

# City of Upland

## Water and Recycled Water Rate Study

PROPOSAL / January 8, 2025



January 8, 2025

City of Upland  
Mr. Chris Alanis  
Public Works Director  
460 N. Euclid Avenue  
Upland, CA 91786

**Subject: Proposal for Water and Recycled Water Rate Study**

Dear Mr. Alanis:

Raftelis Financial Consultants, Inc. (Raftelis) is pleased to submit this proposal to conduct a Water and Recycled Water Rate Study for the City of Upland (City). We believe that our unique combination of qualifications, staff resources, local presence, California experience, and City knowledge will ensure a value-added project for the City and its ratepayers.

Raftelis was established in 1993 to provide financial, rate, and management consulting services of the highest quality to water and wastewater utilities. Since that time, Raftelis has grown to have the largest water and wastewater utility rate and financial consulting services practice in the country, with more than 160 consultants. Our staff has provided rate and/or financial planning assistance to over 1,000 utilities across the United States and have conducted thousands of studies. Our mission has always been focused on assisting our clients in meeting their goals of financial viability.

Over the past several years, water providers around the country have experienced increasing challenges in an already demanding industry. This includes several years of supply chain issues, higher rates of operational and capital inflation, and extreme wet-dry climate cycles. In addition, tightening regulations, legislation, and litigation throughout California further compound the challenges of being a water provider at a time when cost-of-living concerns and affordability are on top of the minds of customers.

Raftelis is confident in our ability to develop optimal rate structures and deliver sustainable financial plans that are in alignment with Proposition 218 and achieve the City's short-term and long-term goals and objectives. A primary objective of this study will be to clearly show a nexus between the costs incurred by the City and the proposed rates and fees to be charged to customers. In our studies we work between agency staff, legal counsel, and industry standards to develop rate proposals that harmonize policy objectives, legal requirements, and accepted industry frameworks. Recent examples of cost-of-service studies conducted by our proposed project team of neighboring agencies include the cities of Ontario, Pomona, Redlands, Chino, Covina, etc.

To assist the City with this project, we have assembled a team with extensive experience in financial planning, demand forecasting, and rate setting; extensive knowledge in San Bernardino County and California water; and a reputation for quality of service. I, Sudhir Pardiwala, will serve as Project Manager, managing the day-to-day aspects of the project and ensuring it stays on schedule, on budget, and effectively meets the City's objectives. I

have more than forty years of experience assisting water utilities. Steve Gagnon will serve as Technical Reviewer. He has assisted numerous agencies in Southern California as well. I will work closely with our staff consultants in conducting analyses and preparing deliverables for the project. Should you have any questions, please do not hesitate to contact me at 626.827 8931 or by email at [spardiwala@raftelis.com](mailto:spardiwala@raftelis.com).

Sincerely,



**Sudhir Pardiwala**  
*Executive Vice President*

# Understanding and Scope of Work

## Decreased Water Use

Nearly all water agencies in California saw significant declines in consumption as a result of wetter than normal winters the past two years. This comes in the wake of decreased demand from the last drought and demand hardening at lower than historical averages. Since water sales are the City's primary source of revenue for the water utility, it is critical to examine conservative scenarios for short-term and long-term water demand.

## Water Supply Costs

The City obtains most of its water from external sources. The San Antonio Water Company (SAWCo) delivers most of the City's water, with supplementary supply through The Water Facilities Authority to meet the City's peak summer and irrigation demands. Recent wet years and inflationary cost increases have resulted in large wholesale water rate adjustments across the state. Rates will need to be able to recover any rising water purchase costs for the City as a result of wholesale rate increases or supply mix changes.

## Operations and Maintenance & Capital Costs

Higher rates of operational and capital inflation have impacted the City's water utility. The City's budget shows a 56% increase in water operating expenses from FY 2022-23 to FY 2023-24, with Reservoir 15 coming online in February of this year. It also has \$29.4 million budgeted for capital expenditures for the current and next fiscal years. Proposed rates will need to reflect these changes while also mitigating rate shock to customers.

# Methodology

There are five main steps to our rate studies:

## 1. Due Diligence and Policy Review

Raftelis will start with a due diligence phase to understand the underlying reason and/or goals for the rate study.

## 2. Financial Plan Development

We then determine future revenue requirements to sufficiently fund the utility's operation and maintenance and capital replacement and refurbishment program. We evaluate current and projected revenues, water use, and expenses, including water purchase costs. The City's Capital Improvement Programs for the utility will be integrated into their respective financial plans to fully fund capital investment.

## 3. Cost-of-service Analysis

The annual costs of providing water and recycled water should be allocated among customer classes commensurate with their service requirements (i.e., how they use the system). In this step, costs are identified and allocated to functional cost components and distributed to respective customer classes according to the industry standards provided in AWWA's *Manual M1, Principles of Water Rates, Fees and Charges (Manual M1)*.

#### 4. Rate Design

Properly designed rates support and optimize a blend of utility objectives, such as affordability for essential needs, fairness and equity, revenue sufficiency, and stability. Raftelis will work with City staff to design rates according to industry standards that meet the City's rate-setting objectives and are defensible in light of recent court cases. Raftelis will develop a customized rate model to assess different rate alternative customer impacts to facilitate informed decision making.

#### 5. Rate Adoption

In the last step of the rate-making process, to comply with the Proposition 218 requirements, the results of the analyses are documented in a study report to help educate the public about the proposed changes, the rationale and justifications behind the changes, and their anticipated financial impacts in layman's terms. The report will detail the proposed rate structure derivation. At a public hearing, 45 days after sending out the public notices, Raftelis can present our recommendations to assist in the City's rate adoption.

## Scope of Work

### TASK 1 – PROJECT MANAGEMENT AND INITIATION (KICK-OFF MEETING)

#### Task 1.1 – Ongoing Project Management and Quality Assurance/Quality Control Process

The proposed project approach entails several different yet interrelated work efforts that will require effective coordination between City staff and the Raftelis Team. Our management approach stresses communication, teamwork, objectivity, and accountability for meeting project objectives to ensure that all deadlines and objectives are met in a timely and efficient manner. We believe in a no-surprises approach so that the client is aware of the status of the project at all times. This task includes general administrative duties, including client communication, billing, project documentation, and overall project administration. **We assumed that staff meetings are virtual and City Council meetings are in person.** We can have in-person meetings if preferred. Both the Project Manager and Technical Reviewer will perform QA/QC on the model results and our recommendations to ensure they are consistent with industry standards and the current rate-setting environment.

#### Task 1.2 – Project Initiation and Data Collection

The kick-off meeting provides a solid foundation for the project and serves as a forum in which City staff can provide input on the project's objectives, approach, work plan, scheduling, and priorities. Raftelis will develop a kick-off meeting package that contains the meeting agenda, and a broad list of questions related to the City's water and recycled water system operations. This kick-off meeting will also serve as a forum for Raftelis to develop an understanding of the City's pricing objectives, financial goals, and other important utility issues.

Raftelis will review the rate study report previously prepared to understand the City's current rate structure development. A detailed data request list is submitted prior to the kick-off meeting so that the City can assemble the appropriate data in the required format. The Raftelis team studies the data to understand revenue streams, operating and capital expenses, and customer counts and use patterns. In addition, Raftelis will review the current reserve structure and propose reserve recommendations that are consistent with industry standards as well as the City's risk management tolerance to maintain financial stability.

### MEETINGS

- One kick-off meeting with City staff

## DELIVERABLES

- Data request list and kick-off meeting summary memorandum

## TASK 2 – DATA COLLECTION AND REVIEW

The purpose of this task is to gather and review the relevant information, documents, and analyses that will be required to conduct the rate study. As part of this task, a detailed data request list will be prepared and submitted to City staff upon notice to proceed so all appropriate data can be forwarded to Raftelis before the kick-off meeting, where the data can be reviewed and any questions answered.

## DELIVERABLES

- Data request list and kick-off meeting summary memorandum

## TASK 3 – QUALITY ASSURANCE (QA) AND QUALITY CONTROL (QC) PROCESS

The QA/QC process ensures that all work performed by Raftelis on this project will be accurate and of the highest quality. Steve Gagnon, PE, will be the lead Technical Reviewer for this project, ensuring it meets both Raftelis' and industry standards. The QA/QC reviewer's primary responsibility is to review the work effort for consistency, accuracy, and validity and ensure that the cost of service and rate models are functioning properly and based on sound rate-making principles and standard industry practice. The reviewer also ensures that the report produced is comprehensive, consistent with the results, and meets the high-quality standards of Raftelis. The QA/QC process is accomplished through periodic reviews of the models throughout the course of their development.

## TASK 4 – FINANCIAL PLAN DEVELOPMENT

The financial plan is a cash flow modelling exercise that ascertains the additional revenue needed to ensure the financial integrity of the utility. It does so by projecting existing rate revenue, other operating and non-operating revenues, debt service payments, and operating and capital expenses over a 10-year period. Existing rate revenue is based on anticipated water sales and the number of customers served by the utilities. We will make prudent water sales and customer growth assumptions with input from City staff.

Raftelis will develop a 10-year cash flow analysis to determine revenue adjustments. We will also review reserve policies to recommend appropriate reserve balances (operating, capital, rate stabilization, etc.) that are consistent with industry standards as well as the City's risk tolerance. The financial plan will be presented in an easy-to-understand format on an interactive dashboard that shows the impacts of various assumptions so that informed decisions regarding revenue adjustments, capital financing through rates or debt, and reserve balances can be made efficiently.

Several features of the model dashboards include the ability to show or indicate:

1. Revenue adjustments required over the planning horizon to meet debt coverage, fund capital projects, and achieve reserve targets
2. Reserve balances and reserve targets as well as debt service coverage ratios (days cash on hand, reserve funding levels)

3. Projected operating costs and revenue streams
4. Operating cost breakdown (O&M, water purchases, debt service payments, pay-as-you-go (PAYGO) capital, etc.)
5. Different capital funding sources such as PAYGO (rate funding), debt financing, or grant funding

We will work with City staff to determine the most appropriate financial plan and rate design. Raftelis models are designed to be user-friendly while being flexible enough to show the City's sensitivity to various assumptions, allowing both City staff and City Council to make informed decisions.

## MEETINGS

- Two webinars to review the results of the financial plan

## DELIVERABLES

- Financial plan model in Excel

## TASK 5 – COST-OF-SERVICE ANALYSIS

The annual costs of providing services will be allocated among customer classes commensurate with their service requirements – i.e., how they use the system. Costs are identified and allocated to cost components and distributed to respective customer classes according to the industry standards provided in the *AWWA M1 Manual*.

Throughout the cost allocation process, Raftelis will incorporate the City's policy considerations, as well as current federal, state, and local rules and regulations such as Proposition 218. We will liaise with the City's legal counsel on rates to ensure proposed cost allocations bases and cost recovery rationale is consistent with Proposition 218, recent case law, and overall defensibility of rates.

The water and recycled water cost-of-service analyses will be based on industry standards and methodologies approved by the AWWA and described in their *Manual M1 Principles of Water Rates, Fees and Charges* (co-authored by Raftelis staff). Cost allocations among customer classes for water and recycled water will likely be based on the AWWA-approved Base-Extra Capacity approach which focuses on the different usage patterns (or peaking characteristics) demonstrated by each customer class. During the cost of service analysis Raftelis will evaluate the City's distinct customer classes, if warranted. Based on the revenue requirement identified in the financial plan, water expenses, such as the purchase, treatment, and distribution of water, are allocated to cost causation components, including supply, delivery, capacity-related costs, meter-related costs, customer costs, conservation costs, and other direct and indirect costs consistent with industry standards.

## MEETINGS

- Webinars if needed

## DELIVERABLES

- Cost-of-service analyses in Excel

## TASK 6 – Design Rates

Properly designed rates support and optimize a blend of various utility objectives, such as affordability for essential needs, fairness and equity, revenue stability, and ease of implementation. Raftelis will develop comparable rate alternatives according to the City’s objectives, with consideration of industry standards and defensibility considering recent legal challenges and Proposition 218.

### Task 6.1 Develop Rate Design Options

Raftelis will develop rate models with the flexibility to evaluate alternative rate structures including options such as inclining tiers, seasonal rates, and a uniform rate. The model will have the capability to examine the different rate structure scenarios to enhance revenue stability, fully fund operations and capital projects through rates, further promote rate affordability, and address fairness of rates within each class. Raftelis will examine the water utility’s current three-tier Single Family Residential (SFR) rate structure, uniform class rates, and the recovery of fixed and volumetric revenues based on fixed and volumetric costs.

#### Tiered Water Rates

In today’s rate-setting environment, it is imperative to show the nexus between the cost to serve water and the rate charged for service in each tier. For any tiered structure, Raftelis will calculate and demonstrate the nexus between costs and rates by tabulating the tiered rates to show each unit cost component individually. These cost components may include water supply costs, system delivery costs, capacity or peaking costs, meter servicing costs, customer service costs, and conservation costs, among others. This rate derivation will communicate to customers the cost drivers behind the rate in each tier and each class. An example of our build-up of “rate components” to final commodity rates is shown in the table below. The five rate components, derived from the cost of service, are summed to derive the final commodity rates.

	Water Supply	Delivery	Peaking	Conservation	Revenue Offset	Proposed Rates
<b>Residential</b>						
<b>Tier I</b>	\$1.82	\$1.96	\$0.92	\$0.00	(\$0.32)	<b>\$4.39</b>
<b>Tier II</b>	\$4.04	\$1.96	\$1.22	\$0.00	(\$0.32)	<b>\$6.91</b>
<b>Tier III</b>	\$6.45	\$1.96	\$1.91	\$0.10	\$0.00	<b>\$10.43</b>

During our analyses, we will examine how the current tiers and tier breakpoints serve the utility’s objectives and discuss any recommended revisions. We design our rate models to allow for multiple rate scenario analyses to show:

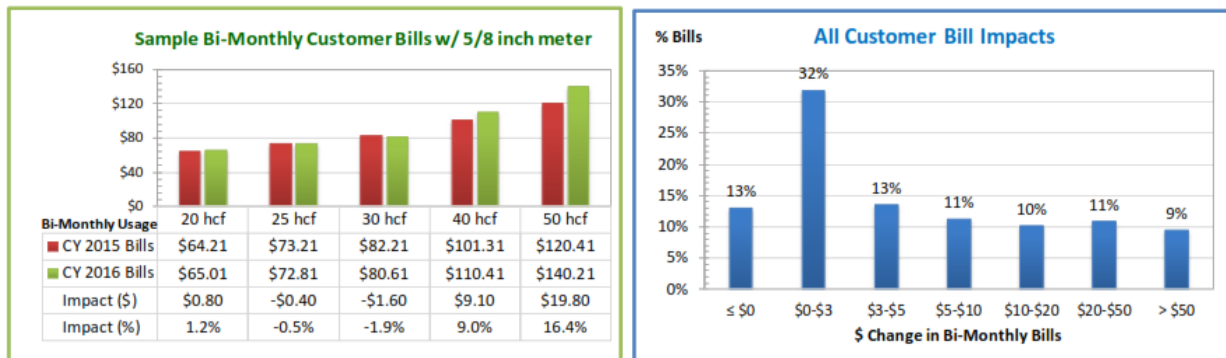
1. Different rate structures based on achieving different policy and rate philosophy objectives
2. Different levels of water use - for example an optimistic, most likely, and pessimistic scenario
3. Varying breakpoints for tiered water rates

### Task 6.2 Comparison of Alternative Rate Design Structures

Rate adjustments stem from a change in the total rate revenue needs and/or a change in the rate structure. The total rate adjustment can sometimes cause “rate shock” to certain customer groups. In our impact analysis graphics, we calculate estimated monthly bills at each level of usage assuming the proposed rate structure was already in place to determine the true impact of the new rate structure. The customer impact analysis will include a series of tables and figures that show projected rate impacts by customer class at various levels of usage. Understanding customer impacts, and taking corrective action, if necessary, allows us to design public outreach



strategies for generating customer buy-in and successful rate implementation. As an example, the customer impact illustration shown below-left indicates that a customer with a 5/8-inch meter using 20 hcf per billing period will see a \$0.80, or 1.2%, increase in the bimonthly bill. We also calculate the bill impacts in aggregate to be able to appreciate how different rate proposals and structures impact classes in aggregate. This visual has proved powerful in discussions with staff and elected officials when entertaining changes to rate structures.



Proposed rates will be designed to be defensible and to fall within regulatory and legal requirements. While Raftelis is not a law firm, we have helped numerous agencies throughout the State develop rates and rate structures that are defensible and meet Proposition 218 requirements. Raftelis assisted the Sweetwater Authority, City of San Juan Capistrano, and Soquel Creek Water District with revised rates after recent legal challenges. We will work with the City’s legal counsel on water rates throughout the study to ensure legal counsel, staff, and the Raftelis Project Team agree prior to presenting any modifications to or new rate structures in a public forum.

Raftelis will discuss preliminary results with staff during two webinars and one in-person meeting. In the meetings, we will discuss the benefits and challenges of each rate structure and each scenario and refine the options that will be presented to City Council.

**PLANNED MEETINGS:**

- Two (2) meetings with City staff to discuss rate options and one (1) meeting with City staff to discuss the comparison of alternative rate structures

**DELIVERABLES:**

- Rate model and customer bill impacts in Microsoft Excel

**Task 7 - Develop Drought Rates**

Raftelis will provide drought rates derived from the underlying existing rate structure. In order to simulate drought conditions, the rate Model will reduce revenue associated with a drop in consumption, but at the same time it will reduce any variable costs related to water production. Based on the usage analysis, we can identify where drought rates need to be set in order to ensure all revenue requirements are met during a period of reduced consumption. Penalty rates can also be set for multiple years and will be ready to implement as soon as conditions warrant, so that valuable time is not lost.

## **TASK 8 – PRESENTATION TO CITY COUNCIL**

Raftelis will present the study process and results to the City Council. With luck, we would get City Council approval to proceed with the Public Notice at the first City Council presentation. However, sometimes the City Council would like to see different rate adjustments or have other input before providing direction. We have assumed one City Council presentation and have provided a price for an additional City Council presentation.

### **MEETINGS**

- One presentation to City Council (presentation materials will be provided to City staff prior to the presentation for review)

### **DELIVERABLES**

- Graphics and/or charts in PowerPoint

## **TASK 9 – REPORT PREPARATION**

The last step of the rate-making process, and in part to comply with Proposition 218 requirements, documents the study results in a study report to inform the public about the proposed changes, the rationale and justifications behind the changes, and their anticipated financial impacts in lay terms. The study report serves as part of the City's administrative record to justify the proposed rates.

### **Task 9.1 Draft Report**

The draft report will include an executive summary highlighting the major issues addressed, decisions reached, and recommended rates developed during the study. The main body of the report will include brief physical descriptions of the system and City characteristics, details of the financial plan and reserve policies, cost of service analysis, rate design details, and the proposed rates. They will also contain discussions on rate structure selection and rate design assumptions. The methodology describing the cost of service, rate calculations, and proposed five-year rates will be described in detail so that the nexus between costs and rates is clearly defined and understandable. Raftelis will provide a draft report to staff and external legal counsel for review. Raftelis will complete a draft report in time for City Council meetings where the Council will select their preferred rates. Any changes, comments, and feedback will be incorporated into the final models and final reports.

### **Task 9.2 Final Report**

Recent legal challenges and court decisions have emphasized the importance of a thorough administrative record and defensible methodology of the final rates for service. To ensure that the study includes a thorough administrative record, the final report will include exhibits listing all assumptions and methodologies used to develop the financial plan, allocate costs to serve customers, and derive rates. The report will lead the reader from the adopted budgets through final rates and customer impacts, with the ability to do the math along the way. Raftelis will incorporate changes, comments, and edits from City staff, legal counsel, and City Council when completing the final reports.

### **MEETINGS:**

- One (1) meeting with City staff and legal counsel to discuss and review the draft report

**DELIVERABLES:**

- Presentation materials
- Draft and final study reports in Microsoft Word and Adobe PDF

**TASK 10 - PROPOSITION 218 PUBLIC HEARING PRESENTATION**

Raftelis will present the study results at a Proposition 218 hearing, during which we will address the City Council and the public’s questions and comments. Presentation materials will be provided to City staff for review before the Proposition 218 presentation.

**MEETINGS**

- One Proposition 218 presentation

**DELIVERABLES**

- Graphics and/or charts in PowerPoint

**OPTIONAL TASK 11 – PROPOSITION 218 NOTICE**

Raftelis will prepare the Proposition 218 Notice for review by the City’s Attorney. The notice will outline the proposed rate changes, will explain the right to challenge the rates, and will meet and comply with the noticing requirements of Proposition 218.

**MEETINGS**

- Web meeting to discuss the Proposition 218 Notice

**DELIVERABLES**

- Proposition 218 Notice

**OPTIONAL TASK 12 – ADDITIONAL CITY COUNCIL MEETINGS**

Should additional City Council meetings be required, we have shown the cost per meeting.

**MEETINGS**

- As needed

**DELIVERABLES**

- Graphics and/or charts in PowerPoint format

**OPTIONAL TASK 13 – CAPITAL IMPROVEMENT PLAN & OPERATING BUDGET SERVICES**

Financial forecasting and determining water rates are only as good as the operating and capital costs that go into them. If there is uncertainty in operating or capital costs, asset management costs, or opportunities to reduce costs, those can have direct impacts on the finances and rates of the utility. We can also help you make your master plans and asset management plans an actionable capital improvement plan that can provide a high level of service while

maintaining rates as low as good service will permit. **We offer capital improvement program and operating budget review services compared to utility best practices to help our clients make sure they have the right amount of capital, asset management, and operating costs in their budgets and look for ways to increase efficiencies, reduce costs, and align their budgets with utility best practices.** This service could potentially reduce your cost of service, reduce or eliminate any needed rate increases, and find some ways to help deliver your CIP or Operations more efficiently depending on your exact needs. It could also help you justify increases to the CIP and rates to address ongoing asset management needs or needed facility/equipment improvements consistent with utility best practices. This type of review also offers an independent third party review of your budgets compared to utility best practices which we have found is beneficial to our clients as rates are developed, proposed, and ultimately approved.

We can include this utility best practice review in our scope of work to review your CIP and Operations Budgets as we work with you to perform the rate study.

### MEETINGS

- As needed

### DELIVERABLES

- CIP and/or Operating Budget reviews with improvement recommendations in Word and/or Excel format

## Schedule

Raftelis proposes to complete the study by November 2025 as shown below:

TASKS	Feb 2025	Mar 2025	Apr 2025	May 2025	Jun 2025	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025
1. Project Management and Initiation (Kick-Off Meeting)	●									
2. Data Collection and Review	●									
3. Quality Assurance (QA) and Quality Control (QC) Process										
4. Financial Plan Development				●	●					
5. Cost of Service Analysis										
6. Design Rates										
7. Develop Drought Rates										
8. Presentation to City Council								●		
9. Report Preparation										
10. Proposition 218 Public Hearing Presentation										●
11. Optional - Proposition 218 Notice										
12. Optional - Additional City Council Meetings.										
13. Optional - Capital Improvement Plan & Operating Budget Services.										

● Meetings

# Fee

The table below shows the hourly rates, hours, and total estimated fee for this project. At the bottom we show a per meeting cost should additional City Council meetings be required.

Tasks	Meetings		Hours							Total Fees & Expenses
	Virtual	In Person	Sudhir Pardiwala	Steve Gagnon	Consultant	Brandon Vatter	Graphic Designer	Admin	Total Hours	
1. Project Management and Initiation (Kick-Off Meeting)	1		10	2	4			2	18	\$6,300
2. Data Collection and Review	1		2		8				10	\$2,790
3. Quality Assurance (QA) and Quality Control (QC) Process			2	8					10	\$3,950
4. Financial Plan Development	2		10		40				50	\$13,950
5. Cost of Service Analysis			10		24				34	\$10,110
6. Design Rates	2		10		24				34	\$10,110
7. Develop Drought Rates			4		16				20	\$5,580
8. Presentation to City Council		1	8		8				16	\$5,510
9. Report Preparation	1		10	2	50			2	64	\$17,340
10. Proposition 218 Public Hearing Presentation		1	8		8			2	18	\$5,730
<b>Total Meetings / Hours</b>	<b>7</b>	<b>2</b>	<b>74</b>	<b>12</b>	<b>182</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>274</b>	<b>-</b>
<b>Hourly Billing Rates</b>	<b>-</b>	<b>-</b>	<b>\$425</b>	<b>\$375</b>	<b>\$230</b>	<b>\$340</b>	<b>\$170</b>	<b>\$100</b>	<b>-</b>	<b>-</b>
<b>Total Professional Fees</b>	<b>-</b>	<b>-</b>	<b>\$31,450</b>	<b>\$4,500</b>	<b>\$41,860</b>	<b>\$0</b>	<b>\$0</b>	<b>\$600</b>	<b>-</b>	<b>\$78,410</b>
									<b>Travel Expenses</b>	<b>\$210</b>
									<b>Technology Fee</b>	<b>\$2,740</b>
									<b>Total Expenses</b>	<b>\$2,950</b>
									<b>Total Fees &amp; Expenses</b>	<b>\$81,360</b>
11. Optional - Proposition 218 Notice	1		2		8		6		16	\$3,870
12. Optional - Additional City Council Meetings		1	8		8				16	\$5,620
13. Optional - Capital Improvement Plan & Operating Budget Services	2		2			24			26	\$9,270
<b>Total Optional Tasks</b>										<b>\$18,760</b>

The City accepts the terms of this engagement letter and proposal:

Approved: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Signatory: \_\_\_\_\_

Title: \_\_\_\_\_