



ATTACHMENT 3

September 13, 2004

Farba Fazeli, P.E.
Senior Engineer
City of Costa Mesa
P.O. Box 1200
Costa Mesa, CA 92628-1200

RE: 19th Street and Placentia Avenue
Rule 20A Undergrounding Project
Located in the City of Costa Mesa

Dear Ms. Fazeli,

I would like to inform you that the Rule 20A Utility Underground Project, 19th Street from Monrovia to Pomona Avenue, and Placentia Avenue, from 18th to 20th Street is nearly complete. All major underground facilities are now installed, energized, and overhead facilities have been removed.

To complete the project, six streetlights will be installed following completion of City street improvements (bus turn-outs) and replacement of one substation bus-tie circuit breaker in November. Upon project completion, a final review of cost performance for this project as compared to our initial project estimate will be performed and communicated.

Per your recent inquiry concerning allocation totals and project costs, following is a preliminary review of our original estimate and forecast at completion. Recorded costs are through September 7, 2004:

Initial Estimate	
2000 Distribution Estimate	\$1,577,000
2003 Transmission Estimate, 19 th & Monrovia	500,000
2003 Transmission Estimate, 19 th & Wallace	500,000
Escalation Applied, Distribution (2000 - 2003 @ 3%/year)	146,000
Escalation Applied, 19 th & Monrovia (3% on \$250K)	8,000
Escalation Applied, 19 th & Wallace (3% on \$250K)	8,000
	<u>\$2,739,000</u>
Recorded Costs	
Distribution	\$4,019,000
Transmission, 19 th & Monrovia	500,000
Transmission, 19 th & Wallace	<u>1,030,000</u>
	\$5,549,000
Estimated Cost to Complete	
Substation Cross-tie Circuit Breaker	\$ 130,000
Streetlight Installation (+ chargeable against allocation)	10,000
Work Order Closure	<u>12,000</u>
	\$ 152,000
Forecast at Completion	<u>\$5,701,000</u>
Variance (Over)/under	(\$2,962,000)

30

After performing an evaluation of this project, the following observations were made:

Distribution	Cost Increase
The original Distribution estimate was conceptual and was developed prior to the completion of any preliminary design. It assumed we would replace approximately 6,369 feet of overhead conductor with 6,369 feet of underground conductor. The final design reflects greater than 17,000 feet of trench when all secondary street crossings, customer service feeds, and streetlight circuits are included. Based upon the installed footage, an estimate produced today with the benefit of design would total approximately \$3.8M.	\$2,080,000
\$3.80M - \$1.72M (orig. est. with escalation) yields \$2.08M in additional cost.	
Lane closures were restricted to the hours between 08:30 AM and 3:30 PM. This translates to a 17% reduction in available work hours.	\$696,000
\$3.8M (revised est.) less \$400K in materials with 83% productivity factor applied yields \$696K in additional cost.	
Service Conversions were rough estimated to be \$80,000, prior to receiving a price from an electrical contractor. The actual cost to complete was \$130,000.	\$50,000
Total	\$2,826,000

When the values associated with escalation, city restrictions, and the design as we now know it are added back to the original Distribution estimate, the revised total is \$4,549,000. Compared to the estimated Distribution cost at completion of \$4,037,000, this equates to a \$559,000 or 12% under-spend.

This project proved to be very challenging with many obstacles to overcome. Note that the City of Costa Mesa, in a letter to Leslie Woolslair of SBC, dated October 30, 2002 stated:

"The absence of 100 percent plans from PacBell have caused the contractor, Arizona Pipeline, to be unable to perform the necessary construction in an economic and productive manner."

Also note that we faced major resistance from property owners to grant easements and/or allow surface mount equipment to be set. The lack of easements and subsequent redesign necessitated an increase in the number, size, and expense of the underground vaults required to house electrical equipment.

Despite these challenges, the underground Distribution system was installed within what today would be the projected cost for a project of this magnitude.

Transmission

19th Street and Monrovia costs are on target within the initial estimate of \$500K. Adjusted for escalation and restricted lane closures, the current estimate for this portion of the project would total \$587K. This successful install proved to be very straight forward and was completed at 15% less than the adjusted estimate.

19th Street and Wallace costs are above target at \$1.03M. This segment of the project provided many challenges that were unforeseen during the conceptualization phase. Traffic lane and alley closure restrictions, along with a lack of space for excavation equipment and mobile cranes in the alley, caused the duration and cost of this work to increase.

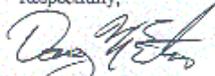
(10)

In addition, increased charging current created by the undergrounding of this circuit has been determined to exceed the rated capacity of Bus Tie Circuit Breaker at Position 4 of Bayside Substation. Replacement of the breaker, scheduled for November, will add an estimated \$130K to the project total.

As City staff was active in problem resolution throughout this project, the challenges overcome by all are well known. Unfortunately, the associated cost increases may not have been communicated as clearly. In the future, I will work closely with the City and keep you informed of cost increases if and when they become apparent.

If you have any questions or concerns, please contact your SCE Regional Public Affairs Manager, Eddie Marquez at (949) 422-8226 or myself at (714) 285-4336.

Respectfully,



Doug McEntee
Project Manager
mcentedj@sce.com

Cc Susan Santoro, City of Costa Mesa
Eddie Marquez, SCE
Tony Mathis, SCE