

The Board has received and takes strong exception to your latest (March 17) email. While the Board continues to believe that a parade of community-wide emails is neither welcomed nor constructive, it is concerned that its failure to respond in kind could be viewed by some as tacit acknowledgment of the validity of your views. Accordingly, we have limited our email response to the points below and encourage those interested to go to the CSM website ([Chateauxsurmer.org](http://Chateauxsurmer.org)>Governance>Road Study Group Communications 2017 [**Password: CSM**]) to view a complete response, along with a copy of your letter. The complete response will be posted as soon as possible.

*Why are we voting before permits are issued?*

- **Regulators have requested evidence of community approval prior to submission of a permit application.**
- **No paving will be undertaken unless all applicable permits are issued.**
- **Permits will only be issued if environmental regulators determine that the paving proposal will result in a net benefit to our waterways.**
- **The paving proposal has been discussed extensively with applicable regulators.**

*Why are we voting before final engineering is completed and costs nailed down?*

- **The design and location of the proposed roadways and related drainage are well developed and have been discussed with regulators and prospective contractors.**
- **Final design (like permit applications) will entail additional costs that can be avoided if a majority of the community opposes paving.**
- **The paving proposal is not a blank check. The maximum amount of the paving assessment is capped at \$3,900, including a substantial contingency reserve.**

*If the roadways are paved, are they at substantial risk of failure?*

- **The paving proposal is based upon extensive input from the CSM's consulting engineer, testing of the load bearing capacity of CSM's roadways (in accordance with Florida DOT standards), and input from a contractor with extensive road building experience in Sanibel.**
- **The experience of the CSM runway and the paved communities adjoining CSM offers visible evidence of the practicability of paving in our area.**

The Board respects the right of each member to vote for or against the proposed roadway upgrades. At the same time, the Board is concerned that the arguments being offered in opposition to the paving assessment are not designed to elicit a more definitive paving alternative, but rather to delay a decision and, ultimately, to maintain the status quo. While maintaining the status quo is certainly an option, it is not the approach recommended by the Board.

Lisa Schmidlin

President CSMIA

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Costs, Infiltration, Water Table, and Potholes

Our cost estimates include a provision for 300 feet of designed infiltration / drainage trenching, on association property, as per the slides presented at the town hall meetings. We have also costed the retrofit of the direct discharge drains that now deliver unfiltered water into the bayou. These features have been designed by engineer Jim Strothers. SFWMD has indicated that these features represent the kinds of modifications that they are seeking. The budget also includes a confirmed cost for building the road base and asphalt paving. Additionally costs for edge retention, staking the road layout and professional supervision are included. In addition to all of that another \$35,000 of contingency has been included. A three year warranty offered by PMI provides additional cost protection.

Some comments on the high water table. The wet season high water table is approximately elevation 1.2 at the CSM subdivision. The finished grades of the road run from elevation 3.2 to 4.7. Testing confirms that there is a minimum of 10 inches base material in the existing road system (Universal Engineering). PMI is proposing the addition of a total of 4.5 inches of total material (base + paved top layer). Using the lowest elevation of 3.2 and subtracting the asphalt and existing 10 inch base sets the lowest end of the base layer at elevation at 1.9. This places the entire road base and system above the wet season high water table. For an actual, physical comparison look at Tahiti Drive, which has a road surface elevation of 3.6 and the same wet season high water table. You will see no evidence of pothole formation or road surface failure.

The water table data must be considered in conjunction with the permeability testing. We know that the current dirt road is essentially impermeable. Capping such a road means that there is no likely change in absorption via the road surface. What we can do with a paved surface is set a proper crown and pitch the road as needed to efficiently shed water.

We have always made clear that the drainage / infiltration features are designed to protect the road surface and filter runoff. It is not intended to impact water in yards. Our objective with regard to water in yards has been to do no harm. Permeability testing clearly demonstrates that the current roads and nearby grass areas are essentially impermeable, essentially the same as a capped surface.

Our sources for information on pothole formation are Dr. Erhard Joeres, and Jim Strothers. Erhard is a civil engineer, emeritus professor of civil engineering at the University of Wisconsin and head of the Gulf Pines road committee. Erhard states unequivocally that potholes in our area are caused by water standing on the road surface and exacerbated by the impact of traffic.

Engineer Jim Strothers concurs with this analysis. Please consider the logic of runway performance and pothole formation. The runway drainage has never been altered. Yet the runway was a pothole minefield (even though some would assert that the runway has superior drainage due to its height). Nevertheless after the runway was capped it has maintained integrity. That means that the runway potholes were caused from above. Water plus traffic creates holes. .