

MEMORANDUM

TO: Governing Board Members
FROM: Deena Reppen, Deputy Executive Director, Government and Public Affairs
DATE: January 15, 2009
SUBJECT: Collier County-Stormwater Improvement Projects FY09 – Contract No. 4600001684

Background: The Big Cypress Basin Board budget has earmarked funding for FY09 for implementation of watershed restoration projects that benefit the Naples Bay Initiative and the Big Cypress Initiative. Under these Initiatives are several projects addressing important water restoration and management issues in Collier County. The goals of the Initiative are to:

- Construct stormwater treatment structures/facilities that improve polluted runoff and
- Improve the hydrology (quantity, timing and distribution) associated with freshwater discharges to the estuaries.

Improvement #1: Lely Canal Phase 1B North - Construction between Rattlesnake-Hammock Rd. and US 41

This project is part of the Lely Area Stormwater Improvement Projects (LASIP) that will provide a comprehensive stormwater treatment and flood mitigation for the East Naples area, which has experienced an increasing level of drainage problems as growth has continued in the area. The drainage area of LASIP consists of 11,135 acres with the Lely Canal watershed that discharges into the estuarine coastal zone of Dollar Bay and Rookery Bay.

The construction of the LASIP projects within the Lely Canal Basin started in 2006. This phase of the project consists of construction of the channel to the designed cross section with gabions on the banks, increasing the flow capacity. It is a continuation of the construction of the Lely Branch Canal that feeds into the Lely Main.

Improvement #2: Gateway Triangle - Completion of Construction of Phase II

The Gateway Triangle is a highly urbanized residential/commercial area adjacent to Naples Bay. The existing stormwater management facility is old, inadequate, and unable to provide relief from urban flooding. Uncontrolled and untreated stormwater runoff continues to carry heavy loads of pollutants directly into Naples Bay. In 2001, the District and Collier County sponsored a stormwater retrofit project involving the installation of outlet control and backflow prevention valves, but much more needs to be done. The purpose of this project is to attenuate flooding by reducing flows and durations of water events in the Gateway Triangle Area while improving water quality of runoff ultimately discharged to Naples Bay.

The project will provide additional water quality improvements by draining a large portion of the area to a detention pond for treatment and by increasing discharge rates to reduce flooding with help of a pump station. The pond will normally discharge per gravity to the US41 stormwater system as it does currently. If the inflow to the pond exceeds the rate of gravity discharge, the water surface in the pond will rise to a level (2.25' NGVD) that will activate one of three pumps. Should the level in the pond continue to rise to a higher stage a second pump will be turned on. A third pump will act as a back-up.

Improvement #3: Gordon River Water Quality Park - Construction of Pump Station & Wetland Creation

Collier County is currently constructing the Gordon River Water Quality Park (aka Freedom Park) which is a water quality treatment park that will help "Save the Naples Bay" from harmful pollutants and alleviate flooding problems in surrounding areas. The park will also provide a number of passive recreational, habitat protection and educational uses.

The purpose of the project is to develop a stormwater management facility that incorporates flood protection, water quality treatment, and passive recreation. The project will involve the creation of wetland littoral zones and construction of stormwater facilities to provide attenuation and treatment for flows discharging into the Gordon River and Naples Bay. Approximately 15 acres of newly constructed wetlands will be created for the water quality portion of the lakes and cascading pond system.

How this helps meet the District's 10-year Strategic Plan:

Construction of stormwater management system improvements meets the District's 10-Year Strategic Plan to restore watersheds and estuaries through local initiatives, and to decrease flood damages through proactive flood management planning.

Funding Source:

The total estimated cost of the projects for FY09 is \$8,900,000, of which the District's contribution is not to exceed \$1,500,000, for which dedicated BCB funds are budgeted for FY09.

This Board item impacts what areas of the District, both resource areas and geography:

The project benefits the water resources of the Naples Bay and the Ten Thousand Island coastal watersheds.

What concerns could this Board item raise?

The Board may be concerned about the County's ability to complete this contract within the fiscal year. Individual projects were identified, scoped and budgeted to fit within the coming fiscal year. The Big Cypress Basin staff is confident that these projects will be completed within FY09.

Why should the Governing Board approve this item?

Approval of this contract will ensure that Collier County will have the funding resources needed to construct stormwater improvements in FY09 and to provide flood protection and maintenance in the County's secondary drainage system.

If you have any questions, please do not hesitate to contact me at ext. 6232.

DR/mg