

**COST SHARING AGREEMENT FOR THE
HYDRANT FLOW AND PIPELINE RESILIENCY IMPROVEMENT PROJECT
DESIGN CONSTRUCTION PHASE**

The Cost Sharing Agreement for the Hydrant Flow and Pipeline Resiliency Improvement Project for the Design Construction Phase ("Agreement") is made as of this ____ day of _____, 201_ ("Effective Date") by and between Purissima Hills Water District ("Water District") and Los Altos Hills County Fire District ("Fire District").

RECITALS

- A. Water District retained an engineering consultant, Pakpour Consulting Group, Inc. ("Pakpour") to design a project herein referred to as the **Hydrant Flow and Pipeline Resiliency Improvement Project** ("Project"), as set forth in **Exhibit A**; and
- B. Pakpour will be working for the Water District and not the Fire District under this Agreement.
- C. The Project is the next step in a series of improvement projects and shared cost agreements between Water and Fire Districts with the intention to replace, improve, and stabilize the water pipeline infrastructure to build greater resiliency and operational capabilities in events of fire, earthquake, flood or other disasters; and
- D. The Project will provide benefits for both water service and fire protection service; and
- E. Water District and Fire District (collectively the "Parties"), by subcommittee, concluded that for each area of pipeline improvement construction, a percentage of the costs for the construction project would be allocated to each of the parties based on the percentage of benefits the improvement would deliver toward fire protection service and the percentage of benefits the improvements would deliver toward Water District service. The Parties allocated the costs associated with the percentage of benefits accordingly.
- F. Parties also concluded by subcommittee, that for purposes of the design construction phase of the Project, the costs allocated to each of the Parties would be a 50/50 split of the estimated design construction costs. This split is derived from the total percentage allocated to each Party for the full construction project.
- G. In the interest of public service, Water District has commenced its part of the design construction phase to be completed in June 2019 and plans to proceed to bid-package distribution for construction in July 2019; and

H. For purposes of this Agreement the Parties have agreed to share the costs of the design construction phase of the Project as follows:

1. Water District will pay the cost of the design construction phase that is now in progress as described in **Exhibit B**. In addition, Water District will pay a portion of design construction phase in **Exhibit C** in the amount of \$42,273. Total cost paid by Water District for its portion of the total design construction phase is \$316,50 plus any additional costs that may be necessary if costs exceed the estimated costs of the design construction project.
2. Fire District will pay the cost of the design construction phase as described in **Exhibit C** minus that amount of \$42,273 paid by Water District. Water District will invoice Fire District for the work performed under **Exhibit C**. Total cost paid by Fire District for its portion of the total design construction phase is capped at \$316,508.
3. Notwithstanding the above, Fire District will pay up to \$15,000 for any additional cost associated with the design construction phase in **Exhibit C**.
4. Water District will pay any additional cost associated with the design construction phase in **Exhibit B** and, in addition, will pay any additional costs associated with the design construction phase in **Exhibit C** in excess of the additional \$15,000 paid by the Fire District. Water District shall be responsible for paying all amounts beyond the Fire District's maximum contribution of \$331,508.

NOW, THEREFORE, the Parties agree as follows:

1. **Scope of Agreement.** This Agreement incorporates the Recitals stated herein and embodies the terms and conditions for sharing the costs of the design construction phase of the Project. This Agreement may be amended only with the mutual written consent of the Parties.

2. **Project Description.** This Project involves the design construction project as set forth in **Exhibit B** and **Exhibit C** and potential construction of multiple projects in phases as described in **Exhibit A**. All areas and facilities of the Project subject to this Agreement are located within the boundaries of the Water District and are within the boundaries of the Fire District.

3. **Fire District Participation.** The Fire District is participating in the cost sharing of the design construction phase to build greater resiliency and operational capabilities of the pipeline in events of fire, earthquake, flood or other disasters for the safety and protection of the public and, to ensure the design construction phase has the potential for construction to be completed and, to enable the construction of the Project even though Fire District may not participate in some or all of the construction project.

4. Project Management. Water District shall be solely responsible for the design construction phase of the Project including any legally applicable bidding requirements, managing the environmental review process under the California Environmental Quality Act and all liability that may arise in accordance with the design of the Project. Water District selected and retained the design consultant engineering firm and will provide all management, administration, receipt of invoices and make payments to said consultant engineering firm. Water District will receive and pay invoices for all design construction services and will then invoice Fire District for Fire District's part of the design construction phase as set forth in **Exhibit C**.

5. Sharing of Costs. It is the intent of this Agreement to provide for the sharing of costs for the design construction phase and to provide a process wherein the Fire District can consider its options whether to proceed with the construction phase of the Project.

- a. Water District hereby agrees to provide funding for its part of the design construction phase, as described in **Exhibit B** and in addition Water District will pay a portion of design construction phase in **Exhibit C** in the amount of \$42,273. Total cost paid by Water District for its portion of the total design construction phase is \$316,508.00 plus any additional costs associated with its part of the design construction phase.
- b. Fire District hereby agrees to provide funding for its part of the design construction phase, as described in **Exhibit C**, minus that amount of \$42,273 paid by Water District. Water District will invoice Fire District for the work performed under **Exhibit C**.
- c. Total cost paid by Fire District for its portion of the total design construction phase is capped at \$316,508.00. Fire District will pay up to \$15,000 for any additional costs associated with the work described in **Exhibit C**. Water District will pay for additional cost of the design construction phase in **Exhibit C** that exceed \$15,000.

The Parties will bear the cost of their own internal administrative and legal consultant costs.

6. Payment Procedures. Water District shall pay all invoices, prepared and submitted in accordance with the cost sharing terms herein, for design construction that are submitted in conjunction with Project. Receipt and payment of invoices by Fire District will be in accordance with County of Santa Clara Finance Department procedures.

Fire District shall make an initial deposit to Water District in the amount of \$50,000.00 within 30 days of the notice to proceed with Fire District's design construction phase. The deposit will collect interest paid to the Fire District equal to the LAIF quarterly interest rate that is paid in the quarter the deposit resides in the Water District account. Water District will use this initial deposit for cash flow purposes and will pay invoices submitted for the Fire District's design construction phase as described in **Exhibit C**.

Simultaneously, Water District will also submit monthly invoices to Fire District to replenish the deposit until such time as the deposit amount equals the amount of the final payment. Fire District shall pay invoices in accordance with the County of Santa Clara Finance Department procedures.

7. Construction Option. At or before the conclusion of the design construction phase, Parties shall meet to discuss terms and conditions of the construction and inspection of the Project. After such discussions, the Commissioners of the Fire District will determine at a public meeting(s) whether or not to participate in construction of the Project. At this time the Fire District is not making any commitment or promise to or not to participate in construction of the Project and shall determine whether to proceed in its sole discretion. Parties shall work cooperatively during the design construction phase and with the design consultants, Pakpour, to develop a Project which meets the operational, service, protection and fiscal needs of each district.

8. Insurance.

Water District and Consultants retained by Water District shall procure, maintain and provide appropriate types and amounts of insurance for the Project, as required by Fire District's Insurance Requirement, as set forth in Exhibit D, against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by Water District and Consultants, their agents, representatives, employees, contractors or subcontractors. Water District and Consultants shall each name the Fire District as an additional indemnified party and an additional Insured. Water District shall provide the Fire District with documentation evidencing the above.

9. Indemnity. Water District and Consultants shall indemnify, defend, keep and save harmless the Fire District, and its directors, officers, agents, employees and independent contractors against any and all liability, damages, costs, claims or actions, including reasonable attorney fees and charges, arising out of any injury to persons or property that may occur, or that may be alleged to have occurred, in the course of the Project caused by any act or omission of the Water District and Consultants and their employees, agents, independent contractors, or consultants. This indemnification obligation shall survive the termination or suspension of this Agreement.

10. Notice. All notices given pursuant to this Agreement shall be given in writing, sent by U.S. mail, postage prepaid, and addressed as follows:

Water District:
General Manager
26375 Fremont Road
Los Altos Hills, CA 94022
phone:
email:

Fire District:
General Manager
P.O. Box 1766
Los Altos, CA 91023
phone:
email:

Copy to:

Dan Siegel Jorgenson, Siegel, McClure &
Flegel, LLP

1100 Alma Street, Suite 210
Menlo Park, CA 94025-3392

11. Severability. If any part of this Agreement is held unconstitutional, invalid, or unenforceable by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Agreement.

12. Attorneys' Fees. In the event that any legal action is commenced to enforce the terms of this Agreement, the prevailing party shall be entitled to an award of its reasonable attorneys' fees and costs.

13. Entire Agreement. This Agreement constitutes the complete expression of the agreement between the Parties. There are no other agreements between the Parties concerning the subject matter of this Agreement except those set forth in this Agreement. Only a writing signed by both Parties may modify this Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year referenced above.

WATER DISTRICT

FIRE DISTRICT,

By: _____
President
Board of Directors

By: _____
President
Board of Commissioners

Attest:

Attest:

District Secretary

District Clerk

EXHIBIT A
PHWD & LAHCFD
Hydrant Flow and Pipeline Resiliency Improvement Project

Description	Project Details			Facility	PHWD		LAHCFD	
	LF	size	Eng Estimate	Improvement	%	\$	%	\$
Elena Rd (La Barranca to Taaffe)	2250	12	\$1,480,000	Seismic outage	75%	\$1,110,000	25%	\$370,000
Taaffe Rd (Vista Del Valle to Dezahara)	3200	12	\$2,105,000	Seismic outage	60%	\$1,263,000	40%	\$842,000
Page Mill Rd (west from Moody Rd)	1350	12	\$915,000	low flow hydrants	50%	\$457,500	50%	\$457,500
Altamont Upstream (Page Mill to Briones)	670	8	\$420,000	low flow hydrants	40%	\$168,000	60%	\$252,000
La Paloma (from Purissima Rd)	810	10	\$385,000	low flow hydrants	0%	\$0	100%	\$385,000
Briones (from Westridge)	300	8	\$237,500	low flow hydrants	0%	\$0	100%	\$237,500
Menalto to Westridge Ct (cross country)	300	8	\$237,500	low flow hydrants	0%	\$0	100%	\$237,500
Altamont Downstream (Appaloosa to Julietta)	1200	8	\$690,000	low flow hydrants	50%	\$345,000	50%	\$345,000
Altamont Downstream (Briones to Appaloosa)	4400	8	\$2,255,000	low flow hydrants	40%	\$902,000	60%	\$1,353,000
			\$8,725,000			\$4,245,500		\$4,479,500
								\$8,725,000

EXHIBIT B



Pakpour Consulting Group, Inc.

August 7, 2018

Patrick Walter
General Manager
Purissima Hills Water District
26375 Fremont Road
Los Altos Hills, CA 94022

**Subject: Proposal to prepare Plans, Specifications and Cost Estimate for
Taafe / Elena Roads Water Main Replacement
Purissima Hills Water District**

Dear Patrick,

Pakpour Consulting Group (PCG) is pleased to provide the following proposal to prepare plans, specifications and cost estimate for the Taafe/Elena Roads Water Main Replacement as identified in the District's 2018 Capital Improvement Program (CIP). The project consists of 3 CIP projects including 1) CIP 07-09 Elena/Taafe Road Intertie, 2) CIP 11-03 Taafe Road Water Main Replacement, and 3) CIP 13-09 Elena Road (North) Water Main Replacement. Following are brief backgrounds of each project pulled directly from each individual CIP exhibit (attached).

CIP 07-09 Elena/Taafe Road Intertie

The Elena Tank and Pump Station is physically located in middle of the District's distribution system making it an ideal location for distribution of water to both Zone 2 and Zone 3. Ultimately 2 additional Zone 3 pumps will be installed at the Elena Pump Station for a total of 3 pumps, 2 of which could operate concurrently for a total pumping discharge of approximately 1,700 gpm. The District is also pursuing purchasing or transferring water from Cal Water which would enter the distribution system along Robleda Road. The Elena Tank and Pump Station is the closest storage and pumping facility to this intertie making it an ideal location to distribute the new water. In anticipation of the upgrades to the Elena Pump Station, the District performed a hydraulic analysis to locate bottlenecks in the distribution system leading out of the pump station. The Elena / Taafe Road Intertie consists of installing approximately 1,900 LF of 8" Ductile Iron Pipe (DIP) and 750 LF of 12" DIP connecting to various points along Elena Road. Distribution System Analysis No. 70

CIP 11-03 Taafe Road Water Main Replacement

The water main along Taafe Road from Vista Del Valle (J-574) to Dezhara Way (J-726) is an 8" Asbestos Cement (AC) water main. AC water main is brittle and subject to severe damage during seismic events. The District has reported several leaks along this stretch of water main. The upgraded water main along Taafe Road will serve as part of the District backbone infrastructure leading from Elena Pump Station to the Altamont Tank Site. The Taafe Road Water Main Replacement consists of replacing 3,200 LF of 8" AC with 12" Ductile Iron Pipe (DIP). Distribution System Analysis No. 70. This project when combined with CIP 13-09 completes the District's backbone infrastructure between the recently completed Zone 2.5 and Neary Tank Utilization Phase I projects.



CIP 13-09 Elena Road (North) Water Main Replacement

This project replaces approximately 1,500 LF of 8" Cast Iron Pipe (CIP) with 12" Ductile Iron Pipe (DIP) water main in the heart of the District. The current water main is over 7 feet deep in certain areas and crosses a culvert on Elena Road which is susceptible to movement. This project starts at the recently constructed Zone 2.5 Project and continues the District's backbone infrastructure south to the Elena Tank and Pump Station. Distribution System Analysis No. 70.

Task 1.0 – Meetings/Field Investigations/Project Management

PCG will conduct meetings and field investigations with District staff during the design phase. This task also includes various project management tasks throughout the project.

Task 2.0 - Topographic Survey, Potholing & Utility Coordination

Topographic Survey

PCG along with our survey subconsultant will research Town of Los Altos Hills and Santa Clara County records for "As-Built" improvement plans, reports, studies and other data that may be pertinent to the project.

Topography will be established and tied to horizontal and vertical control by the surveyor. The survey scope will consist of providing reference points, topographic information, establishment and listing of benchmarks and field monuments, site data control, utility information along affected roads. The survey will also include a full topo of the District's property at Elena Tank Site. Existing right-of-way and adjoining property information will be obtained and shown on the project base map.

We assumed the District will mark the location of the existing water mains and call for USA markings prior to the field survey. The survey will show the location of the marked water main and any other underground utilities as marked.

Potholing

Along and adjacent to the proposed water main alignment there are numerous existing wet and dry-utilities. We recommend potholing all critical utility crossings to determine the horizontal and vertical location to reduce potential water main alignment conflicts. The potholing contractor will be responsible for coordinating USA markings in the field and providing 1-person traffic control for potholing operations.

Our potholing subconsultant will perform up to fifteen (15) utility potholes using air-vacuum excavation to verify the precise horizontal and vertical location of underground utilities. The exact pothole locations will be determined after the preliminary water main alignment is established. Once the requested utility has been exposed, pertinent utility data will be collected including the utility type, material composition, general soil characteristics, depth and a photo of the exposed utility. After utility data collection, the pothole will be restored to its previous condition using the appropriate backfill and surface restoration materials as required by the permitting authority. Potholes will be marked in the field with MAG nail in asphalt or chiseled X in concrete and pertinent utility data will be recorded on the ground surface with white paint displaying the pothole number, utility size, type and depth. Potholes performed in natural ground will be marked with a steel pin and pertinent utility data will be recorded on a wooden lath at each pothole location. The results of the field work will be presented in a Portable Document Format (PDF) report that will include: pertinent utility data, longitudinal and latitudinal coordinates (for reference purposes only) and photos.



Utility Coordination

Project Utility Notices will be sent out to utilities and services operating in the area, informing them of the project and requesting plans of their facilities, and their requirements for construction near them. We will coordinate with the various utility companies to resolve potential conflicts.

Task 3.0 - Geotechnical / Environmental Investigations

Geotechnical and environmental investigations may be required for work within the cross-country alignment on the Elena Tank Site between the existing tanks/driveway and Elena Road below. It is unknown at the time of this proposal whether the cross-country portion will be open-trenched or directionally bored. Following survey completion, we will explore various alignment options for an optimal location accounting for vegetation removal, the existing slope, existing retaining walls, and ultimately constructability. If the new water main is directionally bored, a geotechnical investigation will be needed. If the water main is open-trenched, an environmental investigation will be needed to determine the biological impacts. For proposal purposes, we assumed a placeholder value for this work based on previous projects. The value shown is for only one, geotechnical or environmental, investigation.

Task 4.0 - 60% Plans

The 60% progress plans will be prepared per District standards. The design drawings will be prepared in AutoCAD Civil 3D 2017. The 60% Plans will be submitted for review to the District. PCG will participate fully in this review process.

Task 5.0 - 90% Plans, Specifications, and Cost Estimates

The 60% plans submitted in the task above will be carried to 90% completion by adding details, additional notes, and addressing District and other agency comments along with preparing 90% technical specifications and cost estimate. Tie-in details will be provided for each intersection. The specifications will be in Microsoft Word format and will be incorporated into the District's "boilerplate" to produce final bid documents. Bid quantities will be estimated for each item of work and a cost estimate prepared based on unit prices for each item. Unit prices will be determined based on recent bid tabulations from similar projects, job cost media such as Means, and discussions with local contractors.

Task 6.0 - Bid Documents (Final Plans, Specifications, and Cost Estimates)

Upon receiving 90% review comments, each comment will be reviewed, discussed, and addressed. Appropriate modifications will be made to the plans, technical specifications, and cost estimates. The plans and specifications will be finalized for the project including all notes/details and incorporating all comments received.

Task 7.0 - Advertisement/Award Period

PCG will administer the Advertisement and Award process on behalf of the District and will include written responses to bidder inquiries, preparation of contract addenda, and attendance at a pre-bid conference and site visit.



Proposed Budget

TASK	DESCRIPTION	District Engineer		Project Engineer II		TOTALS	
		HR	COST	HR	COST	HRS	COST
			\$190		\$145		
1.0	Meetings/Field Investigations/Project Management	20	\$3,800	120	\$17,400	140	\$21,200
2.0	Topographic Survey, Potholing, Utility Coordination	0	\$0	80	\$11,600	80	\$11,600
3.0	Geotechnical / Environmental Investigations	10	\$1,900	40	\$5,800	50	\$7,700
4.0	60% Plans	40	\$7,600	360	\$52,200	400	\$59,800
5.0	90% Plans, Specifications, and Estimates (PSE)	20	\$3,800	240	\$34,800	260	\$38,600
6.0	Bid Documents - Final PSE	20	\$3,800	100	\$14,500	120	\$18,300
7.0	Advertisement / Award Period	10	\$1,900	80	\$11,600	90	\$13,500
Total Labor		120	\$22,800.00	1020	\$147,900	1140	\$170,700
Topographic Survey							\$50,000
Geotechnical or Environmental Survey							\$20,000
Potholing							\$25,000
5% Direct Expense Fee (Mileage, Copies, Plots, Etc.)							\$8,535
Total Budget for Design, and Advertisement Assistance							\$274,235

Proposed Schedule

Notice to Proceed	August 8, 2018
60% Submittal	December 21, 2018
60% Submittal Review Meeting	January 11, 2019
90% Submittal	March 15, 2019
90% Submittal Review Meeting	March 29, 2019
Final Submittal	May 3, 2019
Advertisement Authorization	May 8, 2019
Award Project	June 12, 2019
Begin Construction	July 1, 2019

Should you have any questions regarding this proposal please do not hesitate to contact me at (925) 224-7717. We look forward to working with the District on this project.

Very truly yours,

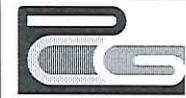
Pakpour Consulting Group, Inc.



Brandon Laurie, P.E.
Project Engineer

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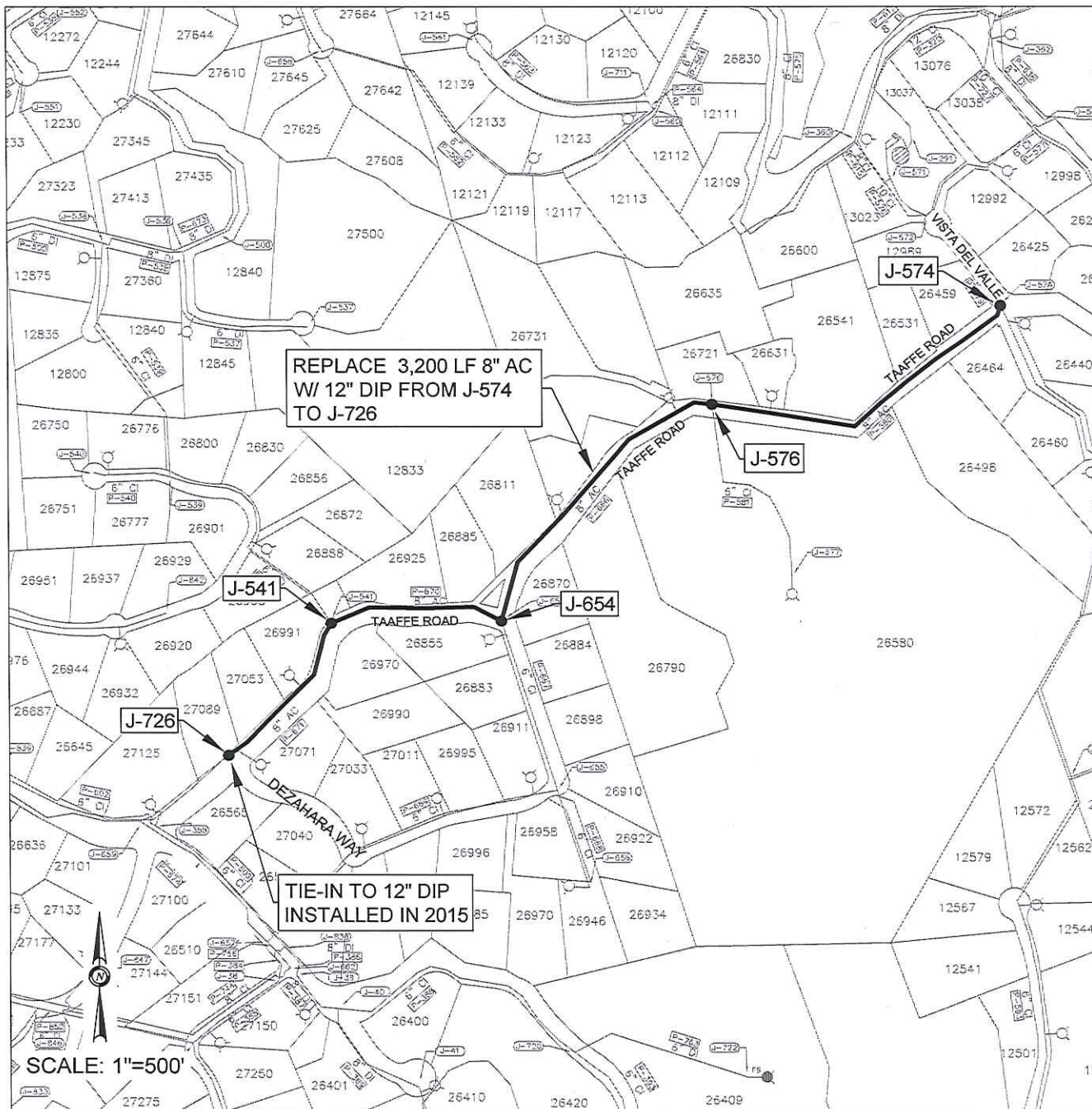
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DATE	05/2018
SCALE	AS NOTED
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	CKD <u>JP</u>



ELENA / TAAFFE ROAD INTERTIE
PROJECT 07-09

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OF 20

Contingency (±10%)	\$ 135,000
Project Budget	\$1,460,000



TAAFFE ROAD WATER MAIN REPLACEMENT

PROJECT BACKGROUND

The water main along Taafe Road from Vista Del Valle (J-574) to Dezahara Way (J-726) is an 8" Asbestos Cement (AC) water main. AC water main is brittle and subject to severe damage during seismic events. The District has reported several leaks along this stretch of water main. The upgraded water main along Taafe Road will serve as part of the District backbone infrastructure leading from Elena Pump Station to the Altamont Tank Site. The Taafe Road Water Main Replacement consists of replacing 3,200 LF of 8" AC with 12" Ductile Iron Pipe (DIP). Distribution System Analysis No. 70.

PROPOSED IMPROVEMENTS

Replace 3,200 LF of 8" AC with 12" DIP

PROJECT BENEFITS

The new 12" DIP water main installed as part of the Taafe Road Water Main Replacement will serve as back bone infrastructure in the central part of the District increasing fire flow, reliability and will replace one of the last sections of AC water main in the hills west of Interstate 280. There will also be increased water movement from Elena Pump Station to Altamont Tank. There is a slight increase in fire protection upon completion of this project.

PROJECT BUDGET (rounded)

12" DIP - 3,200 LF @ \$450/LF	\$1,440,000
Service Connections - 17 @ \$3,500/EA	\$ 59,500
Fire Hydrants - 5 @ \$17,500/EA	\$ 87,500
Tie-Ins - 5 @ \$15,000/EA	\$ 75,000
Subtotal Construction	\$1,660,000
 Planning, Design & Construction Support	 \$ 250,000
 Contingency (±10%)	 \$ 195,000
Project Budget	\$2,105,000

SCALE: 1"=500'



Pakpour Consulting Group, Inc.
5776 Stoneridge Mall Road, Suite 320
Pleasanton, CA 94588
925.224.7717 Fax 925.224.7726
www.pcgengr.com

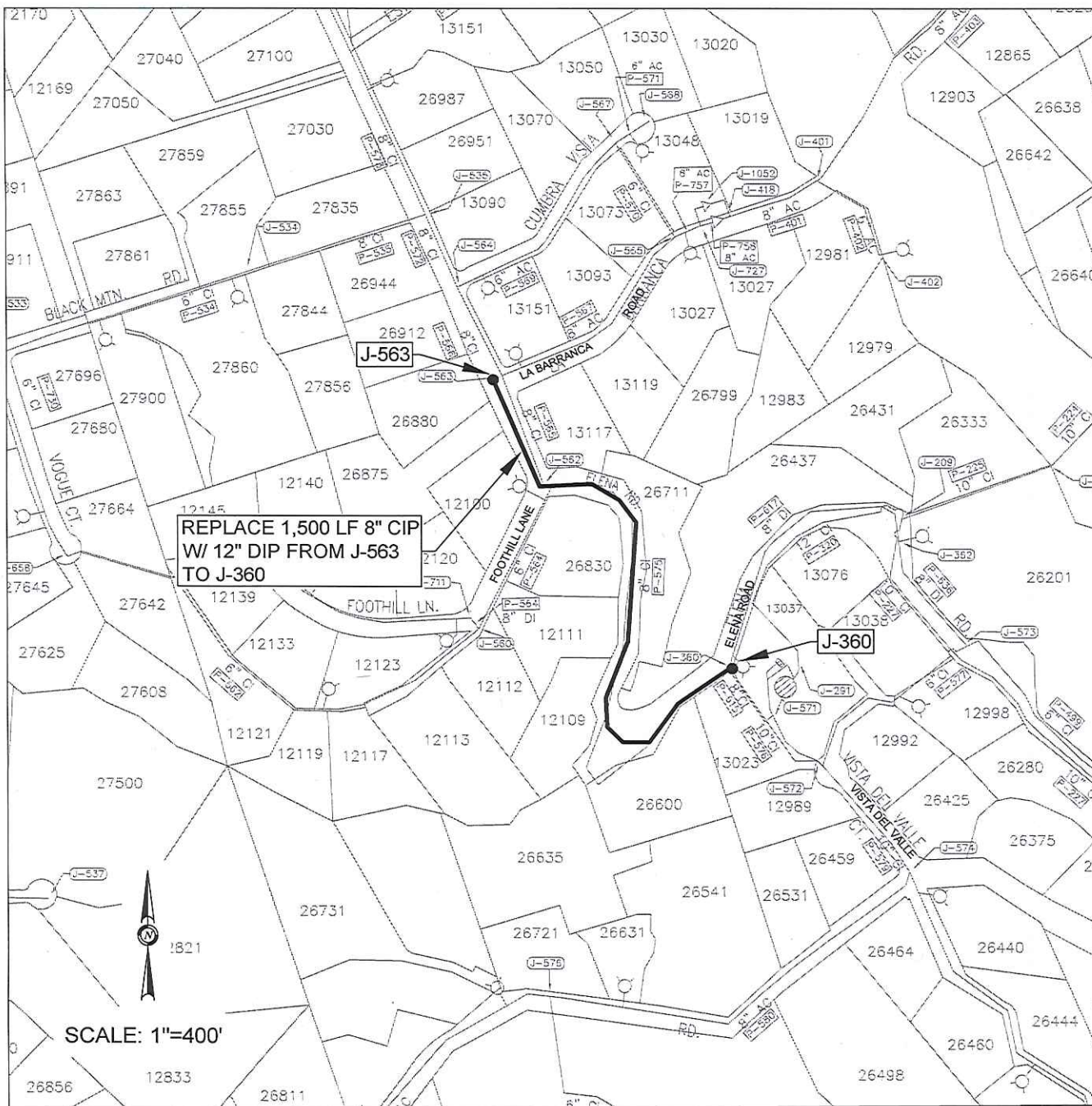
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SCALE AS NOTED
DRAWN: FF / BL
BY: JP



PURISSIMA HILLS WATER DISTRICT
SANTA CLARA COUNTY, CALIFORNIA
26375 FREMONT ROAD
LOS ALTOS HILLS, CA 94022-0264

TAAFFE ROAD WATER MAIN REPLACEMENT
PROJECT 11-03
CAPITAL PROJECT SUMMARY - 2018 UPDATE

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ELENA ROAD (NORTH) WATER MAIN REPLACEMENT

PROJECT BACKGROUND

This project replaces approximately 1,500 LF of 8" Cast Iron Pipe (CIP) with 12" Ductile Iron Pipe (DIP) water main in the heart of the District. The current water main is over 7 feet deep in certain areas and crosses a culvert on Elena Road which is susceptible to movement. This project starts at the recently constructed Zone 2.5 Project and continues the District's backbone infrastructure south to the Elena Tank and Pump Station. Distribution System Analysis No. 70.

PROPOSED IMPROVEMENTS

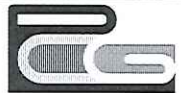
Replace 1,500 LF of 8" CIP with 12" DIP

PROJECT BENEFITS

The Elena Road (North) Water Main Replacement replaces a deep 8" CIP water main crossing a culvert on Elena Road with a new 12" DIP water main while at the same time extending the District's backbone infrastructure south to the Elena Tank and Pump Station. There is a slight increase in fire protection upon completion of this project.

PROJECT BUDGET (rounded)

12" DIP - 1,500 LF @ \$450/LF	\$ 675,000
Service Connections - 9 @ \$3,500/EA	\$ 31,500
Tie-Ins - 3 @ \$15,000/EA	\$ 45,000
Subtotal Construction	\$ 750,000
 Planning, Design & Construction Support	 \$ 150,000
 Contingency (±10%)	 \$ 90,000
Project Budget	\$ 990,000



Pakpour Consulting Group, Inc.
5776 Stoneridge Mall Road, Suite 320
Pleasanton, CA 94588
925.224.7717 Fax 925.224.7726
www.pcgengr.com

JOB No.	10002.04
DATE	05/2018
SCALE	AS NOTED
DRAWN:	FF / BL
CKD	JP



PURISSIMA HILLS WATER DISTRICT
SANTA CLARA COUNTY, CALIFORNIA
26375 FREMONT ROAD
LOS ALTOS HILLS, CA 94022-0264

ELENA ROAD (NORTH) WATER MAIN REPLACEMENT
PROJECT 13-09
CAPITAL PROJECT SUMMARY - 2018 UPDATE

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EXHIBIT C



Pakpour Consulting Group, Inc.

November 8, 2018

Patrick Walter
General Manager
Purissima Hills Water District
26375 Fremont Road
Los Altos Hills, CA 94022

**Subject: Proposal to prepare Plans, Specifications and Cost Estimate for
Altamont/Page Mill/La Paloma Roads Water Main Replacement
Purissima Hills Water District**

Dear Patrick,

Pakpour Consulting Group (PCG) is pleased to provide the following proposal to prepare plans, specifications and cost estimate for the Altamont/Page Mill/La Paloma Roads Water Main Replacement, a joint project between the Purissima Hills Water District (District) and the Los Altos Hills County Fire District (LAHCFD).

The project consists of various Capital Improvement Projects (CIP) identified by the District and LAHCFD including 1) CIP 09-03 Altamont Road Zone 4 Water Main Replacement, 2) CIP 13-06 Page Mill Road Water Main Replacement, and 3) La Paloma Road Water Main Replacement, along with additional Zone 4 improvements along Altamont Road and various side streets to improve fire flows along the Altamont Road corridor. Following are brief backgrounds of the projects; exhibits attached:

Altamont Road / Westridge Court / Briones Way (Exhibit 1: Projects 1-3)

This project consists of replacing approximately 5,070 LF of 6" Cast Iron (CI) water main with 8" Ductile Iron (DI) water main along Altamont Road between Page Mill Road and Appaloosa Way; replacing 300 LF of 2" Polyvinyl Chloride (PVC) water main with 8" DI water main at the end of Westridge Court; replacing 300 LF of 6" CI with 8" DI along Briones Way between Westridge Court and Via Cerro Gordo. Replacement of these water mains will increase fire protection in this part of Zone 4.

CIP 13-06 Altamont Road Zone 4 Water Main Replacement (Exhibit 1: Project 4)

The existing 6" Cast Iron (CI) water main along Altamont Road has had several leaks over the past five years. The water main is located behind the curb line, encumbered by several existing Oak trees, and inaccessible. The services are direct tap without service saddles. This project replaces approximately 1,200 LF of 6" CI water main with 8" Ductile Iron (DI) water main between Julietta Lane (J-838) and south of Appaloosa Way (south of J-839). In addition, this project would abandon a 450 LF 6" CI cross country water main between Byrne Park Lane (J-845) and Julietta Lane (J-837) by installing 1,000 LF of new 8" DI water main directly on Byrne Park Lane between Altamont Road (J-358) and the Altamont Tank Driveway (J-XX). This project is consistent with the goals of the District to replace/relocate older CIP water mains with DIP water mains to more accessible locations and improve fire flows locally benefiting both the District and LAHCFD.



CIP 13-06 Page Mill Road Water Main Replacement (Exhibit 1: Project 5)

This project consists of abandoning a high risk 1,500 LF 6" Cast Iron (CI) water main located between Page Mill Road (J-801) and Canyon Road (J-XXX). This water main is located in mountainous, hard to access, cross country terrain, with homes located below on Canyon Road. Any leak on this water main will cause severe damage to these homes. To maintain existing fire flow's throughout Zone 4 with the abandonment of this water main, 1,350 LF of existing 8" CI water main along Page Mill Road will require replacement with 12" Ductile Iron (DI). Distribution System Analysis No. 254.

La Paloma Road (Exhibit 2: Project 3)

This project consists of water main replacement along La Paloma Road (~600 LF) from a 6" CI to a 10" DI eliminating a bottleneck in the area.

Task 1.0 – Meetings/Field Investigations/Project Management

PCG will conduct meetings and field investigations with District staff during the design phase. This task also includes various project management tasks throughout the project.

Task 2.0 - Topographic Survey, Potholing & Utility Coordination

Topographic Survey

PCG along with our survey subconsultant will research Town of Los Altos Hills and Santa Clara County records for "As-Built" improvement plans, reports, studies and other data that may be pertinent to the project.

Topography will be established and tied to horizontal and vertical control by the surveyor. The survey scope will consist of providing reference points, topographic information, establishment and listing of benchmarks and field monuments, site data control, utility information along affected roads. The survey will also include a full topo of the District's property at Elena Tank Site. Existing right-of-way and adjoining property information will be obtained and shown on the project base map.

We assumed the District will mark the location of the existing water mains and call for USA markings prior to the field survey. The survey will show the location of the marked water main and any other underground utilities as marked.

Potholing

Along and adjacent to the proposed water main alignment there are numerous existing wet and dry-utilities. We recommend potholing all critical utility crossings to determine the horizontal and vertical location to reduce potential water main alignment conflicts. The potholing contractor will be responsible for coordinating USA markings in the field and providing 1-person traffic control for potholing operations.

Our potholing subconsultant will perform up to twenty (20) utility potholes using air-vacuum excavation to verify the precise horizontal and vertical location of underground utilities. The exact pothole locations will be determined after the preliminary water main alignment is established. Once the requested utility has been exposed, pertinent utility data will be collected including the utility type, material composition, general soil characteristics, depth and a photo of the exposed utility. After utility data collection, the pothole will be restored to its previous condition using the appropriate backfill and surface restoration materials as required by the permitting authority. Potholes will be marked in the field with MAG nail in asphalt or chiseled X in concrete and pertinent utility data will be recorded on the ground surface with white paint displaying the pothole number, utility size, type and depth. Potholes performed in natural



ground will be marked with a steel pin and pertinent utility data will be recorded on a wooden lath at each pothole location. The results of the field work will be presented in a Portable Document Format (PDF) report that will include: pertinent utility data, longitudinal and latitudinal coordinates (for reference purposes only) and photos.

Utility Coordination

Project Utility Notices will be sent out to utilities and services operating in the area, informing them of the project and requesting plans of their facilities, and their requirements for construction near them. We will coordinate with the various utility companies to resolve potential conflicts.

Task 3.0 - 65% Plans

The 65% progress plans will be prepared per District standards. The design drawings will be prepared in AutoCAD Civil 3D 2017. The 65% Plans will be submitted for review to the District. PCG will participate fully in this review process.

Task 4.0 - 90% Plans, Specifications, and Cost Estimates

The 65% plans submitted in the task above will be carried to 90% completion by adding details, additional notes, and addressing District and other agency comments along with preparing 90% technical specifications and cost estimate. Tie-in details will be provided for each intersection. The specifications will be in Microsoft Word format and will be incorporated into the District's "boilerplate" to produce final bid documents. Bid quantities will be estimated for each item of work and a cost estimate prepared based on unit prices for each item. Unit prices will be determined based on recent bid tabulations from similar projects, job cost media such as Means, and discussions with local contractors.

Task 5.0 - Bid Documents (Final Plans, Specifications, and Cost Estimates)

Upon receiving 90% review comments, each comment will be reviewed, discussed, and addressed. Appropriate modifications will be made to the plans, technical specifications, and cost estimates. The plans and specifications will be finalized for the project including all notes/details and incorporating all comments received.

Task 6.0 - Advertisement/Award Period

PCG will administer the Advertisement and Award process on behalf of the District and will include written responses to bidder inquiries, preparation of contract addenda, and attendance at a pre-bid conference and site visit.

Proposed Schedule

Notice to Proceed	TBD
65% Submittal	6 Months from NTP (2 Survey, 4 Design)
65% Submittal Review Meeting	2 Weeks
90% Submittal	3 Months from 65% Review Meeting
90% Submittal Review Meeting	2 Weeks
Final Submittal	1 Month from 90% Review Meeting
Advertisement Authorization	1 Week from Final Submittal
Award Project	1 Month from Advertisement
Begin Construction	1 Month from Award



Proposed Budget

TASK	DESCRIPTION	District Engineer		Project Engineer II		TOTALS	
		HR	COST	HR	COST	HRS	COST
			\$190		\$145		
1.0	Meetings/Field Investigations/Project Management	20	\$3,800	160	\$23,200	180	\$27,000
2.0	Topographic Survey, Potholing, Utility Coordination	0	\$0	100	\$14,500	100	\$14,500
3.0	65% Plans	40	\$7,600	480	\$69,600	520	\$77,200
4.0	90% Plans, Specifications, and Estimates (PSE)	20	\$3,800	320	\$46,400	340	\$50,200
5.0	Bid Documents - Final PSE	20	\$3,800	120	\$17,400	140	\$21,200
6.0	Advertisement / Award Period	10	\$1,900	80	\$11,600	90	\$13,500
Total Labor		110	\$20,900.00	1260	\$182,700	1370	\$203,600
Topographic Survey							\$70,000
Potholing							\$40,000
5% Direct Expense Fee (Mileage, Copies, Plots, Etc.)							\$10,180
FY 19-20 Fee Increase Allotment							\$35,000
Total Budget for Design and Advertisement Assistance							\$358,780

Should you have any questions regarding this proposal please do not hesitate to contact me at (925) 224-7717. We look forward to working with the District on this project.

Very truly yours,

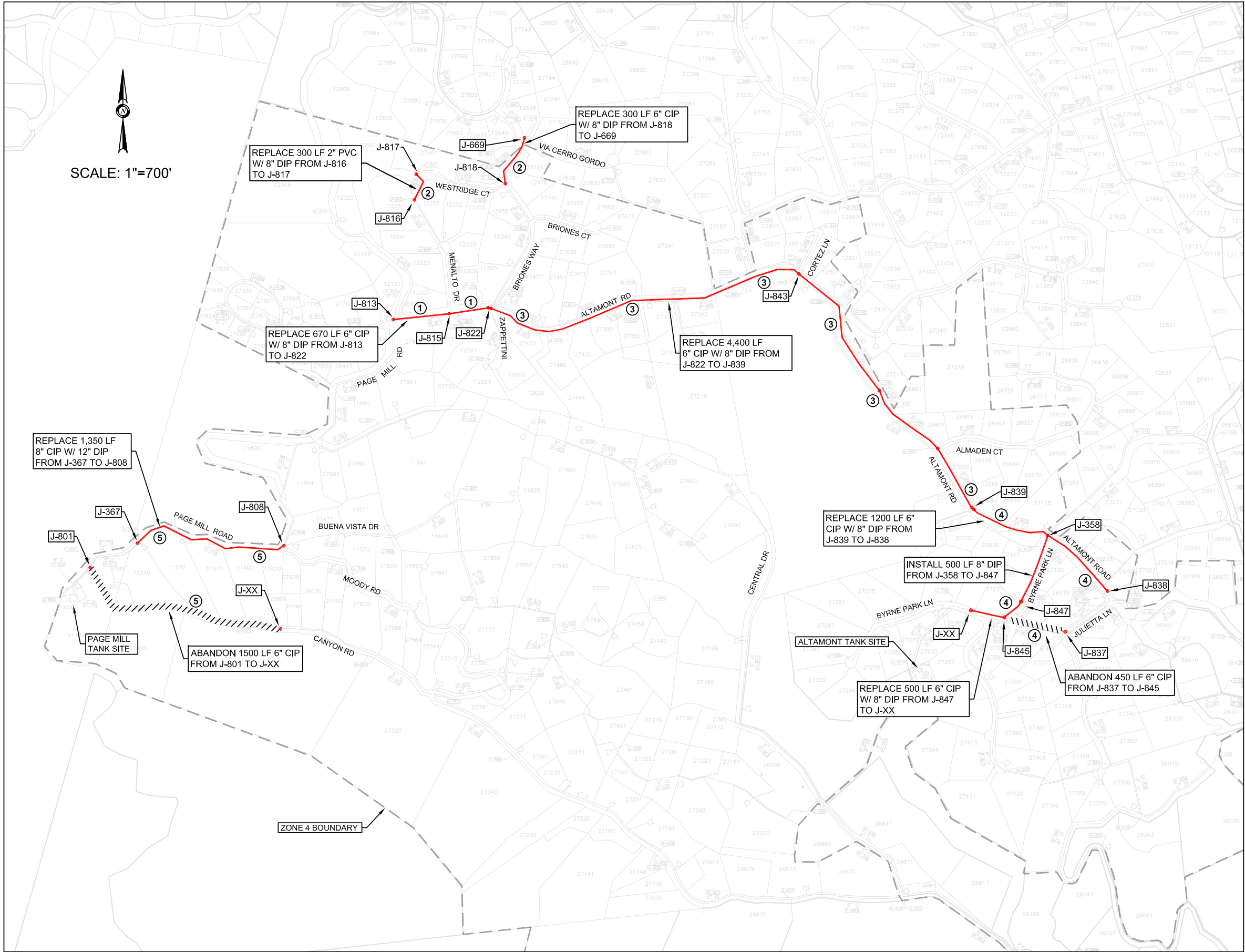
Pakpour Consulting Group, Inc.



Brandon Laurie, P.E.
Project Engineer

J:\Projects\PHWD - 10002.00\34-Taaffe-Elena Road Water Main Replacement\Contract\Agency\Altamont Proposals\XX-PHWD-Walter-18.11.08-Altamont-Page Mill-La Paloma Roads Water Main Proposal.docx





ZONE 4 WATER MAIN PROJECTS

PROJECT BUDGETS (approximate)

Project 1 - Altamont Rd (Page Mill to Briones Way)

8" DIP - 670 LF @ \$350/LF	\$ 234,500
Service Connections - 2 @ \$3,500/EA	\$ 7,000
Fire Hydrants - 1 @ \$17,500/EA	\$ 17,500
Tie-Ins - 3 @ \$15,000/EA	\$ 45,000
Subtotal Construction	\$ 305,000

Planning, Design & Construction Support	\$ 75,000
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Contingency (±10%)	\$ 40,000
Project Budget	\$ 420,000

Project 2 - Westridge Ct and Briones Way

8" DIP - 600 LF @ \$350/LF	\$ 210,000
Service Connections - 6 @ \$3,500/EA	\$ 21,000
Fire Hydrants - 3 @ \$17,500/EA	\$ 52,500
Tie-Ins - 4 @ \$15,000/EA	\$ 60,000
Subtotal Construction	\$ 345,000

Planning, Design & Construction Support	\$ 85,000
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Contingency (±10%)	\$ 45,000
Project Budget	\$ 475,000

Project 3 - Altamont Rd (Briones Way to Appaloosa)

8" DIP - 4,400 LF @ \$350/LF	\$1,540,000
Service Connections - 19 @ \$3,500/EA	\$ 66,500
Fire Hydrants - 5 @ \$17,500/EA	\$ 87,500
Tie-Ins - 6 @ \$15,000/EA	\$ 90,000
Subtotal Construction	\$1,785,000

Planning, Design & Construction Support	\$ 265,000
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Contingency (±10%)	\$ 205,000
Project Budget	\$ 2,255,000

Project 4 - Altamont Rd (Appaloosa to Julietta, Byrne Park)

8" DIP - 2,200 LF @ \$350/LF	\$ 770,000
Service Connections - 14 @ \$3,500/EA	\$ 49,000
Fire Hydrants - 2 @ \$17,500/EA	\$ 35,000
Abandonment	\$ 20,000
Tie-Ins - 4 @ \$15,000/EA	\$ 60,000
Subtotal Construction	\$ 934,000

Planning, Design & Construction Support	\$ 186,000
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Contingency (±10%)	\$ 110,000
Project Budget	\$ 1,230,000

Project 5 - Page Mill

12" DIP - 1,350 LF @ \$450/LF	\$ 607,500
Service Connections - 4 @ \$3,500/EA	\$ 14,000
Fire Hydrants - 2 @ \$17,500/EA	\$ 35,000
Abandonment	\$ 20,000
Tie-Ins - 2 @ \$15,000/EA	\$ 30,000
Subtotal Construction	\$ 706,000

Planning, Design & Construction Support	\$ 144,000
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Contingency (±10%)	\$ 85,000
Project Budget	\$ 935,000



Pakpour Consulting Group, Inc.
5776 Stoneridge Mall Road, Suite 320
Pleasanton, CA 94588
925.224.7717 Fax 925.224.7726
www.pcgengr.com

JOB No.	10002.04								
DATE	06/2018								
SCALE	1" = 700'								
DESIGN:	BY GU/BL								
	CKD JP								
DRAWN:	BY GU/BL								
	CKD JP								
SYMBOL	DATE	REVISIONS	BY	CKD					



PURISSIMA HILLS WATER DISTRICT
SANTA CLARA COUNTY, CALIFORNIA
26375 FREMONT ROAD
LOS ALTOS HILLS, CA 94022-0264

Exhibit 1

ZONE 4 WATER MAIN PROJECTS

SHEET 1

OF 1

EXHIBIT D

LOS ALTOS HILLS COUNTY FIRE DISTRICT INSURANCE REQUIREMENTS

WATER DISTRICT shall provide its insurance broker(s)/agent(s) with a copy of these requirements and require that they provide Certificates of Insurance complete with copies of all required endorsements to: **General Manager, Los Altos Hills County Fire District (FIRE DISTRICT), P.O. Box 1766, Los Altos, CA 91023.**

In addition, CONSULTANT, as referenced herein, are those parties retained by WATER DISTRICT for work performed on the Hydrant Flow and Pipeline Resiliency Improvement Project Design Construction Phase. Said CONSULTANT shall provide its insurance broker(s)/agent(s) with a copy of these requirements and require that they provide Certificates of Insurance complete with copies of all required endorsements to: **General Manager, Los Altos Hills County Fire District (FIRE DISTRICT), P.O. Box 1766, Los Altos, CA 91023.**

Minimum Scope of Insurance

Coverage shall be *at least as broad as*:

1. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01 covering CGL on an “occurrence” basis, with limits no less than **\$2,000,000 or \$4,000,000 aggregate per occurrence**. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. CGL insurance must include coverage for the following:
 - a. Bodily Injury and Property Damage
 - b. Personal Injury/Advertising Injury
 - c. Premises/Operations Liability
 - d. Products/Completed Operations Liability
 - e. Aggregate Limits that Apply per Project
 - f. Explosion, Collapse and Underground (UCX) exclusion deleted
 - g. Contractual Liability with respect to this Agreement
 - h. Broad Form Property Damage
 - i. Independent Consultants Coverage
- The policy shall contain no endorsements or provisions limiting coverage for (1) contractual liability; (2) cross liability exclusion for claims or suits by one insured against another; (3) products/completed operations liability; or (4) contain any other exclusion contrary to the Agreement.
2. **Automobile Liability:** Insurance Services Office Form Number CA 00 01 covering, Code 1 (any auto), or if WATER DISTRICT AND CONSULTANT have no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than **\$1,000,000** per accident for bodily injury and property damage.
3. **Workers’ Compensation/Employer’s Liability:** WATER DISTRICT AND CONSULTANT certifies that it is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers’ compensation or to undertake self-insurance in accordance with the provisions of that code,

and it will comply with such provisions before commencing work under this Agreement. To the extent WATER DISTRICT AND CONSULTANT have employees at any time during the term of this Agreement, at all times during the performance of the work under this Agreement WATER DISTRICT AND CONSULTANT shall maintain insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than **\$1,000,000** per accident for bodily injury or disease.

4. **Professional Liability** (Errors and Omissions) Insurance appropriate to the WATER DISTRICT AND CONSULTANT's profession, with limit no less than **\$1,000,000** per occurrence or claim. This insurance shall be endorsed to include contractual liability applicable to this Agreement and shall be written on a policy form coverage specifically designed to protect against acts, errors or omissions of the WATER DISTRICT AND CONSULTANT. "Covered Professional Services" as designed in the policy must specifically include work performed under this Agreement.
5. **Umbrella or Excess Liability: Umbrella or Excess Insurance.** If umbrella or an excess liability insurance policy is used to satisfy the minimum requirements for CGL or Automobile Liability insurance coverage listed above, the umbrella or excess liability policies shall provide coverage at least as broad as specified for the underlying coverages and covering those insured in the underlying policies. Coverage shall be "pay on behalf," with defense costs payable in addition to policy limits. WATER DISTRICT AND CONSULTANT shall provide a "follow form" endorsement or schedule of underlying coverage satisfactory to FIRE DISTRICT indicating that such coverage is subject to the same terms and conditions as the underlying liability policy.
6. **FIRE DISTRICT**, its officers, officials, employees, agents, and volunteers are to be covered as additional insureds on the umbrella or excess policy with respect to liability arising out of work or operations performed by or on behalf of the WATER DISTRICT AND CONSULTANT including materials, parts or equipment furnished in connection with such work or operations. If WATER DISTRICT AND CONSULTANT maintain broader coverage, umbrella or excess coverage and/or higher limits than the minimums shown above, FIRE DISTRICT requires and shall be entitled to the broader coverage, umbrella or excess coverage and/or the higher limits maintained by WATER DISTRICT AND CONSULTANT. Any available insurance proceeds in excess of the specified minimum limits of insurance and any other coverages shall be available to FIRE DISTRICT.

Other Insurance Provisions. The insurance policies are to contain, or be endorsed to contain, the following provisions:

Additional Insured Status. FIRE DISTRICT, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy and the Automobile Liability policy, with endorsements under CG 20 10 10 01 and 20 37 10 01, or endorsements providing the exact same coverage, with respect to liability arising out of work or operations performed by or on behalf of the CONSULTANT including materials, parts or equipment furnished in connection with such work or operations.

Primary Coverage. For any claims related to this contract, the WATER DISTRICT AND CONSULTANT's insurance coverage shall be primary insurance as respects FIRE DISTRICT, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by FIRE

DISTRICT, its officers, officials, employees, or volunteers shall be excess of the WATER DISTRICT AND CONSULTANT's insurance and shall not contribute with it.

Notice of Cancellation. Each insurance policy required above shall be endorsed to state that coverage shall not be canceled except after thirty (30) days' prior written notice (10 days for non-payment) has been given to FIRE DISTRICT.

Waiver of Subrogation. WATER DISTRICT AND CONSULTANT hereby grants to FIRE DISTRICT a waiver of any right to subrogation which any insurer of said WATER DISTRICT AND CONSULTANT may acquire against FIRE DISTRICT by virtue of the payment of any loss under such insurance. WATER DISTRICT AND CONSULTANT agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not FIRE DISTRICT has received a waiver of subrogation endorsement from the insurer.

Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by FIRE DISTRICT. FIRE DISTRICT may require the WATER DISTRICT AND CONSULTANT to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to FIRE DISTRICT.

Claims Made Policies. If any of the required policies provide claims-made coverage:

7. The Retroactive Date must be shown, and must be before the date of the contract or the beginning of contract work.
8. Insurance must be maintained and evidence of insurance must be provided ***for at least three (3) years after completion of the contract work.***
9. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the WATER DISTRICT AND CONSULTANT must purchase "extended reporting" coverage for a minimum of ***three (3) years*** after completion of contract work.

Verification of Coverage. WATER DISTRICT AND CONSULTANT shall furnish FIRE DISTRICT with original certificates and amendatory endorsements effecting coverage required by this clause. All certificates and endorsements are to be received and approved by FIRE DISTRICT before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the WATER DISTRICT AND CONSULTANT's obligation to provide them. FIRE DISTRICT reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

All policies, endorsements, certificates, and/or binders shall be subject to approval by the District's Attorney as to form and content. These requirements are subject to amendment or waiver only if so approved in writing by the Fire District General Manager.

Special Risks or Circumstances. FIRE DISTRICT reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.