

## ENGINEERS MEMORANDUM

Project: White Water Estates  
Subject: Roadway assessment and site visit  
Date: February 15, 2023

On Wednesday February 15<sup>th</sup> a visual roadway assessment/inspection was done. Weather was 45 with sun and I was accompanied by Steve Braegelman, HOA representative. Steve provided me a copy of a roadway map that he had color coded into 3 phases, green for phase 1, purple for phase 2 and pink for phase 3.

In the inspection it was very apparent that the immediate issues with the roads fall within Phase 1. The roadway shows signs of the subgrade failing in areas and the cul-de-sac that abuts lots 26, 27 and 29 is in need of complete asphalt removal and subgrade recompaction. There is the potential that some of the subgrade failures are due to stumps and other organics not being removed prior to construction and now they have decomposed enough to cause failure.

Phase two is in good condition at this present time with only some slumping of the road (potentially from what was discussed in phase one), near Lot 54, Lot 49 and in the cul-de-sac near lot 30.

Phase three at this date is in very good condition with minor issues occurring at this time.

**Engineers Recommendation:** My recommendation is as follows:

- Phase 1 to receive a new 2" asphalt overlay.
  - Contractor should overlay to provide a 2% crown to roadway to facilitate better stormwater runoff. During overlay contractor should sawcut out failed areas of roadway and inspect subgrade for possible organics that is causing failure then recompact. The cul-de-sac near lot 26 will need full pavement removal and inspection/recompaction of subgrade.
- Phase 2 to be evaluated for overlay in 5 to 7 years.
  - Areas described in paragraph 3 could be sawcut and repaired at this time if financially viable.
  - Sealcoating at this time would extend the need for an overlay out further, depending on financial viability.
- Phase 3 to be evaluated for overlay in 10 to 14 years.
  - Phase 3 is in great condition for its age and is a good candidate for Sealcoating. Proper sealcoating at this time could avoid the need for an overlay for 20 years +/-.

**Jim Cook, PE CESCL | *Civil Engineering Director***