

Ojitos Frios Ranches Homeowners Committee (OFRHU1)
Summary of Road Maintenance Research and Findings
May 2008

This document summarizes the research the Committee has done to develop a long-term road maintenance plan for our development. One main problem that the Committee faced in developing such a plan was a nearly total lack of documentation of any road maintenance research or planning in the Committee's records, to include the minutes of their meetings. Thus, a copy of this document will be attached to the Committee's minutes for their next meeting.

Background on Cost Estimates

The Committee started by working with a local contractor, Elmer Pacheco, to develop a detailed understanding of what work would be needed to bring our roads up to County standards. However, early in the process, we realized that doing so would be very costly because it would mean widening all our roads to at least 20'. The only section of road that currently is 20' wide is Mirasol. Thus, we had Elmer estimate costs of rebasing the existing roads, but maintaining most of them at 12' to 16' wide with only Mirasol being maintained at 20' wide to Chris Baca's driveway. To summarize, the parameters we gave Elmer were:

- **All 3 miles of our roads would be re-graded and re-based with 4" of new material.** We also specified the type of material that was used initially on the Dorothy reconstruction. However, the cost of road base material is nearly the same for any type of material, so this requirement did not affect the cost of the estimates.
- Highly traveled roads (Mirasol, Roadrunner to Coyote, and first 1/4 of Coyote) would be maintained or expanded to 20'. The remaining roads would be maintained at their current width or a minimum width of 12'.
- Replace the culvert at the entrance to make it shorter and wider. This culvert must be able to handle all the runoff from nearly a mile of Mirasol during the heaviest expected rainfall. It also needs to be reengineered so that its inflow opening is protected from trash.
- Add one new culvert on Coyote where water currently runs over the surface as well as installing a depression in one section of Roadrunner where water also runs over the road, but the amount could be handled without a culvert.

NOTE - These parameters were set to determine what bringing our roads up to County standards would cost and not to solicit any bids for work. The Committee just wanted a starting point to help us determine what we could afford to do.

Cost Results

The overall estimate to accomplish the above work was developed by Elmer Pacheco and the total came to approximately \$200,000. Since the amount was so high, the Committee decided to focus on one component - the first 1/4 mile of Mira Sol. Elmer's estimate for this section was \$25,000. We called the two other contractors whom the Committee had hired in the last 6 years and asked them to submit bids on this component and then followed up with a written request. These were Trambley and Crespin. Neither responded to our request.

In addition, we reviewed the cost of recent work to determine how reasonable Elmer's estimates were. By far the largest cost of the plan is the cost of base material. Thus, we compared the cost of the base that Trambley delivered in the spring of 2007, which was \$20 per cubic yard, with Elmer's estimate, which was \$19 per cubic yard. In addition, we compared the cost Elmer charged us for grading the roads in December versus what Trambley charged us in the spring, and Elmer was a couple of hundred dollars cheaper. We also felt that he did a better job in that he waited until the water content was right. Trambley did his grading when the roads were too dry.

Based on our research, the Committee feels that the rates per hour and per cubic yard included in Elmer's estimates are realistic and that we probably cannot get cheaper prices. In addition, Elmer only guaranteed the rate per cubic yard of road base until 5/1/08 and so they are no longer good. Since the cost of road base is tightly linked with the cost of diesel fuel and the cost of diesel fuel has gone up substantially since Elmer made his estimates, the costs of actually doing the work probably will be significantly higher than the estimates.

Reducing the Costs

The Committee believes that the costs per hour and costs per cubic yard in Elmer's estimates are sound. Thus,

we are working on ways to reduce the amount of work in the estimates. However, about the only options we have is to narrow the roads and/or reduce the amount of base we put down. These are the components of the estimate that are driving the cost. For example, we can drop the cost substantially by putting on less than 4" of base now. However, doing so would make it harder to maintain a proper crown on the roads, which would increase surface water and cost us more over the life of the road in regular maintenance. Fundamentally, past Committees have added very little base to our roads and most of it now is gone. We need to put enough new base down so that we can maintain a proper crown on the roads and to eliminate mud holes.

We can reduce the cost by not widening Roadrunner or Coyote and only maintaining the roads at their current width. However, we also need to consider safety in determining road width in several places.

However, before the Committee makes those sorts of decisions, we are going to get an independent, outside professional opinion on our plans. We are in the process of contacting both the County Director of Public Works and the State Engineer's office. We hope to have one of both of them inspect our roads and give us solid, objective advice on how to bring them up to acceptable standards. We clearly cannot meet County standards, which include a minimum 20' width. However, it may help us set priorities going forward.

Note that very little of the work that needs to be done can or should be done by untrained volunteers working by hand. The Committee will pursue organizing work groups to help with road maintenance, but the best use of such work groups is for rapid response to small problems that cannot wait for a grading or would not justify bringing in a contractor with the proper equipment and expertise. For example, if someone spots a culvert whose mouth is clogged, the Committee could use on-call volunteers to clear it before it backed up and damaged the roads. The same would be true of clearing clogged ditches. However, for regular maintenance, the cost of having a contractor clear the ditches and culverts as part of an overall grading or other larger maintenance project is very small and so using volunteers for regular maintenance would save very little.

Summary

At this point, the Committee believes:

- The cost of road maintenance over the next 10 years will be much higher than it has been in the past because of the need to re-base the roads and the rapidly increasing cost of road base.
- We need to minimize the life-cycle cost of maintenance for our roads (around 10 to 20 years), not just the cost of dealing with immediate needs.
- Prior maintenance efforts have been hampered by lack of a long-term, well-documented and well-researched plan that was developed with the help of outside, expert road engineers.

Jim Peters, Treasurer
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