

Policy: 4465-7- Guidelines for Lake Surveys

Section: Surveys

Office/Department: Office of Design Policy/Support

Reports To: Division of Engineering

Contact: 404-631-1000

The Project Manager, during the preparation of a Project Concept, shall be responsible for locating and preparing a map showing the approximate drainage basin of all identifiable lakes within 500 feet downstream (500 feet from the Right-of-Way limits) on a project, subject to the following conditions. (See Figure #2* for typical map layouts.) These maps should be transmitted to the Project Manager tasked with the design of the project.

Projects located south of the heavy line shown on the attached map (Figure #1*) or projects located anywhere within the State with cut or fills (i.e., all resurfacings, minor widenings, and most intersection improvements), should normally not require lake surveys unless the project is directly adjacent to a lake, the project involves a major channel relocation or modification, or if the project is located in a highly sensitive area.

The appropriate Project Manager shall be responsible for improving the drainage basin map to identify and show exit points from the project to the lake. Locations of known lakes should be marked on the plans. Design should also make a determination as to whether the lake can be properly protected or if it should be used as a sediment retaining structure for the project. Proper erosion control measures, along with the need for additional easements or right-of-way should be considered prior to preparing Right-Of-Way Plans.

A request to perform a lake survey by the District or Design Office should be forwarded to the District preconstruction survey crews at the time the project is submitted for final review (typically 3 to 5 months prior to letting). This will allow time for the survey crews to schedule the work prior to clearing and grubbing. The survey should be performed as close to the letting as possible. A recommended setup for a baseline on a Lake Survey is shown in Figure #3*. The baseline needs to be tied down to the centerline of the dam and other available permanent points to insure the relative repeatability of the measurement locations. Existing features (building corners, trees, etc.) should be used if possible. A probable 5 to 7 year life of a survey point should be considered.

Where existing features are not available, iron pins should be used and marked appropriately. Back-up points are recommended. The survey information required includes distances and offsets on the bank locations to allow delineation of the limits of the pond or lake. Survey information, notes, maps, etc., from the preliminary lake survey should be sent to the Geotechnical Engineering Bureau of the Office of Materials and Research for review and filing.

The Project Engineer will be responsible for insuring that the lake surveys are completed prior to clearing and grubbing in the area and to note the location of any other ground disturbing work being performed within the drainage basin, above or below the project. Even lakes that are greater than 500 feet from the project may require lake surveys if deemed necessary by the Project Engineer due to one of the following conditions:

1. Lakes downstream of a project where it is evident that construction (by others) upstream of the project is already contributing silt to the stream/lake.
2. Lakes located in a publicly sensitive area.

*See office for Figures 1, 2, and 3.

References:

History:

publish externally, annual review: 01/29/21;
copied to GDOT Publications v.02.00.00: 02/21/12;
added to TOPPS: 05/01/96;
added to Manual of Guidance: 11/16/92
Reviewed: 1/29/2021