# PA Fish & Boat Commission Bureau of Engineering

Soils Testing Services
For
Lake Nessmuk Dam
Spillway Upgrade Project
Wellsboro, Tioga County, Pennsylvania

August 13, 2012

### **INVITATION TO BID**

The Pennsylvania Fish and Boat Commission (Commission), hereby invites your bid proposal for the furnishing of all material, equipment, labor, and supplies for the performance of all work listed in the following specifications for the Lake Nessmuk Dam Spillway Upgrade Project.

The following are the technical specifications for Soils Testing Services during the Spillway Upgrade Project at the Lake Nessmuk Dam.

### **BACKGROUND AND PROJECT DESCRIPTION**

Lake Nessmuk Dam is a 50-ft high rolled earth dam constructed in 1968. It is approximately 870-ft long and impounds a 60-acre reservoir (Lake Nessmuk). The dam is owned and operated by the Commission. The Borough of Wellsboro leases land from the Commission for the Lake Nessmuk Park. It is classified as a high-hazard dam, located about one mile upstream from Wellsboro, Pennsylvania, see attached Location Map.

The Commission will be constructing a project to increase the dam's spillway capacity and embankment stability utilizing Commission in-house construction resources. The project involves excavating soil from the auxiliary spillway and placing the excavated soil on the downstream face of the dam. The soil placement is to be compacted to at least 95% unit weight and -4% to +2% optimal moisture content based on the standard proctor.

# AGENCY POINT OF CONTACT

The Professional's point of contact with the PFBC is:

Jerry Woomer, P.E. PA Fish and Boat Commission 450 Robinson Lane Bellefonte, PA 16823

Office Telephone: 814-359-5170 E-mail: gwoomer@pa.gov

### **OBJECTIVE AND SCOPE OF SERVICES**

The objective of these services is to provide soil testing services as follows:

- 1. Unified Soil Classification ASTM 2487
- 2. Standard Proctor Test ASTM D698
- 3. In Place Nuclear Density Test ASTM D6938

#### Item 1: Unified Soil Classification - ASTM D2487

The Professional shall conduct classification test(s) as directed by the Commission and in accordance with ASTM D2487.

The Commission will extract the sample(s) for testing and provide it to the Professional. The Professional will take possession of the sample(s) on site. Transportation costs of the sample(s) are incidental to Item 1. Expect initial classification test(s) to be directed prior to the start of excavation and earthfill activities. Additional samples will be taken during earthfill operations when the Professional will be onsite completing work associated with Item 3 and the Professional will take possession of the sample at the end of the work week.

The Commission will provide at least five (5) working days notice prior to the Professional taking possession of the initial sample. Once the Professional takes possession of the sample, testing shall be complete within three (3) working days; test results shall be faxed to the Commission upon completion of the test with hardcopies to follow.

#### Item 2: Standard Proctor Test - ASTM D698

The Professional shall conduct standard proctor test(s) as directed by the Commission and in accordance with ASTM D698.

The Commission will extract the sample(s) for testing and provide them to the Professional. The Professional will take possession of the sample(s) on site. Transportation costs of the sample(s) are incidental to Item 2. Expect initial proctor test(s) to be directed prior to the start of excavation and earthfill activities. Additional samples will be taken during earthfill operations when the Professional will be onsite completing work associated with Item 3 and the Professional will take possession of the sample at the end of the work week.

The Commission will provide at least five (5) working days notice prior to the Professional taking possession of the initial sample. Once the Professional takes possession of the sample, testing shall be complete within three (3) working days; test results shall be faxed to the Commission upon completion of the test with hardcopies to follow.

## Item 3: In Place Nuclear Density Test – ASTM D6938

The Professional shall provide a certified technician and calibrated nuclear density gauge in order to conduct in place nuclear density test(s) in accordance with ASTM D6938 and as follows:

- 1. The Commission will schedule the Professional for Item 3 work.
  - a. Payment for Item 3 will be based on the numbers of hours the technician is on site as directed by the Commission. The Professional will be compensated from the scheduled start time each day to one half (½) hour after the completion of the day's earthfill work.
  - b. The Commission reserves the right suspend Item 3 work for the day in the event weather prohibits earthfill operations; the Professional will be compensated for a minimum of four (4) hours/day when the Commission directs the technician to be on site for the day.
  - c. The Commission reserves the right to suspend Item 3 work without compensating the Professional based on weather forecast with at least one (1) working day notice.
- 2. Payment for Item 3 will be based on the numbers of hours the technician is on site and does not include travel time. In addition, all equipment and storage requirements needed for Item 3 work shall be included in the bid price.
- 3. Each lift of earthfill will be tested at least once.
- 4. The Professional will provide a hand-written report of each test to the Commission at the end of each work day and a typed report the following week. The time to produce the report(s) shall be included in the bid price for Item 3. The report shall included the following:
  - Date of issue.
  - 2. Project title and number.
  - 3. Name, address and telephone number of the professional.
  - 4. Dates and location of samples and tests or inspections.
  - 5. Names of individuals making the inspection or test.
  - 6. Designation of the Work and test method.
  - 7. Identification of product and specification section.
  - Complete inspection or test data.
  - 9. Test results and an interpretation of test results.
  - 10. Ambient conditions at the time of sample taking and testing.
  - 11. Comments or professional opinion as to whether inspected or tested work complies with Contract Document requirements.
  - 12. Name and signature of technician.
- 5. Provide the Commission with the following documentation:
  - 1. 1 copy of the Certifications for each technician that will be on site.
  - 2. 1 copy of the latest calibration and for each gauge that will be used.
- 6. The professional will be required to sign a log documenting arrival and departure times on site.

#### **ADMINISTRATIVE CONSIDERATIONS**

- 1. All travel and mobilization cost shall be included in the bid prices.
- 2. All administrative and clerical cost shall be included in the bid price.
- 3. Although a site visit is not required, it is recommended; contact the Agency Point of Contact to schedule a site visit.

#### **SCHEDULE**

The Professional shall start work upon notification from the Commission. The Professional will be given at least five (5) working days notice to take possession of the initial soil samples for classification and proctor testing. The excavation/earthfill phase of the project is tentatively scheduled to start in November 2012 with an estimated ten (10) to twelve (12) week duration with a potential winter shutdown.

The expected Project work hours are as follows:

Monday:

8:00 AM to 5:00 PM (1/2 hour lunch)

Tuesday through Thursday:

7:30 AM to 5:00 PM (1/2 hour lunch)

Friday:

Currently not scheduled, the Commission will notify

the Professional at least five (5) working days in

advance of Friday work

No work will be done on State Holidays

# **SCHEDULE OF UNIT PRICES**

# The project fee schedule is presented below:

<u>Item</u>	Fee Type	<u>Fee</u>
Item 1 - Unified Soil Classification - ASTM 2487	EACH	\$
Item 2 - Standard Proctor Test - ASTM D698	EACH	\$
Item 3 – In Place Nuclear Density Test – ASTM D6938	HOUR	\$
	Total =	\$

Invoices will be submitted a monthly basis.

