

## **SCHEDULE A.10**

### **WASTEWATER FACILITY IMPROVEMENT DESCRIPTION**

#### **A.10.1 PURPOSE**

The Parties acknowledge that the Concessionaire has subcontracted its responsibilities set forth in the Concession Agreement with respect to the sewage collection system services of the Wastewater Facility to the Contractor pursuant to the O&M Subcontract. The purpose of this Schedule is to identify the Wastewater Facility Improvements that Concessionaire anticipates that Contractor will proceed to design and construct in accordance with the O&M Subcontract and the Final Work Authorization. Contractor agrees that, following the Effective Date, it will diligently pursue the completion of the Wastewater Facility Improvements in accordance with Article 6 of the O&M Subcontract. Concessionaire shall have the discretion, exercised in accordance with Prudent Industry Practices, to determine the precise order and schedule for the design and construction of the Wastewater Facility Improvements.

#### **A.10.2 DESCRIPTION OF WASTEWATER FACILITY IMPROVEMENTS**

The description of the Wastewater Facility Improvements set forth in this Schedule is preliminary in nature and requires further refinement and development as to the scope, design, cost and construction of such Wastewater Facility Improvements. The preliminary Cost Estimate set forth in this Schedule for each Wastewater Facility Improvement is only an estimate of the costs to design and construct each of the Wastewater Facility Improvements. The preliminary Cost Estimates are not fixed or guaranteed prices and Concessionaire acknowledges that Contractor has made no representation or warranty that the Wastewater Facility Improvements can be designed and/or constructed for the amounts set forth in the Cost Estimates. The preliminary Cost Estimate on the remaining pages of this Schedule does not include any inflation adjustment.

City of Rialto – Proposed Capital Improvement Projects (CIP)

NOTE 1: ALL COSTS ESCALATED PER YEAR BY ..... 3.0%  
NOTE 2: TIME PERIODS ARE FISCAL YEARS (JULY 1 TO JUNE 30)  
NOTE 3: ASSUMED FINANCIAL CLOSE DATE = SEPTEMBER 1, 2012  
NOTE 4: ASSUMED INITIATION OF IN PROGRESS OR EMERGENCY RECURRING CIP = SEPTEMBER 1, 2012  
NOTE 5: ASSUMED INITIATION OF INVESTMENT CIP = OCTOBER 1, 2012 (PER SCHEDULE BELOW)  
NOTE 6: ASSUMED INITIATION OF NEW RECURRING CIP = JULY 1, 2013

WASTEWATER INVESTMENT

Priority	Project Name	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	Total Cost
S1	Wastewater Treatment Plant Improvements (including SCADA at plant and six lift stations)	\$1,095,000	\$11,089,000	\$5,615,000	\$0	\$0	\$17,799,000
S2	Sewer Main Replacement on S. Acacia, E. Merrill, and S. Sycamore (6,860 feet total)	\$191,000	\$1,962,000	\$0	\$0	\$0	\$2,153,000
S3	Sewer Main Replacement on N. Sycamore, E. Etiwanda, and N. Acacia (8,308 feet total)	\$65,000	\$1,441,000	\$0	\$0	\$0	\$1,506,000
S4	Sewer Main Replacement on N. Willow and W. Foothill (3,950 feet total)	\$0	\$78,000	\$791,000	\$0	\$0	\$869,000
S5	Sewer Main Replacement on W. Rialto (2,650 feet total)	\$0	\$11,000	\$519,000	\$0	\$0	\$530,000
S6	Short Sewer Main Replacements on W. Randall, AT&SF RR, E. 1 <sup>st</sup> , N. Willow, N. Riverside, and N. Pepper (2,410 feet total)	\$0	\$0	\$544,000	\$0	\$0	\$544,000
S7	Wastewater Treatment Plant FOG Modifications	\$0	\$21,000	\$844,000	\$0	\$0	\$865,000
	<b>Wastewater Investment Sub-Total</b>	<b>\$1,351,000</b>	<b>\$14,602,000</b>	<b>\$8,313,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$24,266,000</b>

WASTEWATER RECURRING

No.	Project Name (quantities are estimates)	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	Total Cost
SA	Manhole Rehabilitation (50 per year)	\$99,000	\$112,000	\$115,000	\$119,000	\$122,000	\$567,000
SB	Main Cleaning and Lining (1 mile per year)	\$0	\$624,000	\$642,000	\$662,000	\$681,000	\$2,609,000
SC	Engineering Studies (Master Plan and Regulatory Related)	\$0	\$104,000	\$104,000	\$104,000	\$312,000	\$624,000
	<b>Wastewater Recurring Sub-Total</b>	<b>\$99,000</b>	<b>\$840,000</b>	<b>\$861,000</b>	<b>\$885,000</b>	<b>\$1,115,000</b>	<b>\$3,800,000</b>
	<b>WASTEWATER SUB-TOTAL</b>	<b>\$1,450,000</b>	<b>\$15,442,000</b>	<b>\$9,174,000</b>	<b>\$885,000</b>	<b>\$1,115,000</b>	<b>\$28,066,000</b>

## **City of Rialto**

### **Proposed Capital Improvement Project (CIP)**

<b>Project No. / Ranking:</b>	S1
<b>Name of Project:</b>	Wastewater Treatment Plant Improvements (including SCADA at the plant and six lift stations)
<b>Problem or Opportunity:</b>	The existing treatment plant consists of 5 separate plants with a total rated capacity of 11.7 MGD. Plant 1, which is out of service and expected to remain out of service in the future, is 1.0 MGD of this capacity resulting in a net rated capacity of 10.7 MGD. Although the rated capacity is adequate based on current average flows of 7.2 MGD and potential development growth of 3.0 MGD (Foothill Boulevard, Downtown Rialto, Renaissance, and Lytle Creek), process bottlenecks and deteriorating infrastructure increase the risk of emergency failure and could ultimately lead to loss of rated capacity.
<b>Recommended Solution:</b>	Upgrade Plants 2, 3, and 4 to address aging infrastructure and process bottlenecks. This will maintain the current rated capacity of these plants at 2.0 MGD each (6.0 MGD total). The improvements include replacement of aeration equipment and clarifier refurbishment to increase reliability. In order to address potential TDS concerns in the plant effluent, chlorine disinfection will be discontinued, and new UV equipment will be installed to replace the existing first generation UV equipment which is very inefficient. If discussions with the Regional Water Quality Control Board (RWQCB) result in the continued use of chlorine for disinfection, reliability improvements will need to be made to that chemical feed system. New cloth filters will replace the existing sand filters due to concerns of the RWQCB with UV disinfection and sand filters. The existing belt filter press is currently at capacity and there is no redundancy, thus a second belt filter press will be installed. This lack of residuals dewatering redundancy is one of the more significant concerns at the plant. The existing SCADA system at the plant, which consists of 5 individual systems running different platforms, will be replaced with one system that is also integrated with the water SCADA. A re-rating of Plant 5 from 4.7 MGD to 6.0 MGD will also be requested of the RWQCB.
<b>Measurable Benefits:</b>	Total plant rate capacity of 12.0 MGD (Trains 2-4 2.0 MGD each, Train 5 6.0 MGD). Adequate redundancy to assure that the plant can meet demands with the largest process units out of service. Compliance with all RWQCB regulations.
<b>Basis of Recommendation:</b>	Field investigations and extensive analysis performed by Contractor and RW Beck, discussions with local operations staff and the RWQCB. Additionally, flow testing was performed to confirm accuracy of meters at the plant. The result, 72 gpcd, was in between the plant influent and effluent flow readings.
<b>Assumptions / Risks:</b>	Normal construction risks associated with retrofit projects exist.
<b>Primary Driver:</b>	Asset Renewal





**Engineer's Probable Opinion of Cost (based on conventional Design-Bid-Build)**

<b>S1 Wastewater Treatment Plant Improvements (including SCADA at plant and six lift stations)</b>					
<b>No.</b>	<b>Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Unit Cost</b>	<b>Total</b>
1	Mobilization/General Conditions	1	LS	\$21,000.00	\$21,000
2	Upgrades to Influent Flow Diversion Box and Influent Flow Meter				
	Submersible Pumps	2	EA	\$71,500.00	\$143,000
	Mixers or Aerators	2	EA	\$30,000.00	\$60,000
	Installation	1	LS	\$95,000.00	\$95,000
	Process Mechanical	1	LS	\$51,000.00	\$51,000
	Electrical	1	LS	\$72,000.00	\$72,000
3	Installation of Grit Classifier at the East Headworks				
	Grit Classifier and Grit Pumps	1	LS	\$95,000.00	\$95,000
	Installation	1	LS	\$95,000.00	\$95,000
	Electrical	1	LS	\$33,000.00	\$33,000
4	Upgrades to the Aeration System and Clarifier for Plant 2				
	Painting	1	LS	\$119,000.00	\$119,000
	Concrete Repair	1	LS	\$119,000.00	\$119,000
	Air Pipe	600	LF	\$178.00	\$107,000
	Diffusers	1	LS	\$119,000.00	\$119,000
	DO probe	2	EA	\$12,000.00	\$24,000
	Mixers	4	EA	\$14,250.00	\$57,000
	RAS pumps	2	EA	\$20,500.00	\$41,000
	WAS pumps	2	EA	\$9,500.00	\$19,000
	Scum pumps	2	EA	\$9,500.00	\$19,000
	Clarifier mechanism	1	EA	\$161,000.00	\$161,000
	Switchgears	1	LS	\$203,000.00	\$203,000
	Process Mechanical	1	LS	\$274,000.00	\$274,000
	Electrical	1	LS	\$376,000.00	\$376,000
5	Upgrades to the Aeration System for Plants 3 and 4				
	Air Piping	800	LF	\$178.00	\$143,000
	Diffusers	1	LS	\$477,000.00	\$477,000
	DO Control System	1	LS	\$238,000.00	\$238,000
	Blowers	1	LS	\$179,000.00	\$179,000
	HVAC at Blower Building	1	LS	\$43,000.00	\$43,000
	Gates	1	LS	\$302,000.00	\$302,000
	Valves	1	LS	\$657,000.00	\$657,000
	Switchgears	1	LS	\$806,000.00	\$806,000
	Process Mechanical	1	LS	\$1,020,000.00	\$1,020,000
	Electrical	1	LS	\$1,423,000.00	\$1,423,000
6	Installation of New Belt Filter Press				
	BFP	1	EA	\$334,000.00	\$334,000
	Installation	1	LS	\$95,000.00	\$95,000
	Process Mechanical	1	LS	\$83,000.00	\$83,000
	Electrical	1	LS	\$117,000.00	\$117,000
7	Replacement of one Gravity Belt Thickener				
	GBT	1	EA	\$191,000.00	\$191,000
	Installation	1	LS	\$95,000.00	\$95,000
	Process Mechanical	1	LS	\$48,000.00	\$48,000

	Electrical	1	LS	\$67,000.00	\$67,000
8	Upgrade of Existing UV and Dechlorination Systems	1	LS	\$750,000.00	\$750,000
9	Upgrade of Existing DynaSand Filters	1	LS	\$2,365,000.00	\$2,365,000
10	Installation of Aeration System at Sludge Holding Tanks				
	Tank Cleaning	1	LS	\$6,000.00	\$6,000
	Blowers	1	LS	\$89,000.00	\$89,000
	Diffusers	1	LS	\$119,000.00	\$119,000
	Air Pipe	500	LF	\$178.00	\$89,000
	Process Mechanical	1	LS	\$149,000.00	\$149,000
	Electrical	1	LS	\$32,000.00	\$32,000
11	SCADA (at plant and six lift stations)				
	Software\Drivers	1	LS	\$34,000.00	\$34,000
	Fiber Optic Testing\Evaluation	1	LS	\$15,000.00	\$15,000
	Central Redundant ControlLogix PLC	1	LS	\$37,000.00	\$37,000
	Opto 22 Replacement Panel Components	27	EA	\$12,000.00	\$324,000
	Chemical System Communication Replacement	1	LS	\$4,000.00	\$4,000
	Filter PLC Upgrade and Communication	1	LS	\$23,000.00	\$23,000
	Lift Station Upgrade and Communications	6	EA	\$7,000.00	\$42,000
	Lift Station Instrumentation (Level Controls)	6	EA	\$2,000.00	\$12,000
	Instrumentation (Influent Sampler)	2	EA	\$10,000.00	\$20,000
	Instrumentation (Plant Flowmeters)	1	LS	\$188,000.00	\$188,000
	Instrumentation (Plant Level Controls)	1	LS	\$10,000.00	\$10,000
	Instrumentation (Plant Pressure Controls)	1	LS	\$27,000.00	\$27,000
	Instrumentation (Plant Analytical)	1	LS	\$24,000.00	\$24,000
	Internet\VPN Firewalls	1	LS	\$4,300.00	\$5,000
	Miscellaneous Drivers	1	LS	\$8,000.00	\$8,000
	Miscellaneous New Instruments and Programming	1	LS	\$200,000.00	\$200,000
	<b>Subtotal</b>				<b>\$13,193,000</b>
	Contingency	10.0%			\$1,320,000
	O&M Project Development	1.0%			\$132,000
	Detailed Design and Permitting/Bidding Support	6.0%			\$792,000
	Construction Phase Engineering Services	5.0%			\$660,000
	O&M Project Management Services	8.0%			\$1,056,000
	<b>Total</b>				<b>\$17,153,000</b>
	<u>Potential Operational Cost Changes</u>				
	To Be Determined				

**Anticipated Schedule** (based on conventional Design-Bid-Build)

<b>S1 - Wastewater Treatment Plant Improvements (including SCADA at plant and six lift stations)</b>												
2012/2013												
Activity	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Project Development												
Detailed Design and Permitting												
Bidding and Contract Award												
Construction and Commissioning												
Project Closeout												
2013/2014												
Activity	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Project Development												
Detailed Design and Permitting												
Bidding and Contract Award												
Construction and Commissioning												
Project Closeout												
2014/2015												
Activity	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Project Development												
Detailed Design and Permitting												
Bidding and Contract Award												
Construction and Commissioning												
Project Closeout												

**END**

## **City of Rialto** **Proposed Capital Improvement Project (CIP)**

<b>Project No. / Ranking:</b>	S2
<b>Name of Project:</b>	Sewer Main Replacement on S. Acacia, E. Merrill, and S. Sycamore (6,860 feet total)
<b>Problem or Opportunity:</b>	Sewers are surcharged and/or could overflow under current conditions.
<b>Recommended Solution:</b>	Replace 1,410' of 12" with 18", 340' of 10" with 18", and 1,150' of 18" with 21" on S. Acacia; 220' of 15" with 21", 240' of 18" with 24", and 490' of 18" with 21" on E. Merrill; and 640' of 18" with 21" on S. Sycamore.
<b>Measurable Benefits:</b>	No surcharge or overflow under current conditions.
<b>Basis of Recommendation:</b>	RW Beck hydraulic modeling.
<b>Assumptions / Risks:</b>	The proposed improvements reflect internal growth but not external growth such as the proposed Lytle Creek development. Normal construction risks associated with unknown underground conditions exist.
<b>Primary Driver:</b>	Reliability and Quality of Service



**Cost Estimate** (based on conventional Design-Bid-Build)

<b>S2</b>	<b>Sewer Main Replacement on S. Acacia, E. Merrill, and S. Sycamore (6,860 feet total)</b>				
No.	Description	Qty	Unit	Unit Cost	Total
1	Mobilization/Demobilization/Bonds/Insurance/Permits/Misc.	1	LS	\$58,000	\$58,000
2	Traffic Control and Safety	1	LS	\$58,000.00	\$58,000
3	Utility Verification (Potholing)	1	LS	\$33,000.00	\$33,000
4	Trench Protection (Sheeting, Shoring and Bracing)	1	LS	\$47,000.00	\$47,000
5	SWPPP and BMPs	1	LS	\$16,000.00	\$16,000
6	Construct Extra Strength VCP- 18-inch S. Acacia	1,750	LF	\$140.00	\$245,000
7	Construct Extra Strength VCP- 21-inch S. Acacia	1,150	LF	\$155.00	\$179,000
8	Construct Extra Strength VCP- 21-inch E. Merrill	710	LF	\$155.00	\$111,000
9	Construct Extra Strength VCP- 24-inch E. Merrill	240	LF	\$170.00	\$41,000
10	Construct Extra Strength VCP- 21-inch S. Sycamore	3,010	LF	\$155.00	\$467,000
11	Construct 60" Manhole	18	EA	\$8,000.00	\$144,000
12	Utility Supports	1	LS	\$27,000.00	\$27,000
13	Video Inspection	1	LS	\$16,000.00	\$16,000
14	Construct AC	1,198	Tons	\$100.00	\$120,000
15	Construct Crushed Aggregate Base	407	CY	\$55.00	\$23,000
16	Replace Striping, Markings, Markers and Signs	1	LS	\$14,000.00	\$14,000
17	Record Drawings (As-Built)	1	LS	\$11,000.00	\$11,000
	<b>Subtotal</b>				<b>\$1,610,000</b>
	Contingency	10.0%			\$161,000
	O&M Project Development	1.0%			\$17,000
	Detailed Design and Permitting/Bidding Support	6.0%			\$97,000
	Construction Phase Engineering Services	5.0%			\$81,000
	O&M Project Management Services	8.0%			\$129,000
	<b>Total</b>				<b>\$2,095,000</b>
	<u>Potential Operational Cost Changes</u>				
	None Expected				\$0

**Anticipated Schedule** (based on conventional Design-Bid-Build)

2012/2013												
Activity	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Project Development												
Detailed Design and Permitting												
Bidding and Contract Award												
Construction and Commissioning												
Project Closeout												
2013/2014												
Activity	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Project Development												
Detailed Design and Permitting												
Bidding and Contract Award												
Construction and Commissioning												
Project Closeout												

END

## **City of Rialto** **Proposed Capital Improvement Project (CIP)**

<b>Project No. / Ranking:</b>	S3
<b>Name of Project:</b>	Sewer Main Replacement on N. Sycamore, E. Etiwanda, and N. Acacia (8,308 feet total)
<b>Problem or Opportunity:</b>	Sewers are surcharged and/or could overflow under current conditions.
<b>Recommended Solution:</b>	Replace 2,400' of 8" with 12" on N. Sycamore; 1,320' of 8" with 10" on E. Etiwanda; and 1,648' of 8" with 12", and 2,940' of 10" with 12" on N. Acacia.
<b>Measurable Benefits:</b>	No surcharge or overflow under current conditions.
<b>Basis of Recommendation:</b>	RW Beck hydraulic modeling.
<b>Assumptions / Risks:</b>	The proposed improvements reflect internal growth but not external growth such as the proposed Lytle Creek development. Normal construction risks associated with unknown underground conditions exist.
<b>Primary Driver:</b>	Reliability and Quality of Service





**Cost Estimate (based on conventional Design-Bid-Build)**

<b>S3</b>	<b>Sewer Main Replacement on N. Sycamore, E. Etiwanda, and N. Acacia (8,308 feet total)</b>				
<u>No.</u>	<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total</u>
1	Mobilization/Demobilization/Bonds/Insurance/Permits/Misc.	1	LS	\$39,000.00	\$39,000
2	Traffic Control and Safety	1	LS	\$39,000.00	\$39,000
3	Utility Verification (Potholing)	1	LS	\$21,000.00	\$21,000
4	Trench Protection (Sheeting, Shoring and Bracing)	1	LS	\$30,000.00	\$30,000
5	SWPPP and BMPs	1	LS	\$15,500.00	\$16,000
6	Construct Extra Strength VCP- 12-inch N. Sycamore	2,400	LF	\$80.00	\$192,000
7	Construct Extra Strength VCP- 10-inch E. Etiwanda	1,320	LF	\$70.00	\$93,000
8	Construct Extra Strength VCP- 12-inch N. Acacia	4,588	LF	\$80.00	\$368,000
9	Construct 48" Manhole	21	EA	\$5,000.00	\$105,000
10	Utility Supports	1	LS	\$16,500.00	\$17,000
11	Video Inspection	1	LS	\$15,000.00	\$15,000
12	Construct AC	1,380	Tons	\$100.00	\$138,000
13	Construct Crushed Aggregate Base	476	CY	\$55.00	\$27,000
14	Replace Striping, Markings, Markers and Signs	1	LS	\$12,500.00	\$13,000
15	Record Drawings (As-Builts)	1	LS	\$11,000.00	\$11,000
	<b>Subtotal</b>				<b>\$1,124,000</b>
	Contingency	10.0%			\$113,000
	O&M Project Development	1.0%			\$12,000
	Detailed Design and Permitting/Bidding Support	6.0%			\$68,000
	Construction Phase Engineering Services	5.0%			\$57,000
	O&M Project Management Services	8.0%			\$90,000
	<b>Total</b>				<b>\$1,464,000</b>
	<u>Potential Operational Cost Changes</u>				
	None Expected				\$0

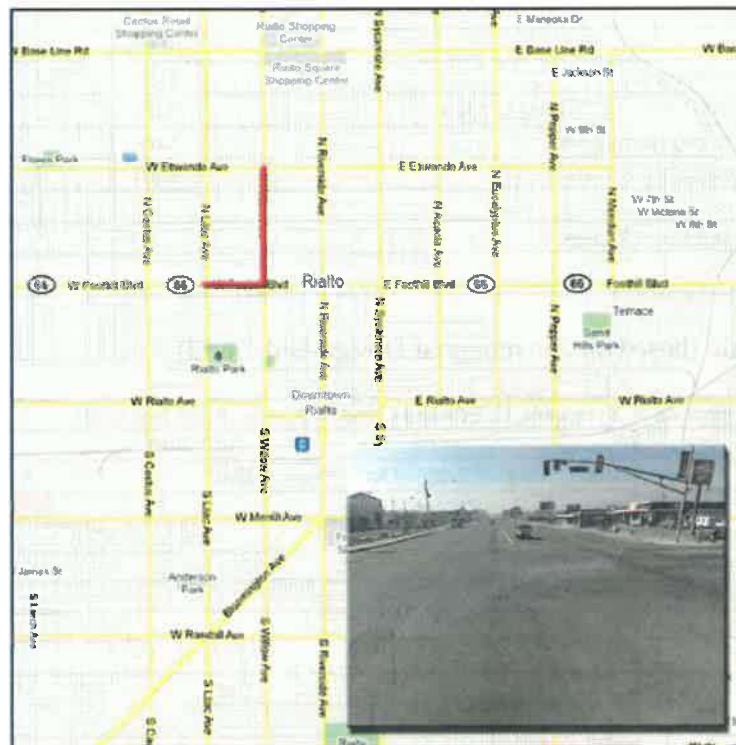
**Anticipated Schedule (based on conventional Design-Bid-Build)**

<b>S3 - Sewer Main Replacement on N. Sycamore, E. Etiwanda, and N. Acacia (8,308 feet total)</b>												
2012/2013												
<u>Activity</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>
Project Development												
Detailed Design and Permitting												
Bidding and Contract Award												
Construction and Commissioning												
Project Closeout												
2013/2014												
<u>Activity</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>
Project Development												
Detailed Design and Permitting												
Bidding and Contract Award												
Construction and Commissioning												
Project Closeout												

**END**

## City of Rialto Proposed Capital Improvement Project (CIP)

<b>Project No. / Ranking:</b>	S4
<b>Name of Project:</b>	Sewer Main Replacement on N. Willow and W. Foothill (3,950 feet total)
<b>Problem or Opportunity:</b>	Sewers are surcharged and/or could overflow under current conditions.
<b>Recommended Solution:</b>	Replace 2,630' of 8" with 12" on N. Willow; and 1,320' of 8" with 12" on W. Foothill.
<b>Measurable Benefits:</b>	No surcharge or overflow under current conditions.
<b>Basis of</b>	RW Beck hydraulic modeling. Surcharging confirmed on N.
<b>Recommendation:</b>	Willow with Veolia operator.
<b>Assumptions / Risks:</b>	The proposed improvements reflect internal growth but not external growth such as the proposed Lytle Creek development. Normal construction risks associated with unknown underground conditions exist.
<b>Primary Driver:</b>	Reliability and Quality of Service





**Cost Estimate (based on conventional Design-Bid-Build)**

<b>S4</b>	<b>Sewer Main Replacement on N. Willow and W. Foothill (3,950 feet)</b>				
<u>No.</u>	<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total</u>
1	Mobilization/Demobilization/Bonds/Insurance/Permits/Misc.	1	LS	\$21,000.00	\$21,000
2	Traffic Control and Safety	1	LS	\$21,000.00	\$21,000
3	Utility Verification (Potholing)	1	LS	\$12,000.00	\$12,000
4	Trench Protection (Sheeting, Shoring and Bracing)	1	LS	\$18,000.00	\$18,000
5	SWPPP and BMPs	1	LS	\$12,000.00	\$12,000
6	Construct Extra Strength VCP- 12-inch N. Willow	2,630	LF	\$80.00	\$211,000
7	Construct Extra Strength VCP- 12-inch W. Foothill	1,320	LF	\$80.00	\$106,000
8	Construct 48" Manhole	13	EA	\$8,000.00	\$104,000
9	Utility Supports	1	LS	\$13,000.00	\$13,000
10	Video Inspection	1	LS	\$10,000.00	\$10,000
11	Construct AC	714	Tons	\$100.00	\$72,000
12	Construct Crushed Aggregate Base	255	CY	\$55.00	\$15,000
13	Replace Striping, Markings, Markers and Signs	1	LS	\$8,000.00	\$8,000
14	Record Drawings (As-Built)	1	LS	\$6,000.00	\$6,000
	<b>Subtotal</b>				<b>\$629,000</b>
	Contingency	10.0%			\$63,000
	O&M Project Development	1.0%			\$7,000
	Detailed Design and Permitting/Bidding Support	6.0%			\$38,000
	Construction Phase Engineering Services	5.0%			\$32,000
	O&M Project Management Services	8.0%			\$51,000
	<b>Total</b>				<b>\$820,000</b>
	<u>Potential Operational Cost Changes</u>				
	None Expected				\$0

**Anticipated Schedule (based on conventional Design-Bid-Build)**

<b>S4 - Sewer Main Replacement on N. Willow and W. Foothill (3,950 feet total)</b>												
	2013/2014											
<u>Activity</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>
Project Development												
Detailed Design and Permitting												
Bidding and Contract Award												
Construction and Commissioning												
Project Closeout												
	2014/2015											
<u>Activity</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>
Project Development												
Detailed Design and Permitting												
Bidding and Contract Award												
Construction and Commissioning												
Project Closeout												

**END**

## City of Rialto Proposed Capital Improvement Project (CIP)

<b>Project No. / Ranking:</b>	S5
<b>Name of Project:</b>	Sewer Main Replacement on W. Rialto (2,650 feet total)
<b>Problem or Opportunity:</b>	Sewers are surcharged and/or could overflow under current conditions.
<b>Recommended Solution:</b>	Replace 2,650' of 10" with 12" on W. Rialto.
<b>Measurable Benefits:</b>	No surcharge or overflow under current conditions.
<b>Basis of Recommendation:</b>	RW Beck hydraulic modeling. Surcharging on W. Rialto confirmed with Veolia operator.
<b>Assumptions / Risks:</b>	The proposed improvements reflect internal growth but not external growth such as the proposed Lytle Creek development. Normal construction risks associated with unknown underground conditions exist.
<b>Primary Driver:</b>	Reliability and Quality of Service



**Cost Estimate (based on conventional Design-Bid-Build)**

<b>S5</b>	<b>Sewer Main Replacement on W. Rialto (2,650 feet total)</b>				
<u>No.</u>	<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total</u>
1	Mobilization/Demobilization/Bonds/Insurance/Permits/Misc.	1	LS	\$11,000.00	\$11,000
2	Traffic Control and Safety	1	LS	\$11,000.00	\$11,000
3	Utility Verification (Potholing)	1	LS	\$8,000.00	\$8,000
4	Trench Protection (Sheeting, Shoring and Bracing)	1	LS	\$9,000.00	\$9,000
5	SWPPP and BMPs	1	LS	\$6,000.00	\$6,000
6	Construct Extra Strength VCP- 12-inch	2,650	LF	\$80.00	\$212,000
7	Construct 48" Manhole	9	EA	\$5,000.00	\$45,000
8	Utility Supports	1	LS	\$6,000.00	\$6,000
9	Video Inspection	1	LS	\$4,000.00	\$4,000
10	Construct AC	524	Tons	\$100.00	\$53,000
11	Construct Crushed Aggregate Base	173	CY	\$55.00	\$10,000
12	Replace Striping, Markings, Markers and Signs	1	LS	\$4,000.00	\$4,000
13	Record Drawings (As-Built)	1	LS	\$3,000.00	\$3,000
	<b>Subtotal</b>				<b>\$382,000</b>
	Contingency	10.0%			\$39,000
	O&M Project Development	1.0%			\$4,000
	Detailed Design and Permitting/Bidding Support	6.0%			\$23,000
	Construction Phase Engineering Services	5.0%			\$20,000
	O&M Project Management Services	8.0%			\$31,000
	<b>Total</b>				<b>\$499,000</b>
	<u>Potential Operational Cost Changes</u>				
	None Expected				\$0

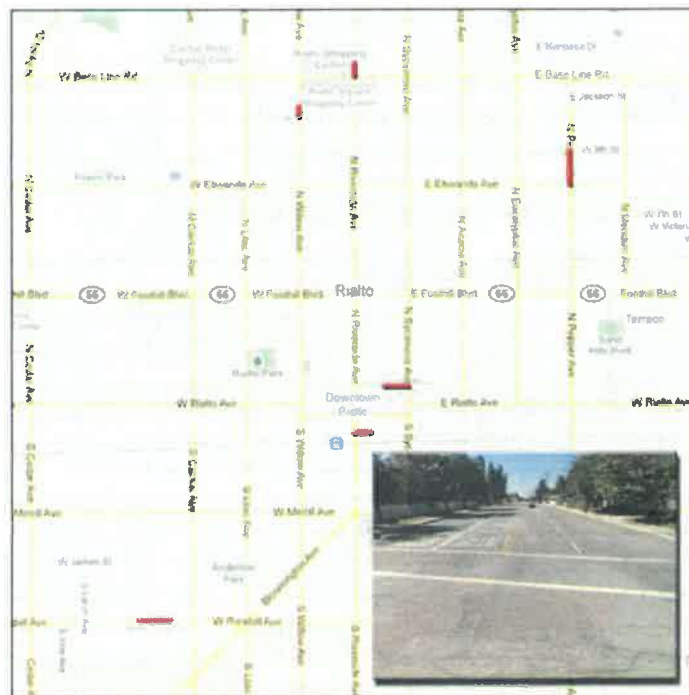
**Anticipated Schedule (based on conventional Design-Bid-Build)**

<b>S5 - Sewer Main Replacement on W. Rialto (2,650 feet total)</b>												
	2013/2014											
<u>Activity</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>
Project Development												
Detailed Design and Permitting												
Bidding and Contract Award												
Construction and Commissioning												
Project Closeout												
	2014/2015											
<u>Activity</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>
Project Development												
Detailed Design and Permitting												
Bidding and Contract Award												
Construction and Commissioning												
Project Closeout												

**END**

## **City of Rialto** **Proposed Capital Improvement Project (CIP)**

<b>Project No. / Ranking:</b>	S6
<b>Name of Project:</b>	Short Sewer Main Replacements on W. Randall, AT&SF RR, E. 1st, N. Willow, N. Riverside, and N. Pepper (2,410 feet total)
<b>Problem or Opportunity:</b>	Sewers are surcharged and/or could overflow under current conditions.
<b>Recommended Solution:</b>	Replace 330' of 10" with 15" on W. Randall; 570' of 8" with 12" on AT&SF RR; 300' of 8" with 12" on E. 1 <sup>st</sup> ; 210' of 8" with 10" on N. Willow; 180' of 8" with 10" on N. Riverside; and 820' of 8" with 10" on N. Pepper.
<b>Measurable Benefits:</b>	No surcharge or overflow under current conditions.
<b>Basis of Recommendation:</b>	RW Beck hydraulic modeling. Surcharging on AT&SF RR, E. 1 <sup>st</sup> , N. Willow, N. Riverside, and N. Pepper confirmed with Veolia operator.
<b>Assumptions / Risks:</b>	The proposed improvements reflect internal growth but not external growth such as the proposed Lytle Creek development. Normal construction risks associated with unknown underground conditions exist.
<b>Primary Driver:</b>	Reliability and Quality of Service



**Cost Estimate (based on conventional Design-Bid-Build)**

<b>S6 Short Sewer Main Repl on W. Randall, AT&amp;SF RR, E. 1st, N. Willow, N. Riverside, and N. Pepper (2,410 feet total)</b>					
No.	Description	Qty	Unit	Unit Cost	Total
1	Mobilization/Demobilization/Bonds/Insurance/Permits/Misc.	1	LS	\$13,000.00	\$13,000
2	Traffic Control and Safety	1	LS	\$13,000.00	\$13,000
3	Utility Verification (Potholing)	1	LS	\$12,500.00	\$13,000
4	Trench Protection (Sheeting, Shoring and Bracing)	1	LS	\$13,500.00	\$14,000
5	SWPPP and BMPs	1	LS	\$8,500.00	\$9,000
6	Construct Extra Strength VCP- 15-inch W. Randall	330	LF	\$100.00	\$33,000
7	Construct Extra Strength VCP- 12-inch AT&SF RR	570	LF	\$80.00	\$46,000
8	Construct Extra Strength VCP- 12-inch E. 1st	300	LF	\$80.00	\$24,000
9	Construct Extra Strength VCP- 10-inch N. Willow	210	LF	\$70.00	\$15,000
10	Construct Extra Strength VCP- 10-inch N. Riverside	180	LF	\$70.00	\$13,000
11	Construct Extra Strength VCP- 10-inch N. Pepper	820	LF	\$70.00	\$58,000
12	Construct 48" Manhole	9	EA	\$5,000.00	\$45,000
13	Utility Supports	1	LS	\$10,500.00	\$11,000
14	Video Inspection	1	LS	\$10,500.00	\$11,000
15	Construct AC	448	Tons	\$100.00	\$45,000
16	Construct Crushed Aggregate Base	147	CY	\$55.00	\$9,000
17	Replace Striping, Markings, Markers and Signs	1	LS	\$13,000.00	\$13,000
18	Record Drawings (As-Builts)	1	LS	\$7,000.00	\$7,000
<b>Subtotal</b>					<b>\$392,000</b>
	Contingency	10.0%			\$40,000
	O&M Project Development	1.0%			\$4,000
	Detailed Design and Permitting/Bidding Support	6.0%			\$24,000
	Construction Phase Engineering Services	5.0%			\$20,000
	O&M Project Management Services	8.0%			\$32,000
<b>Total</b>					<b>\$512,000</b>
<u>Potential Operational Cost Changes</u>					
	None Expected				\$0

**Anticipated Schedule (based on conventional Design-Bid-Build)**

<b>S6 - Short Sewer Main Replacements on W. Randall, AT&amp;SF RR, E. 1st, N. Willow, N. Riverside, and N. Pep</b>												
2014/2015												
Activity	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Project Development												
Detailed Design and Permitting												
Bidding and Contract Award												
Construction and Commissioning												
Project Closeout												
2015/2016												
Activity	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Project Development												
Detailed Design and Permitting												
Bidding and Contract Award												
Construction and Commissioning												
Project Closeout												

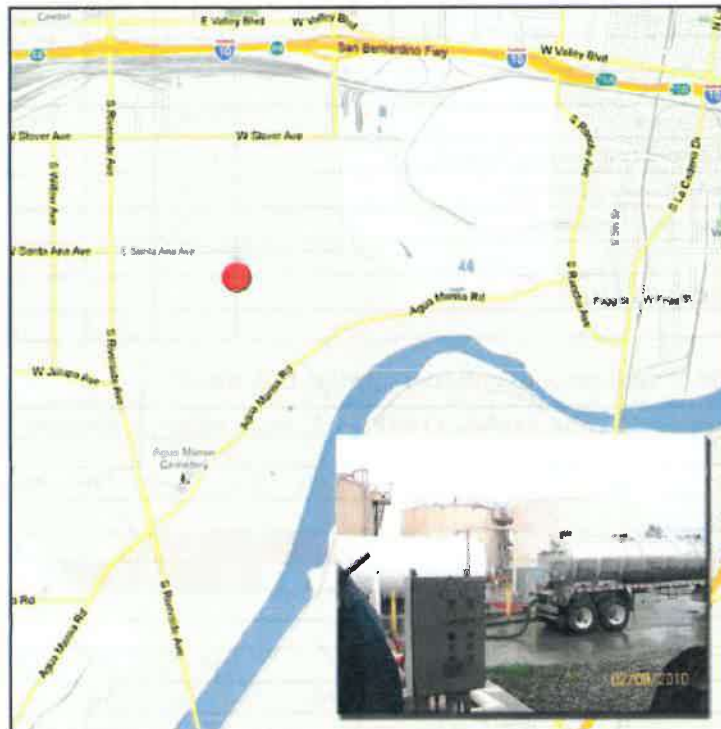
**END**



## **City of Rialto**

### **Proposed Capital Improvement Project (CIP)**

<b>Project No. / Ranking:</b>	S7
<b>Name of Project:</b>	Wastewater Treatment Plant FOG Modifications
<b>Problem or Opportunity:</b>	The FOG receiving station has inadequate capacity to allow the digesters to generate sufficient biogas to meet the capacity of the fuel cells. The biogas cleaning system is also deficient.
<b>Recommended Solution:</b>	Provide a second FOG receiving tank, improve the heating capabilities, and upgrade the biogas cleaning and monitoring system.
<b>Measurable Benefits:</b>	A FOG/digester/fuel cell system that can meet the system design capacity without the need for natural gas.
<b>Basis of Recommendation:</b>	Field investigations and analysis performed by Contractor.
<b>Assumptions / Risks:</b>	The original work is completed and all legal issues are resolved by the City. Contractor has ample opportunity to operate the facility for a period of time before implementing improvements. Normal construction risks associated with retrofit projects exist.
<b>Primary Driver:</b>	Reliability and Quality of Service



**Cost Estimate (based on conventional Design-Bid-Build)**

<b>S7</b>	<b>Wastewater Treatment Plant FOG Modifications</b>				
No.	Description	Qty	Unit	Unit Cost	Total
1	Mobilization/General Conditions	5.0%	of const	\$595,000.00	\$30,000
2	Piping	1	LS	\$15,000.00	\$15,000
3	Pumps	2	EA	\$10,000.00	\$20,000
4	Tanks	2	EA	\$75,000.00	\$150,000
5	Heating	1	LS	\$20,000.00	\$20,000
6	Valves and others	1	LS	\$65,000.00	\$65,000
7	Upgrades to Biogas Cleaning and Monitoring	1	EA	\$100,000.00	\$100,000
8	Installation	50.0%	of eqpt	\$285,000.00	\$143,000
9	Process Mechanical	25.0%	of eqpt	\$135,000.00	\$34,000
10	Electrical	35.0%	of eqpt	\$135,000.00	\$48,000
	<b>Subtotal</b>				<b>\$625,000</b>
	Contingency	10.0%			\$63,000
	O&M Project Development	1.0%			\$7,000
	Detailed Design and Permitting/Bidding Support	6.0%			\$38,000
	Construction Phase Engineering Services	5.0%			\$32,000
	O&M Project Management Services	8.0%			\$50,000
	<b>Total</b>				<b>\$815,000</b>
	<u>Potential Operational Cost Changes</u>				
	To Be Determined				N/A

**END**

## **City of Rialto** **Proposed Capital Recurring Project**

**Project No.** SA  
**Name of Project:** Manhole Rehabilitation  
**Problem or Opportunity:** Manhole deterioration can occur resulting in infiltration/inflow.  
**Recommended Solution:** Identify and rehabilitate manholes as necessary.  
**Measurable Benefits:** No infiltration/inflow at rehabilitated manholes.  
**Basis of Recommendation:** Requested by the City of Rialto. In line with typical industry practice.  
**Assumptions / Risks:** Extent of scope currently unknown. Contractor to assume program in second half of 2012 to maintain continuity.  
**Primary Driver:** Asset Renewal  
**Potential Delivery Method:** Utilize contracted labor, similar to investment main replacement work.

### **Engineer's Probable Opinion of Cost**

<b>SA</b>	<b>Manhole Rehabilitation (per year)</b>				
<u>No.</u>	<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total</u>
1	Materials, labor, and installation	50	EA	\$2,000.00	\$100,000
	O&M Project Management Services	8.0%			\$8,000
	<b>Total</b>				<b>\$108,000</b>
	Potential Operational Cost Changes				
	None				\$0

**END**



**City of Rialto**  
**Proposed Capital Recurring Project**

**Project No.** SB  
**Name of Project:** Main Cleaning and Lining  
**Problem or Opportunity:** Main deterioration can occur resulting in infiltration/inflow.  
**Recommended Solution:** Identify and line mains as necessary.  
**Measurable Benefits:** No infiltration/inflow at lined mains.  
**Basis of Recommendation:** Requested by the City of Rialto. In line with typical industry practice.  
**Assumptions / Risks:** Extent of scope currently unknown. Contractor to initiate program in second half of 2013 after identification and evaluation of program scope.  
**Primary Driver:** Asset Renewal  
**Potential Delivery Method:** Utilize contracted labor, similar to investment main replacement work.

**Engineer's Probable Opinion of Cost**

<b>SB</b>	<b>Main Cleaning and Lining (per year)</b>				
<u>No.</u>	<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total</u>
1	Materials, labor, and installation	5,280	FT	\$106.00	\$560,000
	O&M Project Management Services	8.0%			\$45,000
	<b>Total</b>				<b>\$605,000</b>
	<u>Potential Operational Cost Changes</u>				
	None				\$0

**END**

## **City of Rialto** **Proposed Capital Recurring Project**

**Project No.** SC

**Name of Project:** Engineering Studies (Master Plan and Regulatory Related)

**Problem or Opportunity:** Master planning should be performed every 5 years. Other types of engineering studies related to regulatory requirements could be expected to occur over a 5 year period.

**Recommended Solution:** Provide funding for both Master Planning and as a placeholder for currently unidentified studies.

**Measurable Benefits:** None

**Basis of Recommendation:** Recommended by Contractor (not identified in the RFP).

**Assumptions / Risks:** Funding not provided for growth related studies. Since scope is unknown, proposed funding is a placeholder.

**Primary Driver:** Reliability and Quality of Service.

**Potential Delivery Method:** Performed by Contractor, a consultant, or a combination.

### **Engineer's Probable Opinion of Cost**

SC	Engineering Studies (Master Plan and Regulatory Related)				
No.	Description	Qty	Unit	Unit Cost	Total
1	Miscellaneous Engineering Studies (5 year total)	1	LS	\$300,000.00	\$300,000
	Master Plan Update (year 5)	1	LS	\$300,000.00	\$300,000
	<b>Subtotal</b>				<b>\$600,000</b>
	O&M Project Management Services	4.0%			\$24,000
	<b>Total</b>				<b>\$624,000</b>
	<u>Potential Operational Cost Changes</u>				
	None				\$0

**END**