

BLAKEMAN ENGINEERING, INC.

P.O. BOX 4 ROUTE 114
NORTH SUTTON, NEW HAMPSHIRE 03260
(603) 927-4163
blakemaneng@tds.net

ENGINEERING: PLANNING
DESIGN
PERMITTING

SEPTIC SYSTEM DESIGN
SITE PLANNING and DESIGN
SUBDIVISION DESIGN

Executive Summary for Proposed Road Extension

*Crimi Land Holdings of NH, LLC
Lighthouse View Road ~ Map 127, Lot 1*

October 12, 2018

A residential subdivision is proposed on a ± 64.1 acre parcel with frontage along Soo-Nipi Park and Lighthouse View Roads. The development is proposed to be a nine lot subdivision plus the remaining land. All lots are sized to comply with New London zoning and subdivision requirements. Two of the new lots will be accessed from Soo Nipi Park Road while four new lots will have driveways off the existing section of Lighthouse View Road (LVR). The remaining three new lots will have frontage on Lake Sunapee plus road frontage and driveway access off of a proposed ± 470 LF extension of Lighthouse View Road. This extension upgrades the end of LVR from the current patch of widened pavement to a circular cul-de-sac that will be built to New London road standards.

Along with the ± 470 -ft road extension, there will be a transitional area of about 145 LF leading up to the road extension where the existing roadway geometry can blend into the new section. Including this transition area, the road construction will begin at STA 14+42 and end at STA 20+57 after going around the cul-de-sac.

The Road Design for this work can be found on the following sheets of the subdivision plans:

D1	<i>Roadway Plan & Profile ~ Road Extension</i>
D2	<i>Construction/Drainage Details</i>

Drainage Design

The proposed new roadway has a ± 2.8 acre drainage area above it for both pre- and post-development conditions. The design intent is to intercept storm run-off from the newly developed road extension and divert it northerly to an existing natural depression that keeps the run-off on the Crimi property and allows it to infiltrate into the existing sandy soil. The diversion swale will be constructed along the low side of the new driveway into Lot #3 and will terminate in a stone level spreader (Level Spreader and Diversion Swale Details are found on Sht D2).

Pre- and Post-Development run-off for this section of road are very low, less than 1 *cfs* (cubic feet per second) for the 50-yr storm over the 2.8-acre drainage area. Smaller storm events are close to negligible. Focusing on road surface only in order to properly size the diversion/treatment swale, the run-off for the 50-yr storm is approx.. 1 *cfs*. The capacity of the diversion swale is in excess of 10 *cfs*.

Stormwater management for individual house sites for the new lots along Lighthouse View Road are proposed to be designed using low-impact development techniques. The designs for individual house sites will be submitted as part of the Building Permit applications and should be prepared by a licensed engineer. Designs should provide BMPs so that the Water Quality Volume (WQV) for post-development conditions do not exceed pre-development conditions and impacts of larger storm events are checked to determine whether there is a negative impact to existing structures along the road.