

JONES PLACE

FEBRUARY 11, 2020

SITE CHARACTERISTICS

The subject property is identified on County Assessor's Maps as 17-03-08-00 Tax Lot 307. The site is an open field and consists of about 10.9 acres.

EXISTING HYDROLOGY

The property generally drains to the northeast and into Muddy Creek.

PROPOSED HYDROLOGY

The proposed drainage system for the subdivision will consist of open roadside ditches and pipes to a proposed detention pond along the north property line. The detention pond will outflow to Muddy Creek. The proposed pond was sized using the TR-55-unit hydrograph storage indication method and the pond outflow was limited to pre-development flows.

The proposed detention pond has an overflow outlet at elevation 396.21. The proposed outlet will drain to Muddy Creek via a 24" storm drain laid at a slope of 0.5% and will flow 30% full. The 10-year pre-development peak flow is 4.72 c.f.s. and the 10-year post-development peak flow is 6.86 c.f.s. The total proposed 10-year routed peak flow to Muddy Creek is 2.41 c.f.s.

Attached are the following:

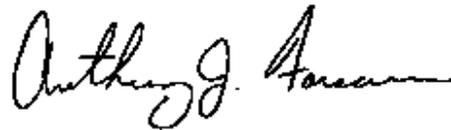
1. Pre-Development 10-year flow (TR-55)
2. Post-Development 10-year flow (TR-55)
3. Routed Post-Development 10-year Flow (TR-55)
4. Stage-Discharge Curve
5. Stage-Storage Curve
6. Hydrograph of 10-year Pre-development, 10-year Post-Development and 10-year Routed Storm
7. 24" Pipe Hydraulics

CONCLUSION

Based on my calculations and the proposed drainage system is sized properly and will provide the necessary flow control.



EXPIRES DEC. 31, 2021

A handwritten signature in black ink that reads "Anthony J. Favreau".