Engineering has reviewed the plans for the Kiddie Academy project submitted July 11, 2018 for TRC review and have the following comments:

- 1. This project is proposing the construction of on-site newly constructed impervious surface greater than 10,000 sf, therefore the project is subject to full stormwater review. This project drains to the lower pond of the Silverstream ponds. A State SW offsite permit will need to be obtained from NCDEQ. The City will also issue an offsite permit concurrently with the State Offsite permit. The City will only review grading, drainage and compliance with Technical Standards. Please submit the Stormwater Management Permit Application Form, a \$1,000 permit application processing fee, one full set of design plans and calculations. Please also include a digital copy of the entire submittal package. Additional comments will be made once the full engineering submittal is reviewed. Please note our review times are approximately 45-60 days right now. Please factor this into your submittal schedule.
- 2. Piped collection systems shall be designed for the 10-year frequency storm event and analyzed for the 50-year frequency storm event to check the system for flooding. Assign an appropriate tailwater to the analysis.
- 3. Provide an inlet drainage area map with each inlet area labelled, delineated and listed.
- 4. Provide sizes, lengths, inverts and slopes for all existing and proposed pipes.
- 5. Provide a grading sheet.
- 6. Address how roof runoff will be directed to the storm drain pipe system.
- 7. Provide all appropriate details to support stormwater management systems.
- 8. Provide all appropriate city standard details. City details shall be the most recent pdf version downloaded from the city website. City details must have the City titleblock.
- 9. Headwalls or flared end sections shall be required at the inlet and outlet of all pipe systems. See TSSM, Ch. V.D.1.i.
- 10. Energy dissipaters shall be designed and constructed at the outlets of all pipe systems. See TSSM, Ch. V.D.1.j.
- 11. C-1.0: For clarity, extend the existing pipe along the southern boundary to the next upstream structure. Presently, the pipe looks like it stops at the property line.
- 12. C-2.0 states there is 49,175 square feet of existing impervious area?
- 13. Per Table 3 (Driveway widths at Property Line) the minimum width for one-way traffic is thirteen (13) feet. The plan shows 12 feet.
- 14. The existing curb ramp at the intersection of Physicians Drive and Canterwood Drive does not appear to meet current City technical standards.
- 15. Can a sidewalk be constructed along the southern side of the parallel parking spaces to provide a safer loading/unloading area for the parents and children?

Please call or email if there are any questions. Thank you.