



# RIVERSIDE PUBLIC UTILITIES

## Board Memorandum

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**BOARD OF PUBLIC UTILITIES**

**DATE: NOVEMBER 27, 2017**

**GENERAL MANAGER'S REPORT**

**ITEM NO: 12**

# **Riverside Public Utilities**

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

**As of October 30, 2017**

**Riverside Public Utilities**  
**Open Capital Work Order Summary Report - Electric Fund**  
**October 2017**

Project / Subproject or WO	Project Description	Board Approval Date	Board Approved Estimate <sup>(7)</sup>	Project Estimate	Year to Date	Life to Date	Available Balance	Last Activity Date	Job Status (Based on Proj. Est.)		Project Status
					Total as of 10/31/2017	Total as of 10/31/2017			% Spent	% Completed	
Open Work Orders/Projects with Budgeted or Actual expenditures > \$200,000											
Advanced Technology <sup>(3)</sup>											
1619634	Operational Data Management System - Electric	05/09/16	3,189,500	3,189,500	90,637	1,958,187	1,231,313	10/25/17	61%	65%	In implementation phase.
1707248	Advanced Metering Infrastructure - Electric	06/12/17	3,000,000	1,890,000	-	-	1,890,000	09/23/16	0%	2%	Developing business case.
	Subtotal			5,079,500	90,637	1,958,187	3,121,313				
Cable Replacement											
1409723	Canyon Crest Area Circuit 1215	11/06/15	1,175,000	1,175,000	2,590	1,030,891	144,109	10/19/17	88%	95%	As-builts in progress.
1319813	Canyon Crest Area Circuit 1218	04/10/17	967,000	967,000	(133,605)	282,519	684,481	10/05/17	29%	50%	In construction.
	Subtotal			2,142,000	(131,015)	1,313,410	828,590				
CIS Banner Upgrade											
1104202	CIS Replacement	06/01/12	8,859,000	8,859,000	2,530	8,304,998	554,002	11/30/16	94%	95%	Completed, pending closure.
	Subtotal			8,859,000	2,530	8,304,998	554,002				
City-Wide Communciations Network											
1719921	Magnolia Avenue	04/24/17	2,189,489	2,189,489	25,181	53,014	2,136,475	10/19/17	2%	15%	In construction.
1524282	Land Mobile Radio (LMR) system (Electric Portion)	09/26/16	3,000,000	1,650,000	111,874	1,680,048	(30,048)	10/19/17	102%	95%	Completed, pending closure.
1423750	Riverside Substation to Hunter Substation	04/24/17	465,000	465,000	19,450	50,260	414,740	10/19/17	11%	15%	In construction.
1423746	Fiber Use License Agreement - Riverside County	01/22/16	325,000	325,000	-	340,484	(15,484)	09/12/17	105%	100%	Closed.
	Subtotal			4,629,489	156,505	2,123,806	2,505,683				
Distribution Automation Reliability											
1309568	Distribution Automation Program	01/18/13	960,000	960,000	2,530	682,539	277,461	10/18/17	71%	65%	In construction.
	Subtotal			960,000	2,530	682,539	277,461				
GO 165 Upgrades/Relocations											
Various	GO-165 Pole Replacements - Citywide	09/25/17	1,125,000	1,125,000	-	-	1,125,000	No activity	0%	0%	Pending start date.
1804337	Four (4) Electrical Vaults & Manholes	09/25/17	557,000	557,000	1,936	1,936	555,064	08/24/17	0%	0%	Pending start date.
1722605	OH & UG Electric Dist. System Inspections	06/26/17	2,844,000	2,388,000	-	-	2,388,000	03/08/17	0%	0%	Pending start date.
	Subtotal			4,070,000	1,936	1,936	4,068,064				

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					Total as of 10/31/2017	Total as of 10/31/2017			% Spent	% Completed	
Major 4/12Kv Conversions											
1521822	Plaza Substation - Circuit 456	09/18/15	933,000	933,000	-	131,926	801,074	06/01/17	14%	25%	In construction.
1521820	Plaza Substation - Circuit 452	09/18/15	1,446,000	1,446,000	279,577	948,823	497,177	09/27/17	66%	55%	In construction.
1503125	Magnolia Substation - Circuit 46	04/17/15	1,833,000	1,833,000	155,831	1,904,798	(71,798)	10/24/17	104%	90%	In construction.
1501824	Plaza Substation - Circuit 454	09/18/15	1,349,000	1,349,000	0	1,366,960	(17,960)	10/02/17	101%	100%	In closing phase.
1411795	Magnolia - Underground Conversion	04/02/15	2,250,000	2,250,000	6,854	1,650,076	599,924	10/05/17	73%	90%	In construction.
1319390	Magnolia - Overhead Conversion	09/19/14	1,577,100	1,577,100	-	1,786,478	(209,378)	06/21/17	113%	95%	In construction.
Subtotal				9,388,100	442,262	7,789,061	1,599,039				
Major Feeders											
1525536	Diana Avenue	01/22/16	850,000	850,000	754	800,637	49,363	07/13/17	94%	100%	Closed on 10/19/2017.
Subtotal				850,000	754	800,637	49,363				
Major Overhead/Underground Conversions											
1604758	7105 Old Frontage 215 Rd	(2)	(2)	208,182	1,462	190,406	17,776	09/21/17	91%	99%	Completed, pending as-builts.
0913192	Tyler Street Widening	08/07/15	816,000	816,000	-	871,531	(55,531)	09/30/17	107%	95%	Completed, pending as-builts.
Subtotal				1,024,182	1,462	1,061,937	(37,755)				
Major Street Light Projects											
1611216	Citywide Streetlight L.E.D. Conversion	07/25/16	1,150,000	1,150,000	22,588	224,585	925,415	10/05/17	20%	20%	In design.
1518574	Tyler Street Widening Project	08/07/15	141,000	141,000	192	233,478	(92,478)	08/10/17	85%	95%	Completed, pending as-builts.
Subtotal				1,291,000	22,781	458,063	832,937				
Major Tract Distribution											
1518525	Jurupa Avenue - New Tract 28987	11/06/15	320,000	320,000	-	13,740	306,260	06/01/16	4%	0%	On-hold.
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.
070016 / 02	Tract 29515 Phase 2 & Sewer Lift Station <sup>(5)</sup>	11/16/07	345,000	345,000	-	344,419	581	06/01/16	100%	95%	Completed, pending as-builts.
Subtotal				1,165,000	-	826,450	338,550				
Major Transmission Line Projects											
1503115	Freeman-Kaiser-Harvey Lynn	12/18/15	300,000	300,000	2,736	178,565	121,435	10/19/17	60%	50%	Pending start date.
Subtotal				300,000	2,736	178,565	121,435				
Neighborhood Streetlight Retrofit											
1523553	Wood Streets Streetlights Phase 2	02/13/17	2,300,000	2,300,000	876,389	1,361,890	938,110	10/24/17	59%	50%	In construction.
080022 / 01	Wood Streets Streetlights Phase I <sup>(6)</sup>	10/18/13	1,909,600	1,909,600	-	1,791,660	117,940	03/01/16	94%	95%	Completed, pending as-builts.
Subtotal				4,209,600	876,389	3,153,550	1,056,050				

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**October 2017**

Project / Subproject or WO	Project Description	Board Approval Date	Board Approved Estimate <sup>(7)</sup>	Project Estimate	Year to Date	Life to Date	Available Balance	Last Activity Date	Job Status (Based on Proj. Est.)		Project Status
					Total as of 10/31/2017	Total as of 10/31/2017			% Spent	% Completed	
RTRP and STP Project											
642975	230 KV Station	03/05/15	42,605,521	42,605,521	347,159	26,258,057	16,347,464	10/19/17	62%	15%	In design.
812940	69 KV Station <sup>(1)</sup>	11/06/09	24,000,000	24,096,844	-	18,306,368	5,790,476	06/29/17	76%	99%	Completed, pending as-builts.
	Subtotal			66,702,365	347,159	44,564,425	22,137,940				
SCADA											
1024305	Electric SCADA System Upgrades	06/27/16	2,938,307	2,938,307	-	2,737,329	200,978	08/10/16	93%	99%	Completed, pending closure.
	Subtotal			2,938,307	-	2,737,329	200,978				
Substation Bus and Upgrades											
1603079	Springs & Orangecrest	02/19/16	1,700,000	1,700,000	473	1,120,097	579,903	07/27/17	66%	60%	Pending construction.
1601400	Springs, Freeman and Mt. View	07/25/16	5,530,000	5,530,000	28,052	2,808,572	2,721,428	10/19/17	51%	45%	In construction.
1507210	RERC Control Power Improvement	10/23/17	272,000	272,000	3,670	22,155	249,845	10/19/17	8%	0%	In construction.
1311245	Orangecrest, Riverside,Springs & La Colina	03/21/14	1,925,805	1,925,805	(162,718)	1,808,901	116,904	10/19/17	94%	75%	In construction.
1411145	La Colina Switchgear 3 & 4	03/21/14	534,051	534,051	188,212	260,734	273,317	09/22/17	49%	25%	On-hold.
1020992	La Colina & Hunter	05/03/13	649,885	649,885	-	457,843	192,042	06/01/16	70%	90%	On-hold.
1024965	Electric Security Monitoring & Access Control	09/16/11	5,000,000	5,000,000	132	5,112,410	(112,410)	09/22/17	102%	100%	Closed.
	Subtotal			15,611,741	57,689	11,590,712	4,021,029				
Substation Transformer Addition											
1619571	Plaza Substation	10/24/16	460,000	460,000	11,038	439,826	20,174	10/19/17	96%	95%	Completed, pending as-builts.
1514752	Mobile Substation #3	05/23/16	2,198,993	2,198,993	27,376	1,886,782	312,211	10/25/17	86%	95%	In commissioning phase.
	Subtotal			2,658,993	38,414	2,326,608	332,385				
SCE Condemnation Costs											
1704094	Annexation 95 & 99 areas	10/24/16	444,000	444,000	-	-	444,000	No activity	0%	0%	On-hold.
	Subtotal			444,000	-	-	444,000				
Total Electric Fund - Open Work Orders				132,323,277	1,912,768	89,870,278	42,451,063				

**Notes:**

- (1) This work is part of Project 050009 & included within the \$24,000,000 authorized by PU Board and includes various work orders closed in prior years.
- (2) 100% customer funded project
- (3) Advanced Technology projects includes both capital expenditures and professional services.
- (4) Work includes both WO 0704432 & 0704434
- (5) Work includes both WO 0702819 & 0702820
- (6) Work includes both WO 809099 & 0809101
- (7) Board approved estimate is the total amount of the work order which can include operating & maintenance costs as well as combined Electric & Water projects.

Riverside Public Utilities  
Open Capital Work Order Summary Report - Electric Fund  
October 2017

Project / Subproject or WO	Project Description	Board Approval Date	Board Approved Estimate <sup>(7)</sup>	Project Estimate	Year to Date	Life to Date	Available Balance	Last Activity Date	Job Status (Based on Proj. Est.)		Project Status
					Total as of 10/31/2017	Total as of 10/31/2017			% Spent	% Completed	

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**  
**October 2017**

Project / Subproject or WO	Project Description	Board Approval Date	Board Approved Estimate <sup>(2)</sup>	Project Estimate	Year to Date	Life to Date	Available Balance	Last Activity Date	Job Status (Based on Proj. Est.)		Project Status
					Total as of 10/31/2017	Total as of 10/31/2017			% Spent	% Completed	

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

**Advanced Technology<sup>(1)</sup>**

1707248	Advanced Metering Infrastructure - Water	06/12/17	3,000,000	1,110,000	-	-	1,110,000	09/23/16	0%	2%	Developing business case.
1619634	Operational Data Management System - Water	05/09/16	4,907,000	1,717,500	29,196	1,005,586	711,914	05/09/16	59%	65%	In implementation phase.
<b>Subtotal</b>				<b>2,827,500</b>	<b>29,196</b>	<b>1,005,586</b>	<b>1,821,914</b>				

**Asset Management System**

1424073	Water Asset Management	06/20/14	2,530,400	2,048,689	23,588	2,164,556	(115,867)	10/12/17	106%	98%	In monitor & control phase.
<b>Subtotal</b>				<b>2,048,689</b>	<b>23,588</b>	<b>2,164,556</b>	<b>(115,867)</b>				

**Aquifer Storage & Recovery System**

1202806	Riverside North Aquifer Storage & Recovery	10/07/11	1,800,000	1,800,000	23,133	447,714	1,352,286	07/01/17	25%	10%	In environmental evaluation phase.
<b>Subtotal</b>				<b>1,800,000</b>	<b>23,133</b>	<b>447,714</b>	<b>1,352,286</b>				

**Development Costs**

1504840	Santa Ana River Habitat Conservation	09/05/14	325,000	325,000	-	134,256	190,744	06/30/17	41%	25%	In biological evaluation phase.
<b>Subtotal</b>				<b>325,000</b>	<b>-</b>	<b>134,256</b>	<b>190,744</b>				

**Facility Rehabilitation**

1806866	John W. North Treatment Plant Trains 1,2,3	10/23/17	530,000	530,000	-	-	530,000	No Activity	0%	0%	Pending replacement, 03/2018
1727627	John W. North Treatment Plant Trains 4,5	07/10/17	368,000	368,000	3,923	3,923	364,077	No Activity	1%	0%	Pending replacement, 10/2017
1712678	Flume 3 Groundwater Well	02/13/17	255,672	255,672	(26,166)	110,173	145,499	10/19/17	43%	100%	Completed, pending closure.
1712677	Gage 92-3 Groundwater Well	02/13/17	264,626	264,626	-	10,383	254,243	06/01/17	4%	0%	On-hold.
1712676	Tippecanoe Groundwater Well	02/13/17	301,454	301,454	27,552	223,415	78,039	10/19/17	74%	100%	Completed, pending closure.
1712675	Raub 6 Groundwater Well	02/13/17	297,582	297,582	35,659	47,516	250,066	10/05/17	16%	40%	In construction.
1712389	Raub 7 Groundwater Well	02/13/17	267,288	267,288	27,216	191,870	75,418	10/19/17	72%	100%	Completed, pending closure.
1524282	Land Mobile Radio (LMR) system (Wtr Portion)	09/26/16	3,000,000	1,350,000	-	1,283,051	66,949	08/10/17	95%	95%	Completed, pending commissioning.
1508449	Palmyrita Well	11/07/14	215,000	215,000	1,189	8,233	206,767	08/15/17	4%	5%	On-hold.
<b>Subtotal</b>				<b>3,849,622</b>	<b>69,373</b>	<b>1,878,564</b>	<b>1,971,058</b>				

**Riverside Public Utilities**  
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					Total as of 10/31/2017	Total as of 10/31/2017			% Spent	% Completed	
Main Replacements											
1619730	Tenth and Eleventh Street	08/22/16	2,245,000	2,245,000	195,991	1,689,855	555,145	08/24/17	75%	100%	Completed, pending closure.
1602941	Larchwood Place	10/16/15	895,000	865,000	3,967	477,422	387,578	06/30/17	55%	100%	Completed, pending closure.
1515609	Arlington Ave. & Western Ave.	06/06/16	1,241,000	1,241,000	91,494	1,013,120	227,880	08/24/17	82%	85%	In construction.
1515505	Ambs Drive	06/06/16	1,523,000	1,523,000	11,390	1,110,120	412,880	08/24/17	73%	100%	Completed, pending closure.
1515504	Arroyo Drive	11/14/16	2,040,000	2,040,000	70,914	1,654,640	385,360	08/30/17	81%	100%	Completed, pending closure.
1513392	Colorado Ave and Toyon Road	05/22/17	2,978,000	2,978,000	455,924	646,413	2,331,587	10/24/17	22%	50%	In construction.
1507007	Jasmine and Columbus	10/03/14	679,000	679,000	-	-	679,000	No Activity	0%	0%	On-hold.
1422097	Indiana Avenue and Mary St.	07/10/17	2,017,000	2,017,000	29,457	140,575	1,876,425	10/19/17	7%	50%	In construction.
1415931	California and Monroe	12/12/14	973,500	973,500	-	820,305	153,195	06/01/17	84%	95%	On-hold. In litigation.
1107917	Magnolia Ave and Ramona Dr	04/10/17	2,704,000	2,704,000	1,542,358	1,929,548	774,452	10/24/17	71%	90%	In construction.
	Subtotal			17,265,500	2,401,496	9,481,998	7,783,502				
Recycled Water Facilities											
1722078	Jackson Street - Phase 1 & 2 Water Sites Retrofit	04/24/17	434,730	434,730	23,979	33,942	400,788	09/26/17	8%	10%	In construction.
1623724	Jackson Street - Phase 1B (Utility Potholing/Design)	10/23/17	433,000	433,000	22,779	69,518	363,482	09/26/17	16%	15%	In construction.
1521905	Jackson Street - Phase 1	01/22/16	8,609,000	8,609,000	1,012,596	1,551,126	7,057,874	09/27/17	18%	25%	In construction.
	Subtotal			9,476,730	1,059,354	1,654,586	7,822,144				
System Expansion											
1703061	Crestlawn-Norco	11/14/16	1,339,000	1,339,000	81,555	1,187,775	151,225	09/21/17	89%	100%	Completed, pending closure.
1615173	Water Cust. Development - 58 Magnolia Ctr.	(3)	(3)	237,767	235,325	235,325	2,442	10/18/17	99%	90%	Pending pavement completion.
	Subtotal			1,576,767	316,880	1,423,100	153,667				
Utility Agreement Projects - Caltrans SR-91 HOV											
1112062	UA 21699 - Misc. Utility Relocations	11/18/11	1,555,000	1,555,000	(35,311)	455,282	1,099,718	09/27/17	29%	99%	Completed, pending closure.
1112059	UA 21702 - Ivy St Bridge	08/19/11	1,600,000	1,600,000	(26,413)	1,333,551	266,449	09/27/17	83%	99%	Completed, pending closure.
	Subtotal			3,155,000	(61,725)	1,788,833	1,366,167				
Total Water Fund - Open Work Orders				42,324,808	3,861,295	19,979,193	22,345,615				

**NOTE:**

(1) Advanced Technology projects includes both capital expenditures and professional services.

(2) Board approved estimate is the total amount of the work order which can include operating & maintenance costs as well as combined Electric & Water projects.

(3) 100% Customer funded project

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





# **RIVERSIDE PUBLIC UTILITIES**

## **Board Memorandum**

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**BOARD OF PUBLIC UTILITIES**

**DATE: NOVEMBER 27, 2017**

**GENERAL MANAGER'S REPORT**

**ITEM NO: 12**

# **Riverside Public Utilities**

## **Closed Work Order Reports**

### **As of October 30, 2017**

Riverside Public Utilities  
Closed Capital Work Order Summary Report - Electric Fund  
October 2017

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**

**Line Rebuilds**

1606533	Palm Avenue Circuit 454	06/27/2016	09/20/2017	\$ 228,000	\$ 273,379	\$ (45,379)	-19.90%
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*1) Note on Final Project Cost:*

Additional protective devices for electrical system protection were added to the scope of work, resulting in additional cost.

*2) Impact to Customer Service:*

The installation of the additional protecting devices will help reduce the total number of customers interrupted during an outage in the area.

*3) Impact to System Reliability:*

Electric system reliability in the area has improved.

**Total Electric Fund - Closed Work Orders**

<u>\$ 228,000</u>	<u>\$ 273,379</u>	<u>\$ (45,379)</u>
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Closed Capital Work Order Summary Report - Water Fund  
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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**

**Pump Station Expansion**

1610216	Riverside Golf Course Drip Irrigation System	2/19/2016	8/25/2017	\$ 240,000	\$ 233,488	\$ 6,512	2.71%
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*1) Note on Final Project Cost:*

Project was completed within budget.

*2) Impact to Customer Service:*

The project saves water and maintains tree health at the golf course.

*3) Impact to System Reliability:*

The project increased efficiency in watering the trees at the golf course.

**Main Replacements**

1518913	Brockton Ave. & Palm Ave. Railroad Crossings	7/1/2016	8/9/2017	\$ 688,000	\$ 659,816	\$ 28,184	4.10%
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*1) Note on Final Project Cost:*

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:*

The project restores water system reliability by replacing old and undersized pipelines in the neighborhoods.

**Total Water Fund - Closed Work Orders**

<u>\$ 928,000</u>	<u>\$ 893,304</u>	<u>\$ 34,696</u>
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