

Provost & Rovero, Inc.

Civil Engineering • Surveying • Site Planning • Structural • Mechanical • Architectural Engineering

P.O. Box 191
57 East Main Street
Plainfield, CT 06374

Telephone (860) 230-0856
Fax (860) 230-0860
www.prorovinc.com

February 21, 2023

Maureen Fitzgerald, Environmental Planner
Town of Waterford
15 Rope Ferry Road
Waterford, CT 06385



RE: Kingstown Properties, LLC – Affordable Housing Development – Clark Lane
P&R Job No. 213009

Dear Ms. Fitzgerald:

Attached, please find one complete set of revised plans for the above referenced project. In addition to the complete set of revised plans, there are ten (10) copies of sheets 7, 8, 13 and 17 which illustrate the majority of the changes in response to your February 15, 2023 review comments. Note that the complete set of plan revisions has also been provided electronically in PDF format. The following information is offered for your consideration with responses corresponding to numbered review comments where applicable:

1. The underdrain along the westerly property boundary has been revised to discharge in several locations along the easterly boundary to mitigate any potential impact from intercepted groundwater which currently supports the hydrology of the easterly off site forested wetland system. The roof drain system for units 27 through 47 has also been revised to discharge to the ground surface at the rear of the units. With these changes, the groundwater recharge area available to support the hydrology of the easterly offsite wetland system is reduced by a maximum of 12%. This is based on an existing surface watershed to the edge of this wetland system of approximately 15 acres. The new impervious surface which will no longer support groundwater recharge is approximately 1.8 acres (12% of existing surface watershed). The underdrain and roof drain revisions are shown on sheets 7 and 8.
2. This comment has been addressed as noted in #1 above.
3. The 4" underdrain discharge has been relocated as suggested. This is shown on sheet 17.
4. Sheet 17 has been revised to show a 6" layer of organic topsoil on the bottom and side slopes of the detention basin. Both micro mounds and micro pools have also been proposed on the basin bottom. A more specific planting plan for the detention basin has also been included with the addition of shrub species suitable for various hydrologic conditions.
5. A permanent stone check dam has been added to the inlet area of the bioretention basin to function as a forebay.

6. We take no exception to monitoring the water elevations during construction and modifying the planting plan as necessary with the approval of Commission staff.
7. The Clark Lane drainage connection has been addressed by the applicant's legal counsel in potential approval conditions.
8. Sheet 13 has been revised to require that Clark Lane drainage be directed away from the proposed sediment basin system.
9. The temporary diversion channels will convey a minimum 5 year design storm, however we anticipate significant excess capacity beyond a 5 year storm.
10. Temporary erosion control blankets have been added to the basin cross section detail on sheet 17.
11. Perimeter erosion control has been added at the detention basin level spreader as shown on sheet 13.
12. The reinforced turf access path has not been changed. The primary concern is providing a pervious soil element between the bioretention basin and detention basin which may be problematic.
13. Sheet 13 has been revised to indicate the use of the detention basin level spreader for dewatering pump discharges. We anticipate that this will be the primary location where such dewatering is necessary during construction.
14. We take no exception to the recommended inspections and testing for the bioretention basin construction.
15. We take no exception to the recommended final inspection and as-built survey for the stormwater treatment system.
16. We take no exception to the recommended stormwater quality monitoring following project completion.
17. We take no exception to the recommended monitoring and reporting for the stormwater basins.
18. We take no exception to the cutting and treating of bittersweet vines if the Commission feels it is appropriate. As noted previously however, this will likely have minimal positive impact and may be a waste of resources without a watershed wide effort.
19. The conservation easement document will note the presence of upland soils in the easement area.

If you have any questions or need additional information, please do not hesitate to contact us at your convenience.

Sincerely,

David J. Held, P.E., L.S.
Provost & Rovero, Inc.