

# Master Plan Report



## Special Report 2008

In the fall of 2007, George Patrash, President of The Lexington Heights Board of Trustees, asked me to prepare a "Special Report". The goal of that report was to make an attempt at explaining what's meant by "Master Plan", "Site Advisory Committee" and "Beautification Committee". The names are used frequently in discussions regarding the Jetties\* and the Beach Area.

The terminology goes back to the 1980's. As official Lexington Heights Historian, I was awarded the dubious honor of compiling this report. Much of the information was found in old records and collections of materials from Rita Hoban.

I've decided to present this report in digital format on a CD for ease of distribution in a Eco-friendly manner. Use the list of "Articles" on the left to navigate the report. Individual articles or the whole report can be printed.

This report is far from a literary work, it's a simple report at best. The report should provide the history and a description of the "Master Plan", the "Site Committee" and "Beautification Committee".

Gene Komaromi

\* I've used the term "Jetty" even though the structures are technically "groins" because of common usage in the area.

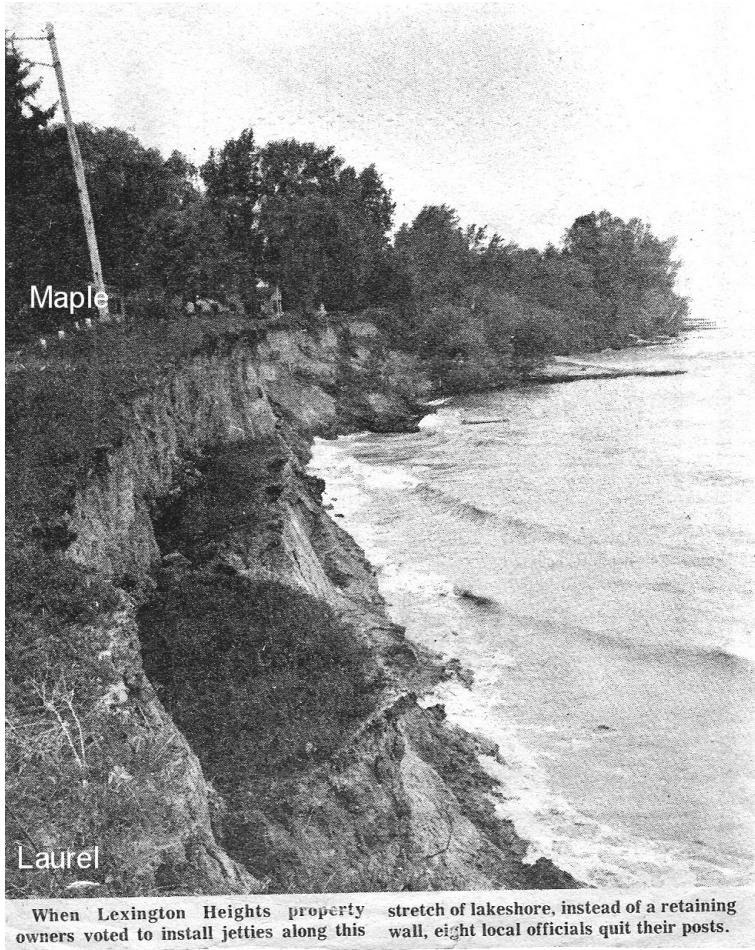
# Environmental Disaster

## High Water Levels In The 1980's - Disaster for Lexington Heights

From the late 1970's to the mid 1980's Lexington Heights was faced with environmental disaster.

- I. Lake levels were at record high.
- II. Rainfall was plentiful to say the least.
- III. Both Lexington Heights and Sanilac County were lacking funds for shoreline erosion control.
- IV. Beaches had become virtually nonexistent.
- V. Wave action was undercutting the cliff in many areas.
- VI. The lack of adequate drainage from roads was washing the cliff from above.
- VII. Many areas on the bluff had no vegetation, in some areas trees had toppled over the bluff crest.
- VIII. The angle of the bluff face was almost 90 degrees in some areas.

The photo below, taken at the present location of the Laurel stairs, gives a dramatic view of the enormity of the problem.



For ease of organization, this report contains three articles describing this disaster in greater detail.

- IX. The first, "Problem Areas" gives more detailed descriptions on specific areas where the erosion was the worst.
- X. The second contains photographs.
- XI. The third article attempts to summarize the causes of the erosion.

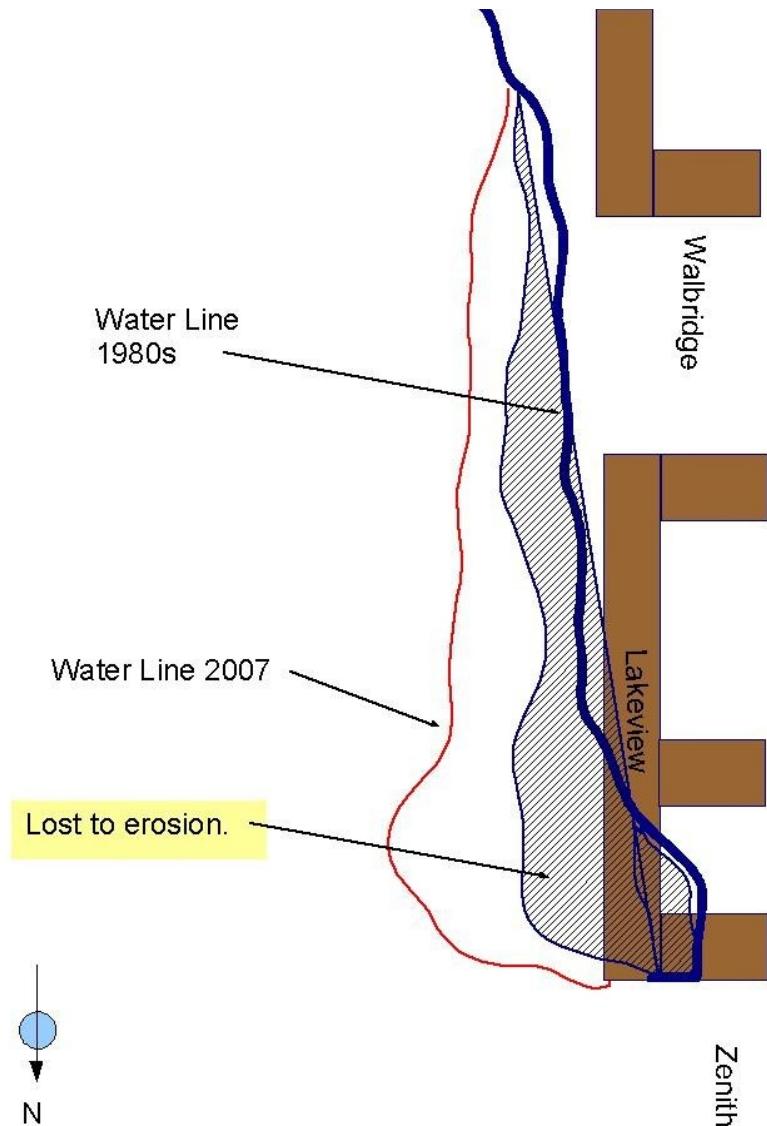
## Problem Areas

### Problem Areas

#### **The Worst Area Was From Zenith Road South to Zenith Creek.**

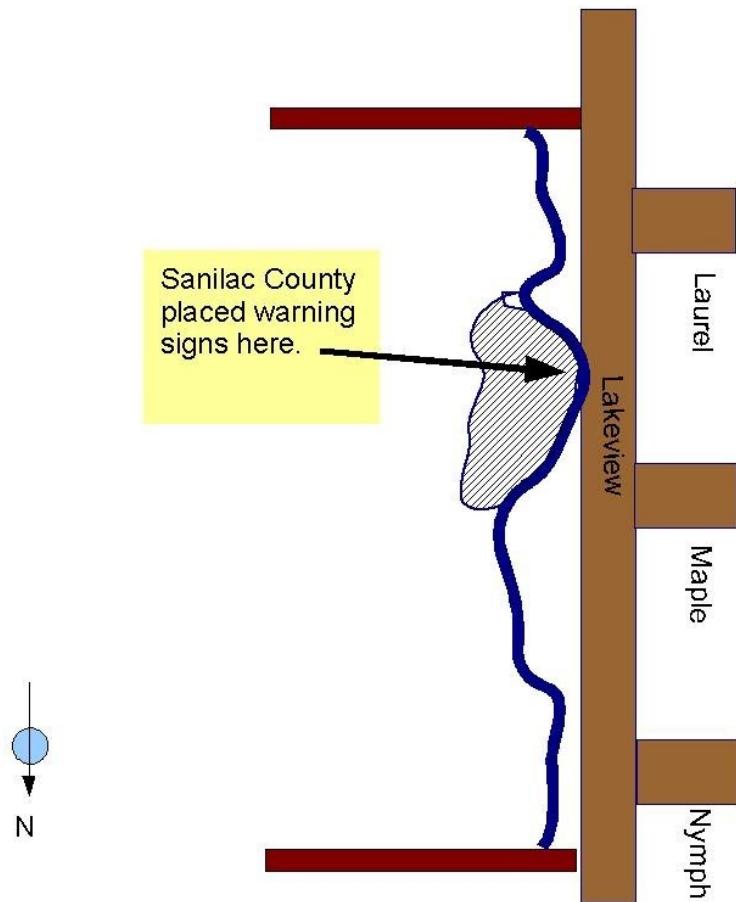
In this area:

- XII. Lakeview Road actually eroded away leaving at least one homeowner with no access to their property.
- XIII. The foot of Zenith Road also eroded away.
- XIV. There was only a foot or two of actual beach in the area.
- XV. The threat of losing some homes was a real possibility.



### **A Second Major Problem Area Was Between Laurel and Maple.**

- XVI. The edge of Lakeview Road was the edge of the cliff.
- XVII. More than 20 feet of land had eroded away.
- XVIII. Sanilac County had placed 'Narrow Road' warning signs in the area and was considering closing Lakeview completely as they had done in the Great Lakes Beach subdivision.



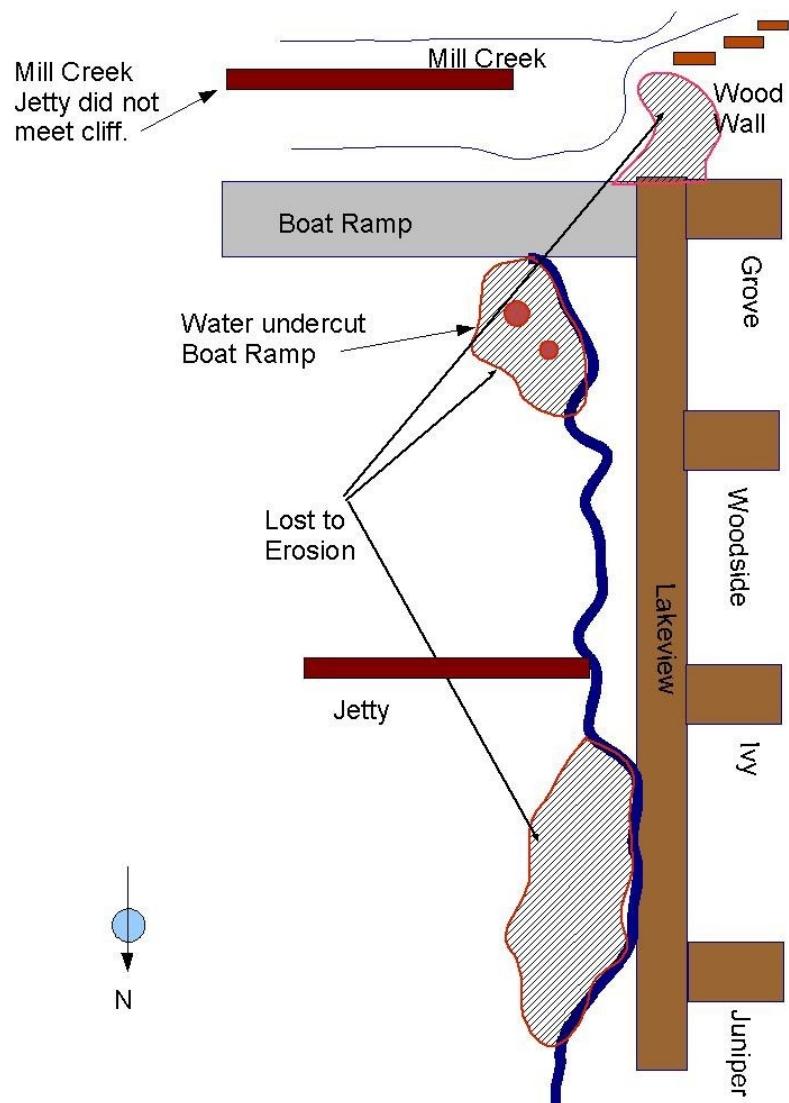
### **The Boat Ramp North To Woodside Was Another Problem Area.**

XIX. The Jetty at Mill Creek didn't go all the way to the cliff and the lake and Mill Creek often washed behind it.

XX. The water had undercut the Boat Ramp on both the north and south, and the ramp was in danger of collapse.

XXI. About 15 feet of land and two large trees had fallen into the lake due to erosion.

XXII. The beach was no more than 25 feet wide on a calm day, and the surf crashed against the cliff on windy days.



# Boat Ramp Early 1980's



## Oak Street and Lakeview Posed Another Threat

- XXIII. The cliff was at the edge of Lakeview.
- XXIV. Several trees had fallen over the edge.

At the foot of Pine, stairs that had been recently installed actually pulled away from the cliff and fell.

There were several other areas that had less erosion, but had a high potential to become serious problems. Take a look at the photographs in the next article titled "Photos" .

## Ivy and Lakeview A Potential Road Closure

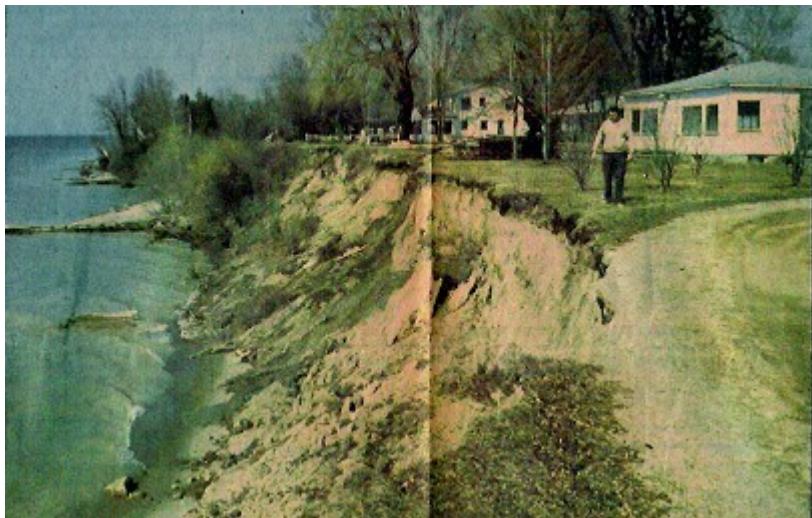
The area just north of Ivy was also severely eroded. Large areas of the bluff had slumped away. This was another area where Sanilac County was considering the closing of Lakeview.

## Photos

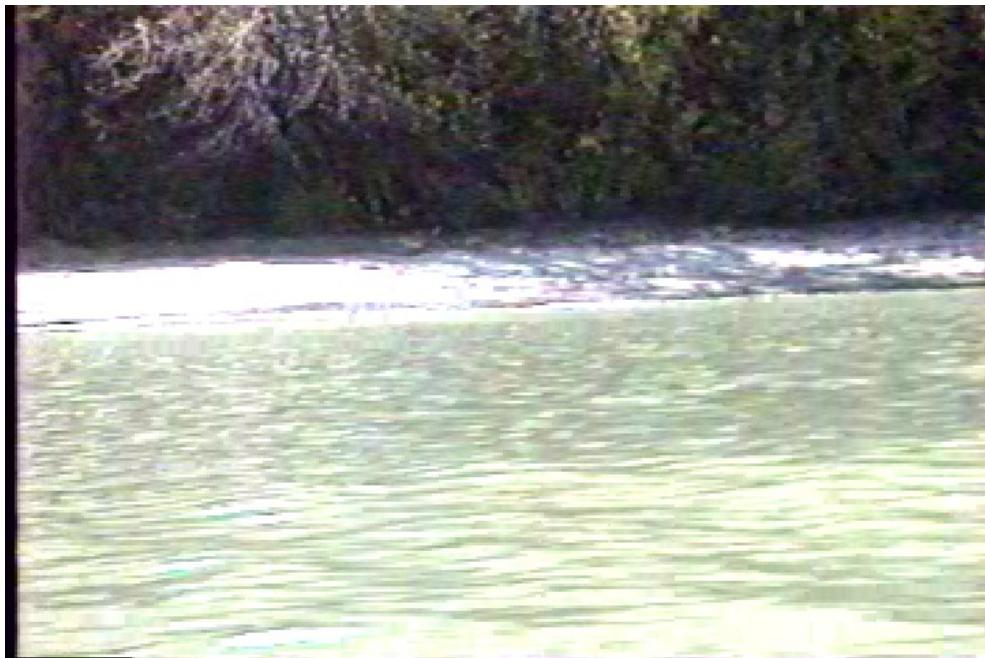
### Photographs



This photograph was taken at Zenith Road when the foot of Zenith and part of Lakeview fell due to erosion.



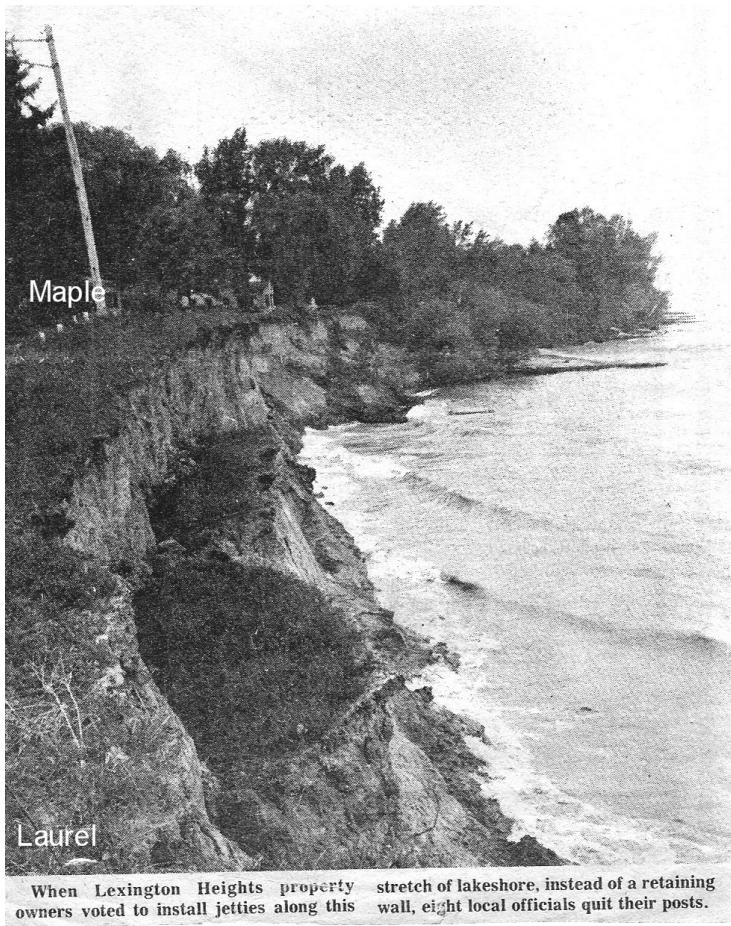
This photograph from the Times Herald does not list the exact location.



This photograph was taken at the foot of Juniper, on a calm day, with only a few feet of beach.



This photograph was taken just north of the Laurel stairs. The small Jetty on the right was over washed and the cliff was dangerously close to Lakeview Road at that point.



This photo is from The Jeffersonian and is taken from the Laurel stairs looking north.

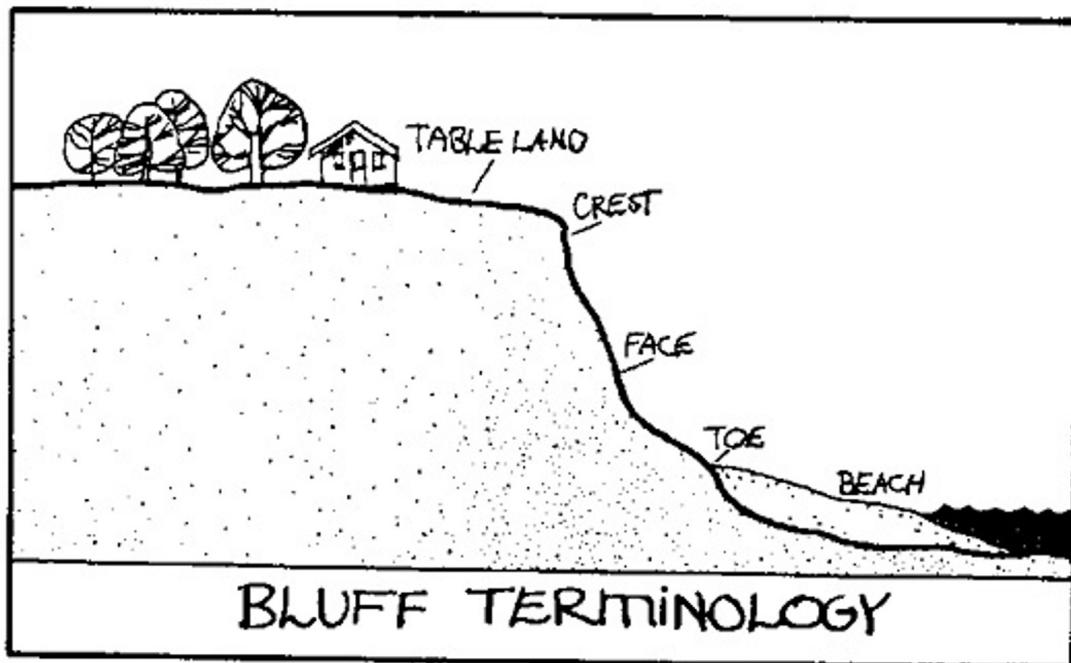


This photo was taken just north of Ivy, in front of Surhigh's house. The cliff touched lakeview Road at this point. Water had over washed the Ivy Jetty. The broken concrete was dumped in an attempt to save Lakeview Road.

## Causes

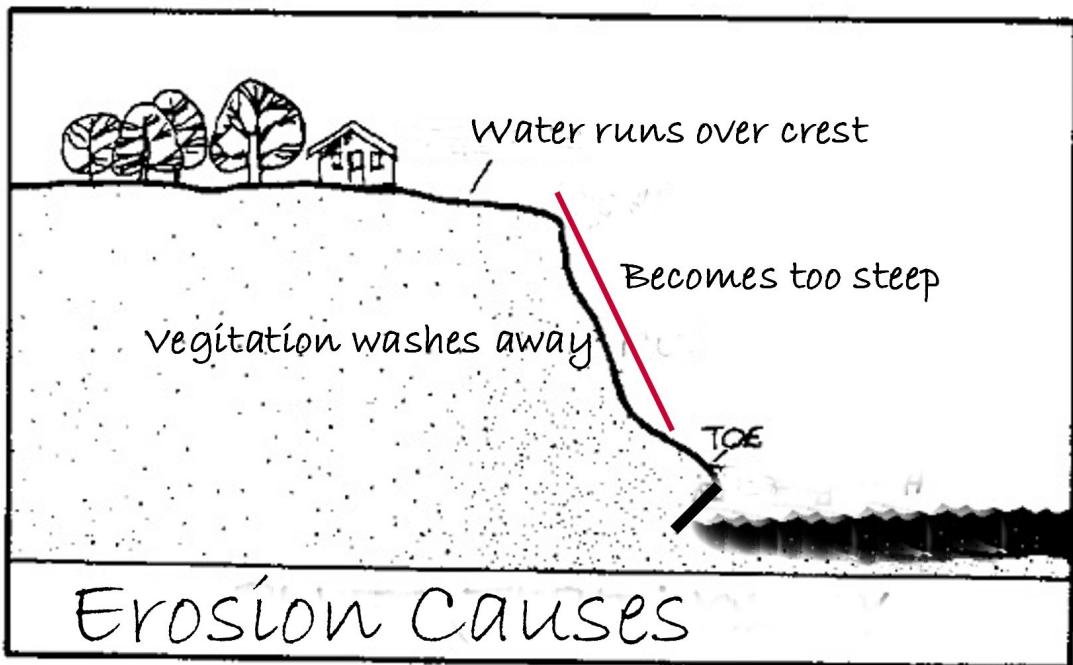
### Erosion Causes In Lexington Heights

The erosion shown in the two preceding articles was caused by several factors. Look at the diagram below to define a few terms used in this report.



The Lexington Heights erosion problems were most likely caused by:

1. Inadequate drainage control that allowed water from roads to run over the "Crest" of the bluff and erode the "Face".
2. Wave action washed over the beach and over the low existing jetties, causing the "Toe" of the bluff to collapse.
3. The actual angle of the bluff became so steep that the "Crest" just naturally slumped down in some areas.
4. The angle of the bluff coupled with water run off denuded the bluff of most vegetation leaving the ground open to even greater erosion.



## **Possible Solutions**

## Sea Wall

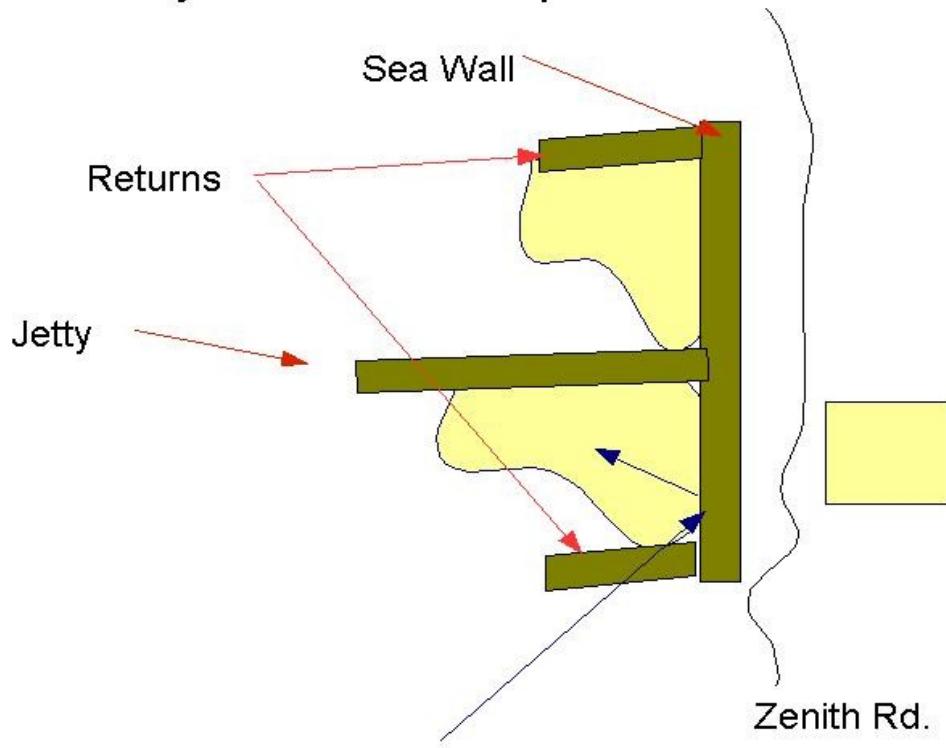
### **Proposal 1 - Low Jetties Backed By A Seawall**

In July of 1985, Lexington Heights a report was given to the Lexington Heights Board of Trustees on the condition of the beach and stairs by Trustee Harry Burgland.:

"In the Zenith area there is much erosion. The steps are wobbly and the bottom of the steps are in the water. The Zenith jetty is too low to be of any help. The jetty at Walbridge is fine, but was built when the water level was lower and now the jetty is not doing its job. The tulip steps are eroding at the top. The Pine steps are gone. There is much erosion south of Oak. The Maple area has much erosion which may be due to ground water."

In September of 1985, the Lexington Heights Board of Trustee decided to follow the "Worst First Principle" and address the erosion at Zenith first. Several proposals were made that would utilize a seawall or a seawall and low jetty system.

## Jetty & Seawall Proposal



### Wave Action

*If waves washed over the low returns the seawall would protect the Bluff Toe.*

A motion was approved that would get bids on an 80 foot seawall, with two 20 foot Returns and a 40 foot Jetty. Some proposals were also discussed to control drainage in other bluff areas, but no action was taken.

In minutes from May of 1986, it's indicated that Lexington Heights Board of Trustees accepted changes to the erosion plan made by The Michigan State Department of Natural Resources. which would place the seawall only 5 five feet from the foot of Zenith Road.

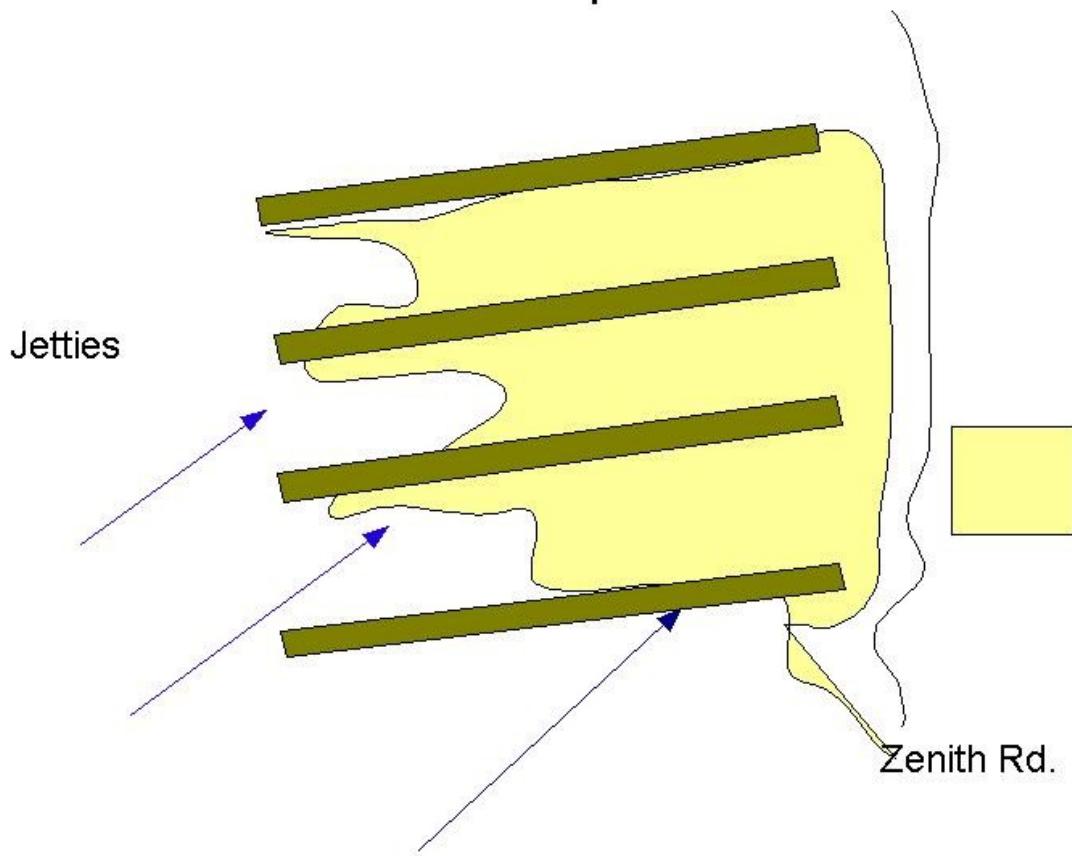
## Large Jetty's

### [Longer And Higher - Another Proposal](#)

At the May 18, 1986 Board of Trustees Meeting, one Trustee, Kurt Riese dropped a bombshell. He had consulted with James W. Shink and Associates, an engineering firm regarding the Zenith Project. Kurt now offered a very different approach that didn't include a seawall and utilized higher and longer jetties that would be spaced between 100 and 150 feet apart.

Kurt Riese and Tom Wilson showed a video presentation to the board showing sea walls that didn't hold and jetty systems that worked. They acknowledged that this plan would save the Zenith Beach but it would not save the road.

## Kurt Riese's Proposal



### Wave Action

*Because of the height of the shore end of the jetties waves could not reach the bluff toe, eliminating the seawall.*

Kurt stated that sand could later be harvested from the beach area and pushed against the bluff, providing an extra buffer for the toe of the bluff. As the beach grew, fill could be added and the angle of the bluff would become less.

Eventually vegetation could be replanted.

Ted Parker from Parker Construction stated that he agreed with the presentation. He felt that the "Jetty and sea walls" wouldn't work.

The Board of Trustees took no action on Kurt Riese's plan. He was reminded that a contract had already been accepted for the "Jetty and Seawall" plan at a cost of about \$70,000.

## Special Meeting

### The Special Meeting

Kurt Riese presented petitions asking for a "Special Meeting" of the membership. After some legal wrangling the "Special Meeting" was called and held after the General Meeting at 1:05 PM on June 1, 1986.

According to minutes from that "Special Meeting", Kurt Riese made a video presentation showing how three Jetties in the Zenith area would cost about \$26,000 while the "Sea Wall" plan would cost about \$70,000. Mr. Riese also produced documents from an engineering firm stating that Jetties would be the best choice in the Zenith area.

A general discussion ensued, and finally a motion was made by Wayne Newton and seconded by Linda Grace as follows:

"The Board of Trustees be restricted from constructing the approved 80 foot wall with returns and the 40 foot Jetty at Vine or any other retaining wall system at the foot of Zenith road and further direct the Board of Trustees construct three 60 foot jetties, 100 feet apart commencing at Vine and travelling north."

The motion carried.

As the "Special Meeting" ended the regular membership meeting was reconvened and Trustees Riefert, Strickland, Martin, Horger, Bergland, Woods and Brown resigned and left the meeting. Rita Hoban resigned in writing a few days later. Filed along with the minutes for the "Special Meeting" were letters of resignation.

Erick Riese, Vice President of the Board, accepted the resignations and appointed Lexington Heights members to fill the empty positions and function as an interim board until the July Elections. The appointed Trustees were Emmanuel Callus, Wayne Newton, Walt Owens, Tom Pillars, Sam Sullivan, Margaret Thorn and Tom Wilson.

(Several Board Members who resigned later tried to rescind their resignations to

no avail.)

A motion was made and carried, that the new Board of Trustees obtain an engineering study, fill out permit applications and have a "Master Plan". ready for July General Meeting.

## The Master Plan

### The Master Plan

At The General Meeting on July 5, 1986 Kurt Riese again presented his Jetty proposal with supporting evidence from James W. Shink and Associates. According to the limited description in the Minutes, a discussion followed.

A Motion was made by Bill Miron and seconded by Fred Lemelin that stated:

"The Board of Trustees shall be directed to institute and adopt the overall Master Plan as presented, to construct at least 16 jetties at intervals of approximately 100 feet apart at a length of 60 feet unless permits limit them to a lesser length. These shall be constructed as rapidly as finances and permits allow. This directive shall be binding on this Board and future Boards of Trustees subject to change only by a vote of The General Membership."

A amendment was made to the motion asking for a professional engineering study to faciliate the Master Plan and the permit process.

The motion passed unanimously.

At the July 20, 1986 Board of Trustees Meeting a motion was passed that stated "Jim Shink shall be hired to do an engineering study for the Master Plan at an hourly rate with the total not to exceed \$1000."

By the August 1986 Membership Meeting permits had been issued by the Army Corps of Engineers for three of the Jetties in the Zenith area. Jim Shink is finishing the applications for the others. Minutes and other records indicate that obtaining these permits turned out to be a long and tedious process with both the Army Corps of Engineers and especially with the State of Michigan. Eventually permits for the "Master Plan" were issued.

In essence, Lexington Heights now had a "Master Plan". The Board of Trustees could do no less than what was stated in the original "Master Plan Motion", but they could do more.



## Additions

### Additions To The Master Plan Motion

Over the next 10 years, succeeding Boards of Trustees continued to build jetties as outlined in the original "Master Plan Motion" on a "pay as you go" basis.

It was soon obvious that the project needed some expansion, so in the next few years:

Jetties were built the whole length of Lexington Heights approximately 100 feet apart.

Drains and outfalls were constructed in the areas where road and ground water was eroding the crest of the bluff.

Eroded land "filled in".

## Reclamation

### What Once Was Ours

Against predictions made in the early 1980s the jetties worked. The beacher grew wider, but more importantly that grew deeper especially at the toe of the bluff. Within a few years beach was 10 to 15 feet thicker at the toe of the bluff north of Laurel. Lexington Heights decided to reclaim some of the eroded areas.

XXV. Lexington Heights was offered broken concrete from State Highway Projects for small transportation fees. Hundreds of truckloads of broken concrete called "rip-rap" were dumped into areas that had eroded away.

XXVI. The Michigan Sugar Company offered Lexington Heights dirt that was washed from sugar beets in their factory process. Lexington Heights paid the transportation fees for the soil, and dumped it over the rip-rap.

XXVII. Drains and outfalls were installed as the reclamation proceeded.

This "Restoration Process" became not only a major undertaking but a long and tedious process. Needless to say there were complaints and descention as restoration continued. As a solution to these problems, the Lexington Heights Board of Trustees asked for advice from its' membership by forming a "Site Advisory Committee".

## Site Advisory

### [The Site Advisory Committee](#)

The Lexington Heights Site Advisory Committee was formed in August of 1996 at the request of Don Surhigh, President of the Lexington Heights Board of Trustees.

*The mission of the committee was "to advise the Board of Trustees and the general membership of the Lexington Heights Corporation on actions that can be taken to improve repair and restore property under control of Lexington Heights Incorporated, with a special emphasis on the lakeshore "*

In order to support that mission, the Site Committee agreed to:

XXVIII. Identify areas that need attention due to specific problems.

XXIX. Gather available material, information and expertise regarding the problem. Investigate possible actions that might solve the identified problem.

XXX. Make recommendations to the Lexington Heights Board of Trustees and membership.

## **Site Committee Recommendations**

On August 14, 1997, after careful study, the Site Committee makes the following recommendations. Please note the recommendations are specific to certain sites along Lakeview. The committee made an attempt to indicate those areas that were "hot spots", locations where there was a "serious ongoing problem that could cause damage or injury. These areas were ranked from 1 through 6, with 1 indicating the area the committee felt had the most pressing needs, not necessary the "area we expect to get attention first. These numbers appear to the right of the titled site areas.

The Site committee has also attached an "Expert List" at the end of this report to assist the board in contacting some experts recommended by licensing authorities. As you're well aware the Site Committee is also in the process of arranging a workshop through Michigan Sea Grant to give various members some expertise on the subject of bluff and erosion control.

### **General**

Consider a "master plan" for trimming vegetation on the bluff and additional plants of materials to be recommended by landscape expert. The Michigan Sea Grant materials titled "[Vegitation As A Control In Shoreline Erosion](#)" should be used as a guide in the trimming of vegetation..

### **Lakeview**

The Site Committee recommends that a post and cable system be installed as soon as possible all along Lakeview and that it be done in a sectional manner so it can be dismantled for bluff & beach work

### **Between Tulip & Walbridge**

The Site Committee recommends the removal of the silt fence on the beach.

### **Tulip & Lakeview**

The stairway has been undermined at the top. The Site Committee recommends that the stairway be restored by a method to be determined by contractor.

### **North End of Worth Ramp**

XXXI. The Site Committee recommends:

XXXII. That the vines that are smothering the trees be removed.

XXXIII. The edge of the bluff be bermed to form drainage "runs" to the pipe drains.

- XXXIV. Remove the blighted tree at the north end of the ramp next to the "no parking" sign.
- XXXV. Remove/repair the broken cable and posts on the ramp.
- XXXVI. Remove the dead tree on the bluff, leave the stump as erosion control.
- XXXVII. Finish grading and planting on the bottom of the north ramp.
- XXXVIII. Replace the "Lexington Heights" sign, consider a flower bed at the base.

### **Lakeview at Rosewood**

There is damage on the bluff due to pedestrian traffic. The Site Committee recommends this area for a future stairway or ramp. The rusted metal & wood barrier needs to be removed at the top of this area.

### **Rosewood & Pine**

There is a tree next to the roadway which hangs over a gully. The Site Committee recommends that the tree be cut down, the roots left as erosion control and the washed out gully be restored to grade.

### **Worth & Lakeview**

Erosion is evident, The Site Committee recommends that a catch basin be installed on the bluff and that a pipe should be connected to that basin to drain it to the beach in an acceptable manner.

### **North of Rosewood**

The thick vegetation and trees at the low point of the road may be contributing to bluff erosion. The Site Committee recommends that the trees be pruned in accordance with landscaper's recommendations - vegetation such as Lilies should be planted at bluff edge.

### **Lakeview Between Pine & Rosewood (6)**

The bluff edge is very close to the road. The Site Committee recommends that some system of stabilization & fill needs to be considered for this area.

### **Pine Stairway (6)**

The stairway has been eroded under the platform. The Site Committee recommends vegetation planting and the use of "Geo Web TM" as an erosion control method.

**South of Pine on Lakeview****(6)**

Trees on the bluff have bare roots. The Site Committee recommends the consideration that the trees be removed to avoid further bluff loss.

**Lakeview between Pine & Oak****(6)**

This area of the bluff seems to have the greatest slope. Dale Newkirk, soil and erosion extension agent suggested a "French Drain" as an effective erosion control for this area. The Site Committee recommends a "French Drain" system in this area or an outfall drain.

#### **Lakeview North of Oak**

**(6)**

Considerable erosion has taken place in this area. The Site Committee recommends:

XXXIX. A proper drainage system be installed.

XL. The dead tree be removed with some consideration for the Woodpecker nests in the tree.

#### **Lakeview - South of Oak & North of Nymph (1)**

This is a narrow bluff area where considerable illegal dumping has taken place. The Site Committee recommends:

XLI. A post and cable system in this area.

XLII. The planting and maintenance of a lawn.

XLIII. Deterrents such as the posting of notices & newsletter announcements need to be

XLIV. explored.

XLV. The Willow tree at the toe of the bluff needs to be trimmed to encourage vegetation

XLVI. growth.

#### **Lakeview & Nymph**

The Site Committee recommends that the stairway be reinforced.

#### **Lakeview Between Nymph and Maple**

This area is overgrown with vegetation. The Site Committee recommends that the vegetation be trimmed by 20 %.

#### **Maple At Lakeview**

**(5)**

There is a Black Walnut tree at the edge of the bluff. The Site Committee recommends the trimming of the tree to remove excess weight.

**Maple & Lakeview****(5)**

The Site Committee recommends that the cement rip rap be covered with dirt and hydro seeded.

**Lakeview South of Maple****(5)**

The Site Committee recommends the removal of the chunk of asphalt.

### **Lakeview North of Laurel To No Parking Sign (2)**

XLVII. That the top of the bluff be leveled and hydro seeded.

XLVIII. The dead tree on the bank be removed.

### **Lakeview South of Laurel**

XLIX. The Site Committee recommends:

L. The wild grape vine be removed.

LI. The dying trees and vegetation be removed.

LII. The sucker growth on the larger trees should be "trimmed up".

### **Lakeview From Juniper North to Electric Pole**

The Site Committee recommends:

LIII. The construction of some type or retaining wall at the bluff toe.

LIV. The area behind the retaining wall be filled with dirt and seeded with vegetation.

### **Juniper & Lakeview**

**(4)**

The Site Committee recommends:

LV. That 20% to 30% of the vegetation be trimmed removing less desirable species.

LVI. That the slump at the top of the bluff be corrected with fill dirt and hydro seeded.

### **Lakeview & Ivy**

**(3)**

The Site Committee recommends:

LVII. The construction of some type or retaining wall at the bluff toe.

LVIII. The area behind the retaining wall be filled with dirt and seeded with vegetation.

LIX. The sucker growth be trimmed off the Maple in front of the Fields residence.

### **Lakeview Between Ivy & Woodside**

Trim 20% to 30% of the vegetation at the cliff top.

### **Woodside to North End of Boat Ramp.**

The Site Committee recommends that this area be covered with "Geo Web TM"

and planted with appropriate vegetation.

### **Boat Ramp South**

The Site Committee recommends that this area be covered with commercial thatch and Hydro seeded.

### Original Committee Members

Debbie Bonneau	Sam Callus	Vonnie Fagan
Donna Fuer	Tom Grazanka	Gene Komaromi
Estelle Loleas	Jill Marentelle	Gail Nedvidek
Tom Pillars	Inga Riese	Joyce Schmitt
Don Surhigh	Darlene Surhigh	Gail Talaferro
Ben Talaferro	Mary Wade	Roberta Helsom

***Editor's Note: The membership of this committee changed over the years and more recommendations were made to the Lexington Heights Board of Trustees. The "Main Report" is reprinted above, only small modifications seem to have been made at later dates. You'll notice that most of the original recommendations have been carried out.***

## **Beautification**

**Note:** I've found that the actual name of an ad hoc committee titled "Beautification" is a bit difficult to document. The first document mentioning "Beautification Committee" is below. I have to assume that the "Beautification Committee" was actually a sub-committee of the "Site Advisory Committee".

### **Lexington Heights Inc. Master Plan Preliminary proposal July 26, 2002**

The Lexington Heights Planning and Beautification Council have formed four committees described as "areas of interest" within the master plan. These committees will assist with communication of Master Plan concepts and ideas to the Board, site advisory, beautification, or other committees or clubs that operate within Lexington Heights Inc.

Currently the following people have volunteered:

Project	Area of Interest	Chairperson
1 M-25 Streetscape	Landscape	Sheila Paige
2 M-25 Streetscape	Signage	Barbara Wright
3 M-25 Streetscape	Lighting	Mary Wade
4 M-25 Streetscape	Engineering/infrastructure	Tom Britz - <u>7390 Lawrence</u>
5 M-25 N. & S.	<b>ALL</b>	<b>vacant</b>
1 Lakeview	Landscape	Debbie B
2 Lakeview	Signage	Barbara Wright
3 Lakeview	Lighting	Mary Wade
4 Lakeview	Engineering/infrastructure	Tom Britz
5 Bluffs	Landscape	Richard Gage
6 M-25 Westside	<b>ALL</b>	<b>vacant</b>
7 Beach entrances	Landscape	Debbie B
8 Beach entrances	Signage	<b>vacant</b>
9 Beach entrances	Lighting	Mary Wade
10 Beach entrances	Engineering/infrastructure	<b>vacant</b>
11 Club house	<b>ALL</b>	<b>vacant</b>
12 Beach	<b>ALL</b>	<b>vacant</b>
13 Emerson	Landscape	<b>vacant</b>
14 Emerson	Signage	Barbara Wright
15 Emerson	Lighting	Mary Wade
16 Emerson	Engineering/infrastructure	<b>vacant</b>
17 Boat dock	<b>ALL</b>	<b>vacant</b>

As time allows the information we are providing will be consolidated and organized into one unified idea.

Some "general guidelines" which we plan to pursue are

- ~1 Establishing an archive, computer and physical, of existing conditions, contacts, photos, maps, reference, etc..
- ~2 Developing a map to define project areas.
- ~3 Produce drawings of projected appearance.
- 4 Include reference to existing government codes.
- 5 Define our existing conditions.

## M-25 Project

Thursday, 7/25/02

Since our last meeting on July 13<sup>th</sup>, some questions and concerns have been raised regarding actions taken to have shrubs planted in some of the newly reconstructed curbed areas along M-25 from Oak St. north to the Worth Township Hall. As Secretary of Lexington Heights, Inc., and in an effort to clarify board actions taken thus far, herein is a history of past meeting minutes as well as discussions with some involved residents. Quotation marked underlined passages note action recorded in our minutes.

- At the August 20, 2000 board meeting, "Sheila Paige presented a proposal for Lexington Heights to plant trees along M25 – had landscaper had come up give planting suggestions for shaded trees, evergreen trees, ornamentals and shrubbery. The overall cost is approximately \$4,000."

Current board members present at that meeting were Gratopp, Pillars, Polack, Powell, Reifert, Solterman, and Wright. There is no further record of action or non-action taken at that meeting.

- At the September 2, 2000 General Membership Meeting is a section entitled "Beautification Project." It reads as follows: "Sheila Page addressed the membership regarding – planting of trees along Lakeshore – M25. The project of planting trees would cost \$4-5,000 for 60 trees to complete the project. Sheila answered questions from the membership regarding the project.

Barb Wright made a motion that Lexington Heights give Sheila Page the go ahead to do the planting of trees on both east and west M25 right aways and give her a budget of \$10,000, Don Surhigh seconded the motion. Barb Wright removed her motion and Don Surhigh removed the second.

Ben Taliaferro made a motion to have the board look into doing treescaping along M25 on both sides with approval from current residents and other legal authorities up to \$10,000 on public lands only. Tom Pillars seconded the motion. Motion was approved by the general membership.

At the 2003 Annual Meeting the membership reversed their decision and the whole M-25 Project was abandoned.

## Notes

## **Reference Materials**