Project Narrative

The following is a Zero-Rise analysis for the improvements on the floodway shown on the permit plans. Refer to table-1 for a list of the structures in the floodway. The parcel map is included for landowner identification purposes in (*Appendix 1*).

See Table-1 on Certification page for a list of structures in floodway

It is the intent of the owner to place structures in the floodway. The interpolated river section chosen to run the model includes all structures per Table-1 and see site plan C-100 for details.

The proposed project is in the floodway Per Water Management District Effective Flood Information Report (*Appendix 2*), therefore this Zero-Rise report shall prove that the proposed structures will not obstruct flows or increase the one percent annual chance of flood elevations by more than 0.01 feet.

The following steps and methodologies were used as specified in the Suwannee River Water Management District's *Environmental Resource Permit Applicant's Handbook Volume II.*

1. Obtain the current effective District model.

The latest update of the Suwannee River Effective Flood Information, along with GIS data for two cross-sections encompassing the project area were obtained from the website and shown in (*Appendix 2*).

2. Run the current effective model.

The model was run with SRWMD existing cross sections and the results show a match of the current effective model.

3. Add the pre-development cross-sections of channel and overbank geometry.

A new interpolated cross-section was cut at the proposed site location, (*Appendix 3*) and the model was run for pre-development cross-sections. The results show a match of the current effective model (*Appendix 4*).

4. Run the model with the existing, permitted, and proposed floodway encroachments.

The interpolated section was modified to account for the proposed structures. The simulation output shows that the water surface profile is not more than 0.01 feet greater than the pre-development water surface profile. A report of the HEC-RAS output is shown in (*Appendix 4*).