

Date:

SCOPE OF SERVICES

for CN-12-05 NALLE GRADE STORM WATER PARK

BASIC SERVICES

Section 1. GENERAL SCOPE STATEMENT

The CONSULTANT shall provide and perform the following services, which shall constitute the GENERAL SCOPE of the BASIC SERVICES under the covenants, terms, and provisions of this SERVICE PROVIDER AGREEMENT.

The proposed project is located at 8350 Nalle Grade Road, North Fort Myers, FL 33990, with a driveway access to Nalle Road within the Bayshore Creek watershed. The drainage basin that originates within Charlotte County contributes heavily on to the problems within Bayshore Creek watershed in Lee County. Contributing area for Bayshore Creek watershed is approximately 3.1 square miles in Lee County and 12 square miles in Charlotte County. The drainage within this part of the county is somewhat complex. Bayshore Creek drainage interacts with Popash Creek drainage depending on water levels and rainfall. Recently, the county conducted a master plan level study of surface water management in North Fort Myers area which included the Bayshore Creek watershed. The subject project is one of the recommended projects in the master plan. The master plan can be found under the surface water section on natural resources web site at

<http://www.lee-county.com/gov/dept/NaturalResources/SurfaceWater/Pages/WatershedTopics.aspx>

In order to meet the objectives of this project it is expected to include a higher resolution and more refined analysis of the watershed within the Bayshore Creek. The purpose of this project is to design, permit and construct a facility that provides water quality benefits, enhanced flood protection, wildlife habitat and recreation opportunities to the community. The project will include an overall assessment of the existing conditions of the proposed location, alternative analysis of multiple preliminary design concepts to achieve the goals prior to developing detailed plans and specifications.

Section 2. TASKS

- The study boundary shall at least cover both Bayshore Creek and Popash Creek watersheds and their tributaries.
- Review basin boundaries developed by other consultants for adequacy and accuracy.
- Delineate watershed and subwatershed boundaries.
- While water quality treatment, flood control and drainage will become main focus of the study, issues with regard to, wetland preservation, protection of wild life, recreation, and water conservation should also be addressed.
- Review of the existing surface water management plans, basin boundaries, flood plain and watershed maps, aerial maps, LIDAR maps, FEMA maps, and elevation contour maps within the region to identify issues of concern.
- Hold public meetings to obtain public input and comments.

- An analysis of past flood events to determine the need for flood control. Solutions to flood control alternatives may include an above ground reservoir with a pumping system.
- Boundary (if necessary) and topographic survey, geotechnical exploration, and other field explorations to collect pertinent data in the project area.
- Develop hydraulic/hydrologic numerical models and methodologies to evaluate flood risks and savings.
- Develop an integrated recreation and storm water elements into the design.
- Identify project needs and associated costs for implementation. Also estimate maintenance and operational costs.
- Review water quality data to identify the parameters that need improvements and develop a design to reduce nutrients and enhance water quality.
- Nutrient load reduction analysis using DEP approved methodology for TMDL compliance.
- Identify water based recreation opportunities for this location and incorporate them into the design.
- Development of a detail design acceptable to the staff and obtain necessary permits for construction.
- Develop construction plans and specifications necessary for bidding and implementation of the project.
- Assist the county staff in obtaining grant funding for the project.