

## **Requirements for Cambridge Lake Level Study**

The Lenawee County Drain Commissioner is seeking proposals to perform a study for Cambridge Lake according to Part 307 of the Natural Resources Environmental Protection Act.

Provide a descriptive scope of services and time schedule to perform tasks.

Proposal to be submitted by April 14, 2008.

Proposal submissions shall contain 3 (three) fees, according to the following:

- ~ Preliminary Lake Level Study
- ~ Lake Level Study
- ~ Fee for both the Preliminary Lake Level Study & Lake Level Study

### **Preliminary Lake Level Study Outline:**

- The feasibility of a project to establish and maintain a normal level of the inland lake.
- The expediency of the normal level project.
- Feasible and prudent alternative methods and designs for controlling the normal level.
- The estimated costs of construction and maintenance of the normal level project.
- A method of financing initial costs.
- The necessity of a special assessment district and the tentative boundaries if a district is necessary.
- Other information that the County Board resolves is necessary.

### **Lake Level Study Outline:**

- Hydrology of watershed.
- Hydraulics of outlet channel.
- Recommendations for the most desirable high level and low levels and duration of the same based on:
  - ~ A study of past lake level records if available.
  - ~ Septic tank and drain field levels in critical low lying areas.
  - ~ A survey of property owners opinions and/or desires.
  - ~ Recreational uses of the lake including dock elevations. This may determined by taking beach profiles in critical areas.
  - ~ Levels at which shoreline erosion and/or ice damage occurs.
  - ~ Fisheries and Wildlife habitat. Assistance should be requested from Fisheries and Wildlife Divisions, Department of Natural Resources.
  - ~ The effect of levels on aquatic weed growth.
- Recommendations for practical methods of maintaining and manipulating legal levels (include an operational guideline for the proposed or existing structure)
- Estimated cost of project including annual maintenance and triennial inspections.
- Recommended assessment district boundaries.
- Recommended apportionment of assessment within district.
- Estimated cost to individual property owners and political subdivisions.
- An environmental assessment of the proposed action.
- Conclusions and recommendations.