



TETRA TECH, INC.

July 18, 2007

Robert Hardcastle
Brooke Utilities, Inc.
3101 State Road
Bakersfield, CA 93308

**RE: Pine Water Company
Proposed New Water Transmission Main
Project No. 1333.0013**

Dear Bob:

Attached, per your request, is our Engineer's Estimate of Cost to design, permit, and construct a new water transmission main for the Pine Water System in Pine, Arizona. The proposed new water main will transmit water from a new well south of Pine Creek and west of State Route 87 to an existing 300,000 gallon storage tank south of Strawberry Hollow Drive and west of State Route 87, an approximate distance of 9,000 lineal feet. This storage tank is also the receiving tank at the lower end of the Pine/Strawberry water main and is at the upper end of the Pine water system. The water from this storage tank can be distributed to other portions of the Pine system.

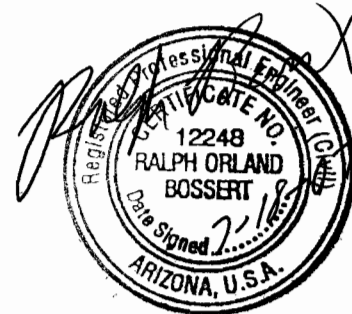
Although there may be other alignments for this main, for the purposes of this estimate we have chosen an alignment along State Route 87 as shown on the enclosed Preliminary Plan. We have also assumed the water will be available at the new well head at a flow rate of 150 gallons per minute and a pressure of 65 psi. An additional water booster will be required to provide sufficient pressure to transmit the water from the well to the existing storage tank. The water transmission main is considered to be an 8-inch main, since it also may be used as a distribution main through Pine and possibly for fire protection along the Pine business corridor.

Thank you for allowing us to provide this service. Please don't hesitate to contact us with any questions or comments.

Very truly yours,

Ralph O. Bossert, PE, RLS
Senior Project Manager

ROB:lmw
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Attachments



PINE WATER TRANSMISSION MAIN
ENGINEER'S ESTIMATE OF COST

18-Jul-07

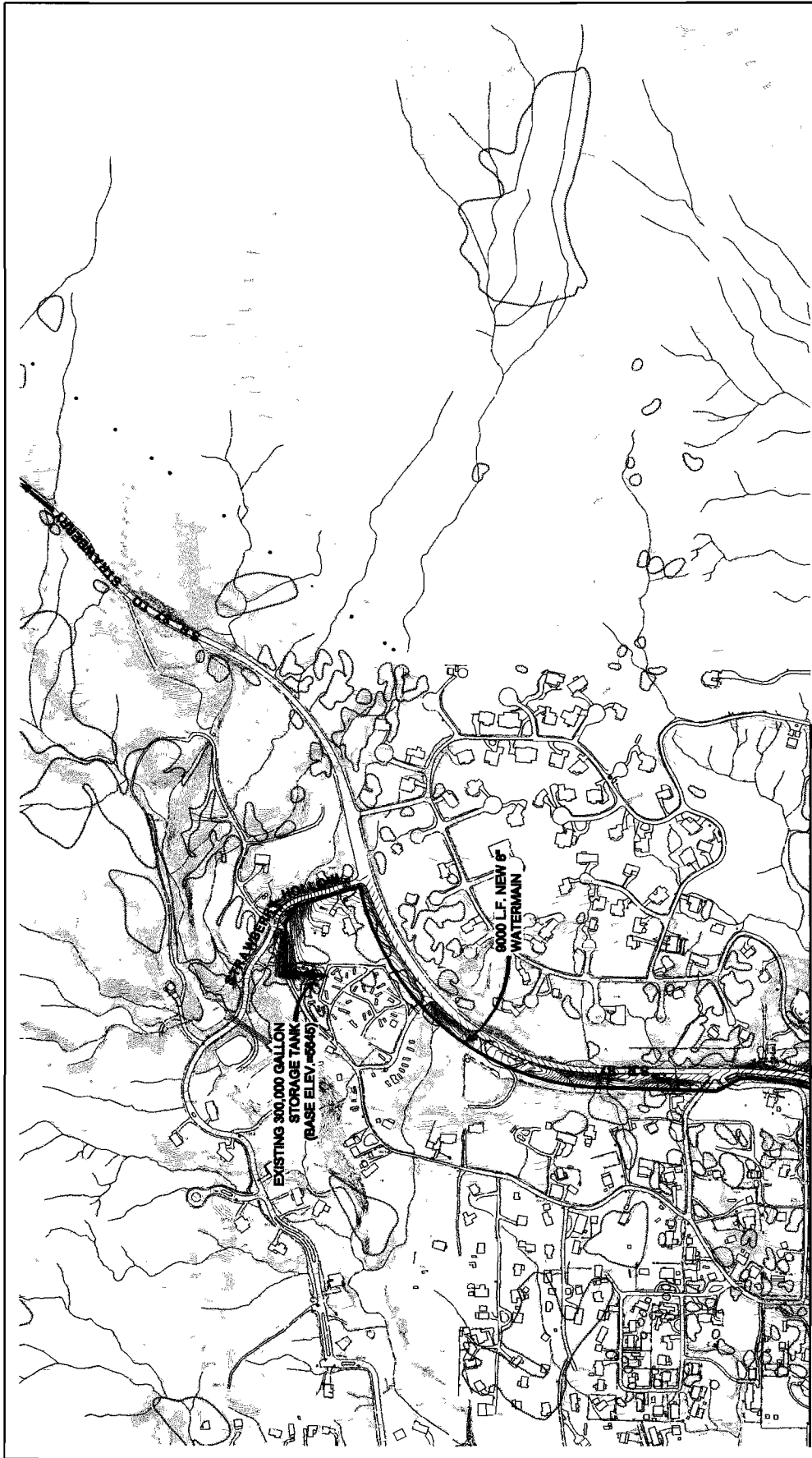
Project No. 1333.0013

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
A) Construction Costs					
1	8" PVC Watermain	8,500	LF	\$ 45.00	\$ 382,500.00
2	8" DIP Watermain	500	LF	70.00	35,000.00
3	8" Valve, Box & Cover	6	EA	1,250.00	7,500.00
4	Sample Tap	6	EA	600.00	3,600.00
5	8" Surge Control Valve	1	EA	10,000.00	10,000.00
6	Storage tank Fill Line	1	EA	5,000.00	5,000.00
7	15 HP Booster Pump	1	EA	30,000.00	30,000.00
8	SCADA System	1	EA	25,000.00	25,000.00
9	Rem and Rep Guardrail	200	LF	30.00	6,000.00
10	AC Rem and Rep	2,140	SY	25.00	53,500.00
11	Concrete Rem and Rep	240	SF	8.00	1,920.00
12	6" ABC	20	CY	50.00	1,000.00
13	Traffic Control	1	LS	-	50,000.00
14	Seeding	1	LS	-	5,000.00
15	Mobilization	1	LS	-	40,000.00
Sub-Total Construction Costs . . .					\$ 656,020.00
Engineering (7%) . . .					\$ 45,921.40
Permits (2%) . . .					\$ 13,120.40
Construction Survey (5%) . . .					\$ 32,801.00
Construction Management (2.5%) . . .					\$ 16,400.50
Quality Control (2%) . . .					\$ 13,120.40
Quality Control (2%) . . .					\$ 13,120.40
SWPPP . . .					\$ 3,000.00
Contingencies (15%) . . .					\$ 98,403.00
TOTAL ENGINEER'S ESTIMATE					\$891,907.10

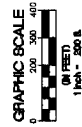
EXCLUSIONS:

- 1) Environmental Studies
- 2) C.O. E. Permitting
- 3) Water Treatment





MATCH SHEET 1



PRELIMINARY
NOT FOR
CONSTRUCTION



SCALE	HORIZ. 1" = 200'
CONV. INTERVAL	= 2'
DRAWING	EX2
SHEET NO.	2
OF	2

PRELIMINARY ALIGNMENT

JOB NO.	13330073
DESIGNED BY	RFJ
DRAWN BY	RFJ
CHECKED BY	RFJ
APPROVED BY	RFJ/2/00
DATE	

PINE WATER TRANSMISSION MAIN
PINE, ARIZONA



NO.	REVISIONS	DATE	BY	CHK.

TETRA TECH, INC.
131 S. PINE AVE.
TULSA, OK 74106
TEL: 918.438.1887

