



Municipal Assistance in Financing a Group Erosion Abatement Project

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THE PROBLEM

Too often privately constructed shoreline protection structures fail prematurely. A 1981 Canadian study of shoreline protection devices at the town of Stoney Brook on Lake Ontario listed three main causes of premature failure: 1) inadequate design and construction, 2) lack of neighborhood coordination, and 3) the nature of the physical environment.

Inadequate design and construction can be traced in part to the limited financial resources of most private property owners. The cost of erosion control measures is very high. Depending on the site characteristics and the design, erosion control measures can cost between \$150 and 1,000 per linear foot for residential property. Offshore breakwaters protecting harbors can cost over \$2,000 per linear foot. Most coastal residents are not able to finance erosion control measures with their own resources. In many cases, financial institutions are not willing to provide loans for shore erosion control measures.

While not much can be done to change the nature of the physical environment, citizens can work to improve the cooperative efforts, design, construction and financing of erosion control measures. The most effective way to deal with erosion problems is on a reach basis (a stretch of shoreline with a similar orientation and physical characteristics). Through a joint project along a reach of shoreline, residents can provide structurally and economically improved protection. In turn, municipalities may assist groups of coastal property owners in securing adequate financing for well-designed, well-constructed, group erosion control measures. An alternative exists that encourages group action and neighborhood cooperation and promotes adequate design and construction of coastal erosion control measures.

A POSSIBLE SOLUTION

Several shoreline communities (the cities of Lakewood, Rocky River, Bay Village, and Euclid) have succeeded in the implementation of innovative methods for financing shoreline erosion control measures. These municipalities were able to provide "loans" to shoreline residents at lower than market rates and at terms of up to 20 years for an erosion control measure. The shoreline residents submitted a petition to the municipality which was signed by all the property owners involved and requested a shore erosion project be constructed. The municipality treated the request like most any other capital improvement project, e.g. building sidewalks. The project was constructed by the municipality and paid for by notes issued by the municipality. The residents will repay the municipalities for the entire cost of the project plus the municipalities' costs through a special assessment property tax.

A more detailed outline of this process follows. The basis of authority for this project is Section 727.06 of the Ohio Revised Code. Before attempting to initiate this process, legal and bond counsel should be consulted.

1. Identify project area and landowners. Meet to determine type of protection and financing procedures. All shoreline property owners in project area must agree to type of protection and financing.
2. Obtain necessary local, state and federal permits. Obtain lease of Lake Erie lands, if necessary.
3. Owners submit 100% petition to city council, including:
 - A. Grant City Easement
 - B. Right to Assess
 - C. Right to Construct Improvement
 - D. Easement allows ingress and egress for installation and functions as a perpetual easement for further maintenance, if necessary.
4. If project includes state assistance, City Council adopts resolution allowing the City to act as an agent for the owners and applying for grant monies from the State and approving the petition and conditions thereof submitted to Council.

Adopt resolution allowing the Mayor to make application for grant monies to the Ohio Department of Natural Resources;

Adopt resolution allowing the City to accept State Grant monies for Erosion Improvement Project;

Adopt Appropriation Ordinance authorizing the two-thirds balance of construction monies to be forwarded to the State of Ohio for release of payment to the contractor upon completion.
5. City Council adopts Resolution of Necessity declaring public improvement as being required.

6. Conduct public hearings for the purpose of answering questions and concerns regarding the proposed improvement.
7. Prepare and deliver preliminary assessments.
8. City Council adopt Ordinance to Proceed with public improvement and allow competitive bidding and the entering into contract for said improvement.
9. City Council adopts Note and Bond Ordinances for short and long-term borrowings.
10. City Council adopts Ordinance to Assess upon completion of public improvement.

There are some additional points that need to be mentioned that might answer some questions. The petition should state that the maintenance of the structure is the responsibility of the upland owners. The sponsoring municipality is not responsible for any maintenance costs.

The more people involved in the project, the more cost-efficient the entire project will be. The municipality's costs are fixed whether it involves 3 properties or 12 properties. These costs include staff time for the City Engineer, Finance Department, Development Director, and legal counsel. The more people involved, the less costs per property.

Depending upon the design of the structure, not all properties have to be contiguous. For example, the installation of precast concrete modular breakwaters with shore returns allowed a property within one project area not to be protected and did not affect the integrity of the structure or the protection of other properties.

The municipality's role in the project is only to provide financial assistance. The property owners must choose the design of the erosion control measure with certain criteria from the municipality, i.e., the life expectancy of the structure should be 25 years.

The special assessment petition and property easements are the only special documents that need to be prepared. The other documents to be approved by City Council are "routine," such as the Resolution of Necessity, certificate of the life of the improvement, certificate relative to borrowing funds, and an ordinance to provide for the issuance of notes.

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