

Engineering has reviewed the plans for the Echo Farms Park project submitted June 18, 2019 and have the following comments:

Stormwater Management Permit Application Form:

- 1) IV. Project Information, Line Item 12: Include additional offsite sidewalk improvements (only if provided as requested below).

Stormwater Calculations:

- 2) Calculations need to be signed & sealed.
- 3) Provide 50yr Pipe Calcs.
- 4) Has 24" RCP been sized for wetland crossing? Please show pipe is adequately sized.

Plans:

- 5) Many labels reference sections of the MUP as "Alternate Bid #1", is there still a second alignment being proposed for the MUP? If there is not a second alternative and/or bid please update labels.
- 6) Is the Future BUA allocation found on the application intended for the future proposed tennis courts?
- 7) There looks to be a conflict with MUP alignment and Future Tennis Court. Please clarify.
- 8) Please consider providing a sidewalk connection from Sand Trap Court to Proposed Driveway Entrance. This can be accomplished by providing a 5' sidewalk through the trees or putting in traditional 5' concrete sidewalk along Echo Farms Blvd. This is important for connectivity to the park and is highly supported by City staff. Please note this is a recommendation and not a public improvement requirement.
- 9) C-3.1: Update Section A-A to show correct ABC and pavement depth.
- 10) C-3:1 & C-3:2: There are a few areas where the proposed contours scale off at greater than 5%. Please spread these contours out to assure contractor can construct path to meet ADA requirements.
- 11) Assure all MUP horizontal curves meet AASHTO Guide for the Development of Bicycle Facilities. There looks to be a curve located at the Southeastern portion of the path that does not meet this requirement.
- 12) C-5.0: Provide Detail for Elevated Wooden Walkway.
- 13) Please forward USACOE & NCDEQ wetland disturbance permits for MUP crossing.

Please submit revised plan sheets, revised application pages, calculations, and any other documentation to Engineering for additional review. Please call or email if there are any questions.