Escarpment Committee Meeting Notes – September 21 2005

Attendees: see signed sheet

1) Motion to accept minutes of Escarpment Committee Meeting held June 15, 2005 by Phil Bates. Seconded by Grace Tyler.

2) Storm Sewer System

JD described the existing storm sewer system along Berkley. There are three sections that are inadequate and some areas where there is no storm sewer. The DNV plans to improve the inadequate sections and to install a storm sewer where it does not exist. This will happen before the end of 2005.

The depth of the storm sewer system varies a great deal and some household connections cannot be fed by gravity alone.

All residents along the top of the escarpment will ultimately have a connection to the storm sewer system up to their property line. This cost will be borne by the DNV. Residents will need to connect to the storm sewer system at their own cost. The DNV is looking into providing financial support to residents through a loan process.

Ideally all water run-off from the roof or other impervious surfaces (e.g. driveway) is connected to the perimeter drainage of a home and is fed through a sump by gravity to a storm sewer system.

JD commented that given the average age of the homes along the top of the escarpment, 70% of them may have plugged perimeter drainage. This means that the perimeter drainage would need to be unplugged or replaced in order to receive water run-off from the roof before connecting the perimeter drainage to the DNV storm sewer system. This may be financially onerous to residents.

The DNV is considering an alternative practice where residents may only need to connect their water run-off from the roof and other impervious surfaces directly via a sump to the storm sewer system, rather than directing the water run-off from the roof through the possibly plugged perimeter drainage. This alternative standard may reduce costs to residents.

The action plan by the DNV is as follows:

- 1. DNV to provide a storm sewer line where missing with connections to each property line. This will take place in the Fall 2005.
- 2. DNV to upgrade the inadequate sections of the existing storm sewer. This will take place in the Fall 2005.
- 3. Residents are responsible for connecting to the storm sewer.
- 4. Financial assistance will be provided to homeowners where necessary. This may be under a Local Improvement Plan, where the DNV advances funds to homeowners so that the necessary work is done sooner rather than later, and residents pay back the DNV within a 20 year period.

A question was asked by a resident if the water line should be replaced at the same time as this construction. JD responded that the typical life span of a municipal water line is 35-40 years and that the existing water line along Berkley is within this range.

The entire storm sewer system is designed to handle a 10-year rainfall event. If such an event is exceeded, then the system will back up and rain water will flow down curbs.

Approximately 80 homes will be involved in the storm sewer construction; 60 homes are not connected to the storm sewer at their property line, and the DNV storm sewer does not connect to the property line of 20 homes.

Residents will be informed through articles in the North Shore News and The Outlook newspapers.

The storm sewer plan for the escarpment has yet to be approved by the DNV Council.

3) Slope Stability Study Format

A \$300,000 contract is under negotiation with BGC Engineering to develop a slope management plan for the Blueridge escarpment.

The project will commence on October 12 2005 and be completed around July 2006. The project area is the entire slope (crest to toe) from Hyannis to Swinburne. The project area does not include slopes that continue down to the Seymour River.

The project consists of the following components:

Fieldwork (approx. 2 months starting October 12 2005):

- A. Prepare an inventory of existing physical and structural features along the entire escarpment.
- B. Install 20 additional piezometers along the escarpment to monitor groundwater levels.
- C. Collect data on groundwater levels during rainfall events.

Analysis and Recommendations (approx. 6 months starting January 2006)

- A. Analyze historical air photos and topographical data from the escarpment area
- B. Develop a quantitative risk analysis of the escarpment.
- C. Develop a risk zone map of the project area (this will not be lot by lot).
- D. Make recommendations on remedial actions required to lessen the riskiest areas

The final plan will be available to the public as soon as possible after completion in approximately July 2006.

4) Status of discussions with homeowners of homes being purchased

The DNV is in the process of buying 9 homes around the landslide area. Four homes are on the top of the escarpment and are a priority because the DNV requires access

to these properties in order to reshape the top of the slope and start the revegetation process.

Of the nine homes, one homeowner is ready to sign their agreement and one homeowner has not responded to the DNV's proposal yet. Of the seven remaining, half have acknowledged their appraisal and are yet to respond and half have counter-offered.

Once the 9 homes are purchased, the DNV can proceed with the stabilization of the landslide area. The plan is to:

- A. Remove each home.
- B. Reshape the top of the slope by removing structures and fill material.
- C. Re-vegetate the slope with plants that will improve soil strength with a strong root structure, help soak up excess rainfall, will be low maintenance and will be aesthetically pleasing.
- D. Build a low fence (3-4 ft high) along the top of the reshaped escarpment.
- 5). Next meeting will be held in October. Bill Maurer will determine the date.
- 6). Meeting adjourned at 9:30 p.m.