Ana River Habitat Conservation	09/05/14	325,000	325,000	-	134,256	190,744	06/30/17	41%	50% In design
<b>Subtotal of OTHERS</b>										
					<b>2,125,000</b>	<b>-</b>	<b>581,970</b>	<b>1,543,030</b>		
<b>GRAND TOTAL OF WATER FUND - Open Work Orders</b>										
					<b>20,254,333</b>	<b>3,051,103</b>	<b>7,104,409</b>	<b>13,149,924</b>		

**NOTE:**

- (1) Board approved estimate is the total approved amount of the work order which can include operating & maintenance costs as well as combined Electric & Water projects.
- (2) Project estimate reflects Water portion only.
- (3) 100% Customer funded project

Items in blue represent work orders with no activity in the last 60 days.



# RIVERSIDE PUBLIC UTILITIES

## Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: OCTOBER 28, 2019

GENERAL MANAGER'S REPORT

ITEM NO:

# Riverside Public Utilities

## Closed Work Order Reports

As of January 31, 2019

Riverside Public Utilities  
 Closed Capital Work Order Summary Report - Electric Fund  
 September-19

Project / Subproject or WO	Project Description	Start Date	End Date	Board Approved Estimate	Final Project Cost	Variance	% Variance
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**CLOSED Capital Work Orders with Budget or Actual Expenditures > \$200,000**

Please note: No Closed Work Orders over \$200,000 to  
 report for the month of September 2019.

<b>Total Electric Fund - Closed Work Orders</b>	\$ <u>      </u> -	\$ <u>      </u> -	\$ <u>      </u> -
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Riverside Public Utilities  
 Closed Capital Work Order Summary Report - Water Fund  
 September-19

Project / Subproject or WO	Project Description	Start Date	End Date	Board Approved Estimate	Final Project Cost	Variance	% Variance
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**CLOSED Capital Work Orders with Budget or Actual expenditures > \$200,000**

**DISTRIBUTION PIPELINE**

1602941	Larchwood Place	10/16/2015	7/22/2019	\$ 895,000	\$ 483,825	\$ 411,175	45.94%
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*1) Note on Final Project Cost:*

The project was completed within budget.

*2) Impact to Customer Service:*

The project ensures delivery of uninterrupted water service to the community.

*3) Impact to System Reliability:*

System reliability will improve due to improved flow by the replacement of outdated materials.

Total Water Fund - Closed Work Orders	<u>\$ 895,000</u>	<u>\$ 483,825</u>	<u>\$ 411,175</u>
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