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October 30, 2023

Jolanda Streifel  
614 24<sup>th</sup> Ave S  
Grand Forks, ND

RE: Review of Setback to  
Septic System Mound Rock Bed  
23666 Cedar Lake Drive  
Aitkin, MN

To Whom It May Concern:

**Introduction**

The owner is planning to build a new 24 foot E/W x 28 foot N/S detached garage. The existing garage will be removed. We were asked to comment on setback of new garage to Septic Mound Rock Bed. The NW corner of the rock bed has been flagged by a Septic Installer.

**Discussion**

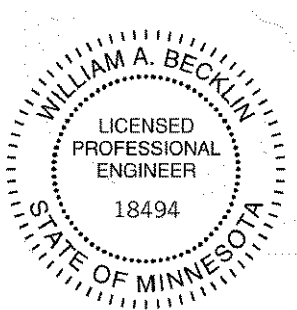
The septic system rock bed must be at least 10 feet from proposed garage. Garage must be built on a floating slab. Frost depth foundation is not allowed. The proposed garage will impinge on the mound slope backfill area. There must be positive drainage from mound and garage. The garage slab must have reinforced masonry at least 40 inches in height minimum where mound slope intersects garage wall.

**Conclusions**

**A new garage can be built 10 feet minimum from NW corner of septic mound rock bed. Garage must be built on a floating slab and slab must have at least 40 inches of reinforced masonry on top of slab where garage foundation intersects mound slope. Provide positive drainage away from garage foundation wall and septic mound. The function of the Septic System will not be affected by the new garage. Do not drive machinery on septic mound.**

**Attachments:**

**Photos**  
**Related Documents**



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

*William A Becklin*

WILLIAM A. BECKLIN, P.E.

DATE: OCTOBER 30, 2023

LIC. No. 18494





**07-1-128500**

**23666 Cedar Lake Drive, Aitkin MN 56431**

**Setbacks to follow for proposed garage**

1. 30 feet from Road right of way (survey flag visible on south property line)
2. 25 feet from rock bed in septic mound
3. 10 feet from property line
4. 10 feet from septic tank

-Meeting all setbacks without a variance- a 24x28 garage should fit (will be tight)

-Exact dimensions of what will fit and meet all setbacks was tough with existing garage on same footprint

-Driveway needs to be factored in to proposed garage and how it will affect runoff

-Fill will be needed south of driveway (slope over 5%) so this might minimize the build a foot or two

**Recommendations to take for proposed garage**

1. Contact civil/structural engineer to write an Engineers Report for reduced setback distance to septic rock bed.
  - This will allow you to push proposed garage to the south and be closer to septic.
  - A variance will not be needed with an engineer's report
  - An engineer's report attached to standard Aitkin County land use application should allow you to build roughly a 24 by 36 garage. (New measurements will need to be taken depending on the setback the engineer grants you. I would shoot for 10 or 15 feet.
  - William Becklin, P.E., #18494 – 763-689-5631
2. Contact Power Company about moving Utility Line and/or power pole
3. Meet with a contractor to come up with ideas on the build especially distance between driveway and north side of proposed garage.
4. These are recommendations and might be of error by a foot or two based on various scenarios
5. Leave main survey stakes in or freshen up so they are visible next spring