Daviess-Martin Joint County Parks & Recreation Department

West Boggs Lake

Property of
Lake and River Enhancement Section
Division of Fish and Wildlife/IDNR
402 W. Washington Street, W-273
Indianapolis, IN 46204

LARE Shoreline Project Construction Summary 2001

FOR FURTHER INFORMATION, CONTACT::

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GENERAL STATEMENT

This project was completed in a remarkably short time and with few deviations from plan. There were no significant alterations to the design in the field, except that shoreline lengths in the original plan were estimated from aerial photos, and the actual lengths were from field measurements. These minor variations cause slight differences in materials volume and labor costs from the estimates, but those differences are very small.

PROJECT GOALS

As is stated in the Design Summary, this project was developed to provide lake shore stabilization for two sections of shoreline that offered special challenges to other designs and methods. Both sites in the project were in areas difficult to access with excavation equipment, materials, etc. Both sites were also exhibiting rapid soil losses, making their stabilization a high priority for managers.

Simply stated, the goal was to provide a high level of protection to the wave impact areas of the sites, while eliminating the need for overland access, and while avoiding a lake level reduction that was undesirable from a fisheries management aspect.

RESULTS

At the end of this project, it appears that all goals were met or exceeded. A total of approximately 1800 feet of shoreline were stabilized, in two sites. The following photos show the end result of each area.

Photo 1: Site One In-Progress

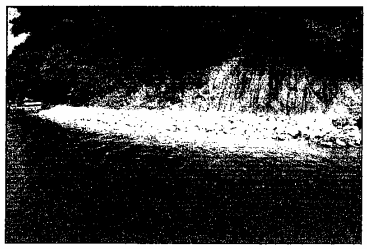


Photo 2: Site One As-Built

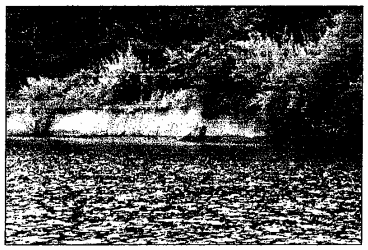


Photo 3: Site Two Pre-Construction

Photo 4: Site Two Post Construction

LESSONS LEARNED

Without question, the most significant lesson from this project concerns what could be termed the "Friction Of Regulation". We found that the system of regulation for this type of project is cumbersome and not conducive to efficiency. The use of the term "friction" to describe the process is intended here to indicate that the process itself tends to transfer energy and other resources away from the intended product, into the system itself. This friction loss occurs largely without compensating for the losses with a measurable benefit.

In projects of this type, in this state, a permit of some form must be obtained from three agencies. The Indiana Department of Natural Resources, Division of Water, Indiana Department of Environmental Management, and the U.S. Army Corps of Engineers. In this project, long delays were experienced with IDNR and the Corps of Engineers due to paperwork and correspondence simply not being responded to in a timely fashion. In the case of IDEM, a lesser delay was caused by their staff needing to glean information from an outside consultant, presumably because their staff did not posses the necessary expertise they felt was needed to evaluate the project.

Until changes are made in the system of regulation and permitting, plans for future projects will have to include allowances for time delays created by regulatory agencies and their personnel. A minimum of one year should be included in project schedules for this friction effect. Furthermore, costs associated with this friction loss, mostly from paid staff time, can not be ignored in budgeting projects.

AS-BUILT DRAWINGS

No significant changes were made to the project from the typical drawings. Those drawing are sufficient to serve as the as-built drawings, along with the site maps from the design summary. Copies of those drawings and maps are attached.

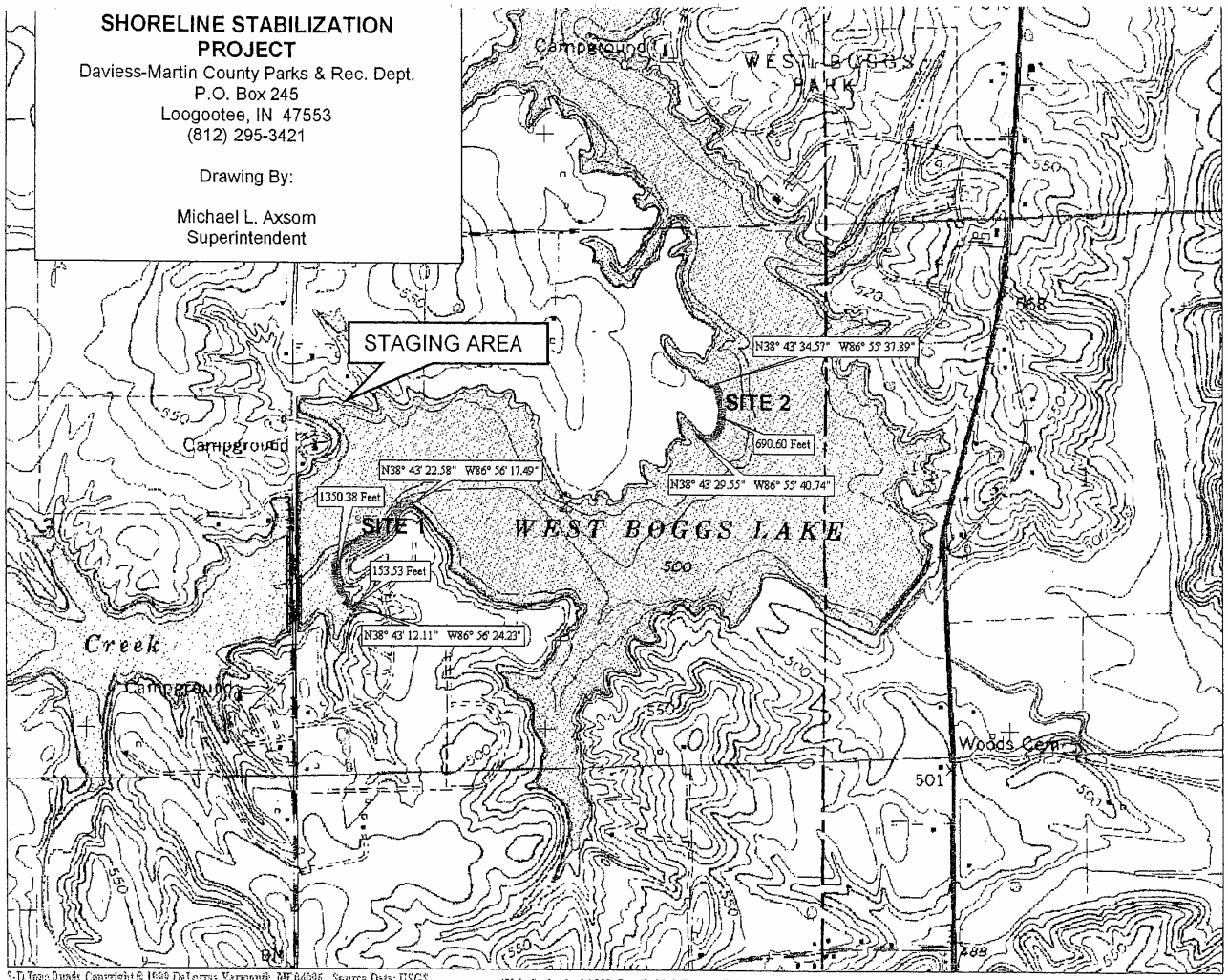
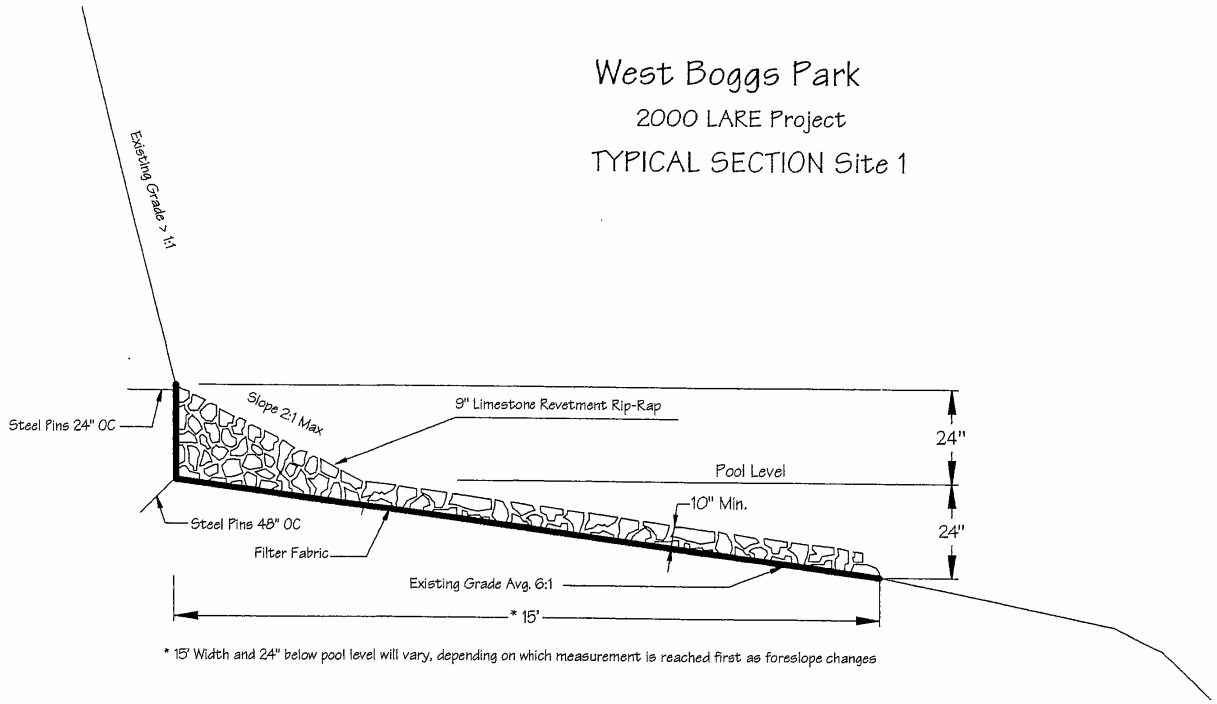

SHORELINE STABILIZATION PROJECT
Daviess-Martin County Parks & Rec. Dept.
P.O. Box 245
Loogootee, IN 47553
(812) 295-3421
Drawing By:
Michael L. Axsom
Superintendent
STAGING AREA
SITE 1
SITE 2
N38° 43' 22.58" W86° 56' 17.49"
1350.38 Feet
153.53 Feet
N38° 43' 12.11" W86° 56' 24.23"
N38° 43' 34.57" W86° 55' 37.89"
690.60 Feet
N38° 43' 29.55" W86° 55' 40.74"
WEST BOGGS LAKE
Campground
Creek
Woods Cem
501
500
550
520
S-D Topo Quads Copyright © 1999 DeLorme Yarmouth, ME04096 Source Data: USGS
450 ft Scale: 1 : 16,000 Detail: 13-6 Datum: WGS84

EXHIBIT C

West Boggs Park

2000 LARE Project

TYPICAL SECTION Site 1



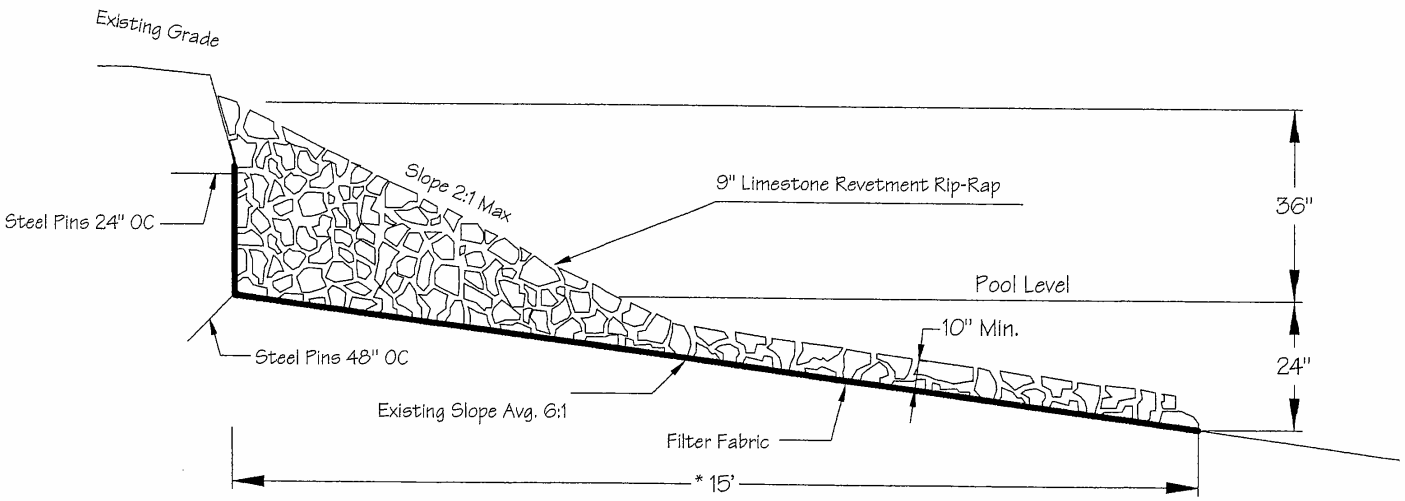
* 15' Width and 24" below pool level will vary, depending on which measurement is reached first as foreslope changes

EXHIBIT D

West Boggs Park

2000 LARE Project

TYPICAL SECTION Site 2



* 15' Width and 24" below pool level will vary, depending on which measurement is reached first as foreslope changes