M E M O R A N D U M

TO: Governing Board Members

FROM: George L. Horne, Deputy Executive Director, Operations & Maintenance

DATE: July 03, 2006

SUBJECT: **3600001279-S-135 Pump Station Hardening, Microwave Tower Telecommunications and Equipment Upgrades**

Background
Pumping Station S-135, a pumping plant and navigational lock, is part of a system of forward pumping stations, is located on the Herbert Hoover Dike rim, serving the northwest corner of the Martin County, Florida basin. S-135 is located on the Northeast portion of Lake Okeechobee, lake-ward of Highway 44, approximately 15 miles southeast of Okeechobee City, Florida. S-135 is upstream of rim-canal L-47-1 and down stream of Lake Okeechobee. In the past, S-135 Pump Station was designed and constructed, to meet then current structural and operational design criteria. This project is part of an ongoing Operations & Maintenance Department pump station hardening, monitoring and operational electronics, preventative maintenance programs required to harden, modernize and upgrade older pump station buildings, equipment and support facilities.

The term 'hardening' is a generic term used to describe strengthening, to hurricane force wind-loading codes and standards, of a facility's structural system (framing, walls and roof system), doors, openings and ventilation system. The term 'electronics' refers to the addition to the station of a network microwave and telecommunications tower, and supporting electronic monitoring and operation equipment.

How this helps meet the District's Mission
The District's mission of flood control and protection of the environment will be enhanced by this project, by improving operational efficiency and will provide decreases in equipment and man-hour costs, repairs and maintenance. The upgrades to S-135 to be provided by this contract will change the current petroleum-based pump bearing lubrication system, to an operationally-efficient and environmentally-friendly water-based lubrication system. The tower and electronics portions of this contract, will add efficient microwave telecommunication equipment, to enable remote monitoring and control of the pump station operations and performance.

The bearing system upgrades, by this project, will feature standardized parts, which will provide for a more efficient maintenance and spare parts stockage program. Addition of the remote electronics station monitoring and operation features, will result in substantial savings of man-hours and equipment hours, currently required for on-site, hands-on station monitoring and operation.

Funding Source:
The lowest responsive and responsible bidder is Worth Contracting, Inc. with a total amount of $1,880,779.02, of which $50,000 is budgeted using ad valorem funds and the remainder is subject to Governing Board approval of the FY07-FY08 budget(s).

This Board item impacts what areas of the District, both resource areas and geography:
This project will improve operating efficiencies, reduce operating cost, and further enhance flood protection in Martin and St. Lucie Counties, as well as at adjacent structures and areas.

What concerns could this Board item raise?
The initial costs and time required to harden and upgrade S-135 per this contract, by necessity and schedule, will require some multi-year funding. However, the overall benefits of increased reliability and operational efficiency will more than offset any concerns the Governing Board may have in regards to the management and execution of this project.

Why should the Governing Board approve this item?
This project is part of an on-going District effort to provide pump station operational reliability, and add remote monitoring/control capabilities at all major flood control pump stations. This project will enhance the reliability of an essential flood control facility.

GLH/lw