

# ROSS ENGINEERING COMPANY

*A Subsidiary of Grady Consulting, LLC*

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Professional Engineers & Land Surveyors

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Norwell, MA 02061  
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June 13, 2022

Chris MacFarlane, Chair  
Cohasset Conservation Commission  
41 Highland Avenue  
Cohasset, MA 02025

Re: Stormwater Site Plan  
46 Black Rock Road

Dear Mr. MacFarlane:

Please be advised that this firm has been retained by the northerly abutter, Barbara Wrenn to review and comment on the stormwater plan for the proposed house addition and detached garage at 46 Black Rock Road. Our firm has previously performed services for Ms. Wrenn and agree the referenced site plan and test pits confirm the fact that this area of Cohasset contains considerable ledge both above and below the existing ground. The ledge on the locus is shown to be both above ground or only four (4) feet below the existing ground at both test pits 1 and 2. Based upon the foregoing we, on behalf of Ms. Wrenn, submit the following comments relative to the work proposed on the referenced site plan.

1. The site plan indicates that stormwater runoff from the rear portion of the subject property is directed to the northerly abutter Wrenn.
2. Given the close proximity to ledge outcrops, as shown on the site plan, there should be, at a minimum, one additional test pit at each end of the proposed chamber system to be absolutely sure the proposed chamber system design is in a location where the ledge is at least 46 inches below existing grade.
3. What is the permeable rate of the sandy loam layer between 24" and 46" at test pit #2?
4. Given the fact there is significant ledge both above and below the ground and in order to avoid a potential "bathtub" effect or overflow of water from the chamber system in both large and/or significant repetitive storm events there should be a provision for an overflow grate at the westerly end of the chamber system that would direct water to a proposed swale on the southerly or righthand side of the existing driveway and out to the street. The addition of this design feature would help to assure that there would be no adverse impact to the Wrenn property.
5. Is there an inspection port for the chamber system?
6. The site plan shows a proposed trench drain encased in concrete but does not indicate an outfall or discharge point for same.
7. Does it make sense to remove all existing soil to the ledge and replace it with stone under the chambers to provide more runoff storage?
8. What portion of the recharge area is NOT in a paved area? If NONE then why does the site plan show a "non-traffic" application detail and for what purpose?

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Page 2

9. The northerly and easterly property lines should be staked out prior to construction to insure there is no encroachment of any nature on the abutting property.
10. We request that any approval of the stormwater permit include an inspection of any excavated area of existing soils prior to the backfill of same. This should include verification of the existing soil and approval of the backfill material, etc.
11. How and where does the roof runoff from the existing house discharge to?
12. Why is it necessary to remove the three (3) existing 12" trees at the northeast corner of the locus?
13. The silt sock line should be labeled on the plot plan accordingly.
14. The horizontal location and limits of the impervious barrier should be shown in the plan view on the plot plan.

We appreciate the Commissions attention to the foregoing and look forward to participating in the upcoming June 16, 2022 Zoom hearing. Should you or any member of the Commission have any questions prior to the public hearing, please contact our office.

Sincerely,  
ROSS ENGINEERING COMPANY  
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Paul J. Mirabito, PLS

PJM/ab  
CC: B. Wrenn