

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: NOVEMBER 26, 2018

GENERAL MANAGER'S REPORT

ITEM NO:

Riverside Public Utilities

Open Work Orders Greater than \$200,000

As of October 31, 2018

Riverside Public Utilities Open Capital Work Order Summary Report - Electric Fund October-18

Project /		Paged	Dacad		Year to Date	Life to Date	Available	l act		b Status	
Subproject or WO	Project Description	Board Approval	Board Approved	Project	Total as of	Total as of	Available Balance	Last Activity	(Based	on Proj. Est.)	Project Status
	1	Date	Estimate ⁽¹⁾	Estimate (2)	10/31/2018	10/31/2018		Date	Spent	Completed	
Open Work O	rders/Projects with Budgeted or Actual expenditures > \$200	0,000									
Advanced 1	Гесhnology										
1619634	Operational Data Management System - Electric	05/09/16	4,907,000	2,474,500	53,095	2,252,659	221,841	09/26/18	91%	70%	In implementation phase.
1707248	Advanced Metering Infrastructure - Electric	06/12/17	3,000,000	790,000	-	-	790,000	09/11/18	0%	2%	Developing business case.
RTRP and S	STP Project	Subtotal	-	3,264,500	53,095	2,252,659	1,011,841				
642975	Riverside Transmission Reliability Project (RTRP)	10/17/14	42,605,521	42,605,521	146,901	28,509,511	14,096,010	10/04/18	67%	15%	In design.
0812940	Sub-Transmission Project (STP) (3)	11/06/09	24,000,000	24,000,000	_	18,312,636	5,687,364	05/31/18	76%	99%	Completed, pending as-builts.
		Subtotal	•	66,605,521	146,901	46,822,147	19,783,374				
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 ⁽⁴⁾	07/20/07	500,000	500,000	-	468,292	31,708	03/13/14	94%	95%	In construction.
Neighborho	ood Streetlight Retrofit	Subtotal	•	820,000	-	482,032	337,968				
1523553	Wood Streets Streetlights Phase 2	02/13/17	2,300,000	2,300,000	365	2,114,642	185,358	10/04/18	92%	95%	Completed, pending as-builts.
080022 / 01	Wood Streets Streetlights Phase I ⁽⁵⁾	10/18/13	1,909,600	1,909,600	-	1,792,642	116,958	06/14/18	94%	95%	Completed, pending as-builts.
Mater T	aminatan Lina Portage	Subtotal		4,209,600	365	3,907,284	302,316				
•	smission Line Projects										Equipment purchased, pending start
1503115	Freeman-Kaiser-Harvey Lynn	12/18/15	300,000	300,000	12,050	192,051	107,949	10/10/18	64%	50%	date
Cable Repla	acement	Subtotal	-	300,000	12,050	192,051	107,949				
1409723	Canyon Crest Area Circuit 1215 Conduit and Cable Replacement for Canyon Crest	11/06/15	1,175,000	1,175,000	-	1,032,476	142,524	02/08/18	88%	95%	In Litigation
1319813	Area Circuit 1218	04/10/17	967,000	967,000	305	735,538	231,462	10/04/18	76%	100%	Completed, pending closure.
1713398	Canyon Crest Area 1F	01/08/18	739,000	739,000	30,307	649,772	89,228	10/04/18	88%	50%	In construction.
CIS Banner	· Upgrade	Subtotal	-	2,881,000	30,612	2,417,786	463,214				
1104202	CIS Replacement	06/01/12	9,200,000	8,859,000	126,804	8,546,301	312,699	10/11/18	96%	95%	Completed, pending closure.
1104202	J. J. Kopissoniani	Subtotal	3,200,000	8,859,000	126,804	8,546,301	312,699	10/11/10	JU /0	55 /0	2 3p.o.coa, portaining olocato.
City-Wide C	Communciations Network		-	· · ·	•		<u>, </u>				
1423750	Riverside Substation to Hunter Substation	04/24/17	465,000	465,000	71,750	336,906	128,094	10/04/18	72%	90%	Completed, pending closure.
1423748	Freeman Substation to Orangecrest Substation	10/22/18	1,265,000	1,265,000	-	22,064	1,242,936	10/04/18	2%	1%	In design phase
1524282	Land Mobile Radio (LMR) system (Electric Portion)	09/26/16	3,000,000	1,650,000	-	1,687,154	(37,154)	07/01/18	102%	95%	Completed, pending closure.
1719921	Magnolia Avenue	04/24/17	2,189,489	2,189,489	216,095	1,650,518	538,971	10/04/18	75%	75%	In construction.
Dio4vib4ia	Automotion Polichility	Subtotal		5,569,489	287,845	3,696,642	1,872,847				
	n Automation Reliability	044045	000 000	000.000		200 5 11		00/02/12	240 1	0.707	In a mature of the co
1309568	Distribution Automation Program	01/18/13 Subtotal	960,000	960,000		682,841 682,841	277,159 277,159	06/30/18	71%	65%	In construction.
		Subtotal	-	960,000	-	002,841	277,159				

Riverside Public Utilities Open Capital Work Order Summary Report - Electric Fund October-18

Project /		Beard	Doord		Year to Date	Life to Date	Aveilable	Loot		b Status	
Subproject or WO	Project Description	Board Approval	Board Approved	Project	Total as of	Total as of	Available Balance	Last Activity	(Based	l on Proj. Est.)	Project Status
		Date	Estimate ⁽¹⁾	Estimate (2)	10/31/2018	10/31/2018		Date	Spent	Completed	
GO 165 Up	grades/Relocations										
·		00/05/47	4 405 000	4 405 000		007.550	007.444		7.40/	4000/	Project completed, pending final
Various	GO-165 Pole Replacements - Citywide	09/25/17	1,125,000	1,125,000	-	827,556	297,444	Various	74%	100%	billing
Various	GO-165 Pole Replacements - Citywide	08/27/18	2,227,000	2,227,000	<u>-</u>	- 007 FFC	2,227,000	Various	0%	0%	Pending start date/notice to proceed
Major 4/12I	(v Conversions	Subtotal		3,352,000	-	827,556	2,524,444				
1319390	Magnolia - Overhead Conversion	09/19/14	1,577,100	1,577,100	-	2,018,710	(441,610)	09/20/18	128%	95%	In construction.
1411795	Magnolia - Underground Conversion	04/02/15	2,250,000	2,250,000	5,493	1,684,692	565,308	09/20/18	75%	95%	In construction.
1521820	Plaza Substation - Circuit 452	09/18/15	1,446,000	1,446,000	-	1,267,741	178,259	04/05/18	88%	90%	In construction.
1521822	Plaza Substation - Circuit 456	09/18/15	933,000	933,000	166,636	414,891	518,109	10/12/18	44%	28%	In construction.
1708710	Plaza Substation - Circuit 458	04/09/18	1,170,000	1,170,000	205,482	415,928	754,072	09/07/18	36%	5%	In construction.
1808449	Plaza Substation - Circuit 448	07/09/18	973,000	973,000	33,566	63,967	909,033	10/12/18	7%	3%	Pending start date
1808451	Plaza Substation - Circuit 443	03/29/18	415,000	415,000	69,554	142,465	272,535	10/10/18	34%	20%	In construction.
		Subtotal		8,764,100	480,731	6,008,394	2,755,706				
Major Over	head/Underground Conversions										
0913192	Tyler Street Widening	08/07/15	816,000	816,000	-	973,503	(157,503)	12/01/17	119%	95%	Completed, pending as-builts.
Maior Stree	et Light Projects	Subtotal		816,000	-	973,503	(157,503)				
1611216	Citywide Streetlight L.E.D. Conversion	07/25/16	1,150,000	1,150,000	_	492,483	657,517	08/29/18	43%	53%	In design.
1722321	Norte Vista Sidwalk Improvements Project	02/12/18	888,000	888,000	188,854	223,761	664,239	10/04/18	25%	15%	In construction.
1725687	Wells-Arlanza Sidewalk Improvements Project	01/08/18	460,000	460,000	275,491	352,736	107,264	10/04/18	77%	65%	In construction.
1120001	Troile / manza Glac waik improvemente i reject	Subtotal	100,000	2,498,000	464,345	1,068,980	1,429,020	10/01/10	1170	0070	
SCADA											
1024305	Electric SCADA System Upgrades	07/01/11 Subtatal	2,938,307	2,938,307	-	2,737,329	200,978	08/10/16	93%	99%	Completed, pending closure.
Substation	Bus and Upgrades	Subtotal		2,938,307	-	2,737,329	200,978				
1311245	Orangecrest, Riverside, Springs & La Colina	03/21/14	1,925,805	1,925,805	-	1,919,696	6,109	05/31/18	100%	99%	Completed, pending as-builts.
1407577	Metal Gate Replacement	04/09/18	337,699	337,699	175	17,552	320,147	08/23/18	5%	5%	Pending construction
1411145	La Colina Switchgear 3 & 4	03/21/14	534,051	534,051	-	345,983	188,068	06/13/18	65%	90%	On-hold.
1507210	RERC Control Power Improvement	10/23/17	272,000	272,000	385	220,719	51,281	10/04/18	77%	88%	Pending procuring add'l equipment
1601400	Springs, Freeman and Mt. View	07/25/16	5,530,000	5,530,000	72,023	4,522,601	1,007,399	10/04/18	82%	85%	In construction
1603079	Springs & Orangecrest	02/19/16	1,700,000	1,700,000	886	1,275,774	424,226	10/04/18	75%	60%	Pending construction.
1808341	Substation Utility Storage Facility	06/11/18	407,385	407,385	36,471	48,697	358,688	10/04/18	12%	5%	In design
1812830	Nine (9) Substation Battery Chargers Upgrade Proj.	02/12/18	384,000	384,000	59,818	226,039	157,961	10/04/18	59%	55%	In construction.
1814007	Substation Capacitor Upgrade Project	01/22/18	5,306,000	5,306,000	354,935	1,004,691	4,301,309	10/04/18	19%	15%	In procurement phase

Riverside Public Utilities Open Capital Work Order Summary Report - Electric Fund October-18

D 1 11					Year to Date	Life to Date			Job	Status	
Project / Subproject	Project Description	Board	Board		Total	Total	Available	Last	(Based	on Proj. Est.)	Project Status
or WO		Approval Date	Approved Estimate ⁽¹⁾	Project Estimate ⁽²⁾	as of 10/31/2018	as of 10/31/2018	Balance	Activity Date	% Spent	% Completed	•
1816163	Substation Automation Upgrade Project	02/26/18	2,027,679	2,027,679	45,997	720,897	1,306,782	10/04/18	36%	30%	In design
1817274	Vista Substation	02/26/18	836,175	836,175	-	782,757	53,418	04/13/18	94%	15%	In engineering and design phase
1822052	Harvey Lynn Substation Site Expansion	10/22/18	2,100,000	2,100,000	-	45,385	2,054,615	06/30/18	2%	10%	Design completed, pending Board approval
1826061	Riverside power plants Arc Flash Mitigatino	06/11/18	497,000	497,000	32	179	496,821	07/12/18	0%	3%	In design
		Subtotal		21,857,794	570,721	11,130,970	10,726,824				
Substation	Transformer Addition		_								
1816638	Freeman Substation & Mt. View Substation	05/14/18	4,202,827	4,202,827	17,511	49,016	4,153,811	10/04/18	1%	1%	In procurement phase. Pending signing agreement with
1822318	Multi Substation Transformer Upgrade/ Recondition	06/25/18	3,082,617	3,082,617	7,100	9,091	3,073,526	10/04/18	0%	1%	contractor
		Subtotal	-	7,285,444	24,611	58,107	7,227,337				
Total Electri	c Fund - Open Work Orders		-	140,980,755	2,198,078	91,804,582	49,176,173				

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.
- (3) WO 0812940 is part of Project 050009 which was approved by Board for \$24,000,000. Project 050009 includes various sub-work orders closed in prior years.
- (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 October-18

	1										•
Project /			_		Year to Date	Life to Date				Status	
Subproject	Project Description	Board	Board .		Total	Total		Last		n Proj. Est.)	Project Status
or WO		Approval Date	Approved Estimate ⁽¹⁾	Project Estimate ⁽²⁾	as of 10/31/2018	as of 10/31/2018	Available Balance	Activity Date	% Spent	% Completed	
	•		Lotimato	Loumato	1010112010			2 0.00	- Oponi	Compresses	•
Open Work (Orders/Projects with Budgeted or Actual expenditures > \$200,0	000									
Advanced	Technology										
1619634	Operational Data Management System - Water	05/09/16	4,907,000	1,332,500	28,589	1,230,493	102,007	09/26/18	92%	70%	In implementation phase.
1707248	Advanced Metering Infrastructure - Water	06/12/17	3,000,000	460,000	-	-	460,000	09/11/18	0%	2%	Developing business case.
2 . 5		Subtotal		1,792,500	28,589	1,230,493	562,007				
System Ex	pansion										
1615173	Water Cust. Development - 58 Magnolia Ctr.	(3)	(3)	237,767	-	262,912	(25,145)	03/31/18	111%	90%	Pending pavement completion.
1726679	Iowa Ave 12-inch Water Main Extension	09/24/18	353,000	353,000	9,457	53,703	299,297	10/10/18	15%	0%	Pending start date
1905091	Iowa Ave 12-inch Water Main Extension	09/24/18	269,000	269,000	16,552	16,552	252,448	08/23/18	6%	0%	Pending start date
_		Subtotal		859,767	26,008	333,167	526,600				
Transmiss	ion Mains										
1612632	Magnolia Ave Techite Pipe Replacement Project	07/09/18	7,335,000	7,335,000	625,189	673,286	6,661,714	10/10/18	9%	10%	In construction.
1903811	Iowa Avenue Transmission Main Replacement	10/22/18	2,140,000	2,140,000	16,082	16,082	2,123,918	08/16/18	1%	0%	Pending start date
A 15 O1	0.00	Subtotal		9,475,000	641,271	689,368	8,785,632				
Aquiter St	orage & Recovery System										
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%	In environmental evaluation phase.
Dovolonm	ont Costs	Subtotal		1,800,000	-	447,714	1,352,286				
Developme											
1504840	Santa Ana River Habitat Conservation	09/05/14	325,000	325,000	-	134,256		09/30/14	41%	25%	In biological evaluation phase.
Facility Re	habilitation	Subtotal		325,000	-	134,256	190,744				
		44/07/44	245 000	245 000		0.022	206.069	44/46/47	40/	E 0/	On-hold.
1508449	Palmyrita Well	11/07/14	215,000	215,000	•	8,932	206,068	11/16/17	4%	5%	
1524282	Land Mobile Radio (LMR) system (Wtr Portion)	09/26/16	3,000,000	1,350,000	-	1,283,051	66,949	07/01/18	95%	95%	Completed, pending commisioning.
1727999	Pressure Reducing Station Replacement	07/09/18	599,000	599,000	969	18,930	580,070	09/20/18	3%	0%	Pending start date.
1827140	Cooley J Groundwater Well	09/24/18	811,000	811,000	3,267	10,031	800,969	10/04/18	1%	0%	Construction starts 11/15/18

Riverside Public Utilities Open Capital Work Order Summary Report - Water Fund October-18

					Year to Date	Life to Date			Job Status		
Project / Subproject	Project Description	Board	Board		Total	Total		Last	(Based or	n Proj. Est.)	Project Status
or WO	, roject Beschiption	Approval	Approved	Project	as of	as of	Available	Activity	%	%	0,000 0:4:40
		Date	Estimate ⁽¹⁾	Estimate (2)	10/31/2018	10/31/2018	Balance	Date	Spent	Completed	
1902331	Stiles Groundwater Well	09/24/18	327,000	327,000	3,270	3,270	323,730	07/18/18	1%	0%	Construction starts 11/15/18
1902332	Garner 5 Groundwater Well	09/24/18	355,000	355,000	3,319	3,319	351,681	07/18/18	1%	0%	Construction starts 11/15/18
		Subtotal	<u>-</u>	3,657,000	10,825	1,327,533	2,329,467				
Main Repla	cements										
1415931	California and Monroe	12/12/14	973,500	973,500	108,240	928,545	44,955	09/19/18	95%	95%	Completed, pending closure.
1507007	Jasmine and Columbus	10/03/14	679,000	679,000	-	47,267	631,733	05/31/18	7 %	0%	On-hold.
1602941	Larchwood Place	10/16/15	895,000	895,000	-	477,602	417,398	03/31/18	53%	100%	Completed, pending closure.
		Subtotal	-	2,547,500	108,240	1,453,414	1,094,086				
Recycled W	Vater Facilities										
1521905	Jackson Street - Phase 1	11/27/17	9,039,000	8,839,000	672,071	8,069,271	769,729	10/04/18	91%	55%	In construction.
1722078	Jackson St - Phase 1 & 2 Water Sites Retrofit	04/24/17	434,370	434,370	22,301	120,653	313,717	10/11/18	28%	18%	In construction.
		Subtotal	_	9,273,370	694,371	8,189,924	1,083,446				
Utility Agre	ement Projects - Caltrans SR-91 HOV										
1112062	UA 21699 - Misc. Utility Relocations	11/19/10	1,555,000	1,555,000	-	486,936	1,068,064	06/07/18	31%	99%	Completed, pending closure.
1112059	UA 21702 - Ivy St Bridge	08/19/11	1,600,000	1,600,000	100	1,369,022	230,978	10/04/18	86%	99%	Completed, pending closure.
		Subtotal	-	3,155,000	100	1,855,958	1,299,042				
Total Water	Fund - Open Work Orders		- -	32,885,137	1,509,404	15,661,827	17,223,310				

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: NOVEMBER 26, 2018

GENERAL MANAGER'S REPORT

ITEM NO:

Riverside Public Utilities

Closed Work Order Reports

As of October 31, 2018

Riverside Public Utilities Closed Capital Work Order Summary Report - Electric Fund October-18

		October-18	3				
Project / Subproject				Board Approved	Final Project		
or WO	Project Description	Start Date	End Date	Estimate	Cost	Variance	% Variance
CLOSED Ca	apital Work Orders with Budget or Actual Expend	litures > \$200,000					
	Major 4/12k Conversion						
1503125	Magnolia Substation - Circuit 46	4/17/2015	9/11/2018	\$ 1,833,000	\$ 2,210,424	\$ (377,424)	-20.59%
	1) Note on Final Project Cost:						
	The Project was over budget due to field additions during the weekend in order to lessen the impact to		•	were identified a	as well as work tha	at had to be comp	leted at night or
	2) Impact to Customer Service:						
	By converting circuit 46 from 4kV to 12kV RPU im	proved electric services, p	ower quality,	and system ope	eration (faster out	age restoration)	
	3) Impact to System Reliability:						
	This work is identified as part of the Electric Syster	n Master plan and Utility 2	.0 and impro	ves system cap	acity, safety and i	reliability.	

\$ 1,833,000 \$ 2,210,424 \$ (377,424)

Total Electric Fund - Closed Work Orders

Riverside Public Utilities Closed Capital Work Order Summary Report - Water Fund October-18

Project / Subproject or WO	Project Description	Start Date	End Date	Board Approved Estimate		Final Project Cost	V	ariance	% Variance
CLOSED Cap	oital Work Orders with Budget or Actual expenditures > \$	\$200,000							
	Facility Rehabilitation								
1727342	Gage 51-1 Groundwater Well	11/27/2017	9/13/2018	\$ 337,000	\$	246,170	\$	90,830	26.95%
	1) Note on Final Project Cost:								
	The project was completed within the estimated cost.								
	2) Impact to Customer Service:								
	The project provides steady production of groundwater at t	he lowest possible	cost, and the	erefore, enhance	es reli	ability of wat	er su	oply to the	customers
	3) Impact to System Reliability:								
	The project improved reliability of water supply.								
1806139	Gage 92-1 Groundwater Well	11/27/2017	9/19/2018	\$ 413,000	\$	350,318	\$	62,682	15.18%
	1) Note on Final Project Cost:								
	The project was completed within the estimated cost.								
	2) Impact to Customer Service:								
	The project provides steady production of groundwater at t	he lowest possible	cost, and the	erefore, enhance	es reli	ability of wat	er su	oply to the	customers
	3) Impact to System Reliability:								
	The project improved reliability of water supply.								

Riverside Public Utilities Closed Capital Work Order Summary Report - Water Fund October-18

Project /		October-18		Board		Final			
Subproject				Approved		Project			
or WO	Project Description	Start Date	End Date	Estimate	Cost		Variance		% Variance
CLOSED Cap	oital Work Orders with Budget or Actual expenditures > \$	200,000							
1806140	Gage 66-1 Groundwater Well	11/27/2017	9/13/2018	\$ 381,000	\$	297,982	\$	83,018	21.79%
	1) Note on Final Project Cost:								
	The project was completed within the estimated cost.								
	2) Impact to Customer Service:								
	The project provides steady production of groundwater at the	ne lowest possible	cost, and the	erefore, enhance	es rel	iability of wat	ter su	pply to the	customers
	3) Impact to System Reliability:								
	The project improved reliability of water supply.								
1806141	Warren 1 Groundwater Well	11/27/2017	9/13/2018	\$ 346,000	\$	263,755	\$	82,245	23.77%
	1) Note on Final Project Cost:								
	The project was completed within the estimated cost.								
	2) Impact to Customer Service:								
	The project provides steady production of groundwater at the	ne lowest possible	cost, and the	erefore, enhance	es rel	iability of wat	ter su	pply to the	customers
	3) Impact to System Reliability:	•	•	•					
	үзү тирасы о зузтети кенаышту.								

The project improved reliability of water supply.

Riverside Public Utilities Closed Capital Work Order Summary Report - Water Fund October-18

Project / Subproject or WO	Project Description	Start Date	End Date	Board Approved Estimate		Final Project Cost	<u>V</u>	/ariance	% Variance
CLOSED Cap	ital Work Orders with Budget or Actual expenditure	es > \$200,000							
1806142	Garner C Groundwater Well	11/27/2017	9/13/2018	\$ 361,000	\$	294,558	\$	66,442	18.40%
	1) Note on Final Project Cost:								
	The project was completed within the estimated cost.								
	2) Impact to Customer Service:								
	The project provides steady production of groundwate	er at the lowest possible	cost, and the	refore, enhance	es reli	iability of wat	er su	pply to the	customers
	3) Impact to System Reliability:								
	The project improved reliability of water supply.								

Total Water Fund - Closed Work Orders

\$ 1,838,000 \$ 1,452,783 \$ 385,217