

Pirate Harbor MSBU for wastewater expansion

Background

In February 2006, the Charlotte County Board of County Commissioners (CCBCC) approved the creation of four Municipal Benefit Service Units (MSBUs) for sewer expansion. At the request of property owners, one of these is Pirate Harbor. On April 25, the BCC approved the initial resolution for these MSBUs, including estimated costs.

Charlotte County Utilities (CCU) is attempting to secure State Revolving Fund (SRF) funding for the Pirate Harbor sewer expansion project. If successful, the SRF funding would finance the upfront costs of the project, and these funds would be repaid by the property owners through the MSBU.

Boyle Engineering, an engineering consulting firm, was awarded the contract for the design of the Pirate Harbor sewer expansion projects. The preliminary design is complete and the application for SRF funding has been submitted to the Florida Department of Environmental Protection (FDEP).

The County is proceeding with the final design phase, to be followed by permitting and construction. If SRF funding is received and the project is approved by the CCBCC, final design could be completed by October 2006. It would take approximately three months to secure a contractor through our Purchasing department. In the best-case scenario, construction could begin in January 2007 and be completed in late 2007.

Preliminary design plans call for the installation of wastewater infrastructure throughout Pirate Harbor; one 4-inch, low pressure sewer (LPS) main per street, on the side opposite the water main, with a connection provided for each residential lot.

To minimize disturbance to the surrounding area, the installation of the LPS lines would be accomplished through "horizontal directional drilling." Along the right of way, approximately every 400 to 600 feet, the contractor would remove a small area of sod and drill horizontally underground to a connection point. The pipes would then be welded together and the contractor would replace the sod once the line is in place. A service line would be provided for every lot that is included in the MSBU.

Once the infrastructure is in place, existing homeowners would have one year to connect to the CCU collection system. New construction would be required to connect as soon as the home is built.

What is a Municipal Service Benefit Unit (MSBU)?

MSBUs are created by County ordinance as a funding mechanism to provide specific services to defined areas. The major benefit is that the costs for services within a specific area are evenly assessed on each property within the benefit unit. In the case of Pirate Harbor, an MSBU has been created specifically to fund the installation of sewer infrastructure in this development.

In an MSBU, revenue is derived from non-ad valorem assessments (literally, “no value,” meaning the assessment is not based on the value of the individual properties). This assessment is certified to the tax collector for collection and appears on your tax bill as a separate line item. All monies collected within a specific MSBU must be spent within that MSBU. Funds cannot be transferred or spent on a different area.

The annual cost of the projects in each MSBU is divided by the total number of Equivalent Residential Units (ERUs) within that MSBU, resulting in an assessment per ERU. ERUs may be calculated based on front footage, lots, acreage or value. The method used for each MSBU is defined in its resolution.

What is Low Pressure Sewer (LPS)?

A Low Pressure Sewer (LPS) system consists of a holding tank and a small, submersible pump. A typical residential LPS tank is 900 gallons. The tank is installed in the property’s yard, below the ground surface. Wastewater from the tank is pumped automatically through a small pressure line that transports it to a lift station and then pumps it to the wastewater plant for treatment.

Each LPS system includes an alarm to alert the customer if there is a problem. If the alarm sounds, the resident is asked to push the reset button and call the number on the control panel. A CCU LPS technician is immediately dispatched to investigate the cause of the alarm and make any necessary repairs. In the event of a power failure, the LPS pump will not operate. However, reserve capacity in the holding tank allows up to one day of normal water usage. If a long-term power failure should occur, the ability to use the system will be reduced and continued use could result in a back up of sewage into the house. In such emergencies (such as after Hurricane Charley) CCU staff has a pumping truck and can go customer to customer to ensure the system remains operational.

Why LPS for Pirate Harbor?

CCU selected LPS for the Pirate Harbor MSBU in an effort to keep costs low for property owners. Because each LPS unit includes its own small pump, this minimizes the number of lift stations required, reducing overall project costs. It is expected that only one lift station will be required for Pirate Harbor. Additionally, there are many existing homes in Pirate Harbor and CCU will be able to convert many of the existing septic systems to LPS, which will also result in savings for the property owners.

As part of the Pirate Harbor MSBU, the County will install all necessary wastewater collection infrastructures, including a service connection point for each property. Each property owner will be responsible for securing the installation of an individual LPS system, which CCU will then operate and maintain as part of its wastewater system.

What are my LPS options?

There are several options for LPS installation, depending on your specific situation. At the time your connection fees are paid, CCU will make an appointment to visit your home and determine which option will work best for you.

Ideally, the system should be located in front of the home, opposite the driveway and at least five feet from the house, to allow access to the system for periodic maintenance and repair. A control panel must also be installed, ideally, within sight of the tank. Finally, a dedicated, 20 amp electric circuit must be available for the LPS system. This must be installed by a licensed electrician and will require a permit.

1. New construction, no septic tank: A complete LPS system must be installed. CCU will provide a list of approved LPS contractors. Your builder will work with one of these contractors to ensure the system is installed properly. CCU will inspect once the installation is complete. In today's dollars, a new LPS system would cost approximately \$2,800 to \$3,500, though these costs can and do fluctuate over time.

2. Existing home, with septic tank: CCU will handle the conversion to LPS or the installation of a new LPS system, as needed. The homeowner will be responsible for procuring a licensed electrician to install the dedicated circuit and control panel. CCU will pump out the septic system before beginning the conversion or installation process.

2a. If the existing septic system is in the proper location, is in good condition, and has at least six inches of ground cover over the top of the tank, CCU can convert the system to LPS by inserting a pump chamber inside the existing tank. The existing drainfield is abandoned. This process takes about three hours, and the system should remain in service throughout the process. In today's dollars, this option would cost approximately \$2,000.

2b. If the required six inches of ground cover is not available, CCU can dig a hole next to the existing tank and install a separate, 200-gallon pump chamber, which is connected to the tank. This process also takes several hours and would cost approximately \$2,500 in today's dollars.

2c. If the existing tank is an inaccessible location, CCU may need to abandon the existing tank and install a new LPS system. In this scenario, CCU would crush and fill the existing tank and install a new tank in an appropriate location. In today's dollars, a new LPS system would cost approximately \$2,800 to \$3,500. Additionally, the customer would be responsible for contracting a licensed plumber to reroute the pipes from the home to the new LPS site.

2d. If the existing tank is not in usable condition, CCU may need to install a new LPS system. In this scenario, CCU would remove the existing septic system and replace it with a new LPS system, using the same hole. If this were not possible, CCU would crush and fill the existing tank and install a new tank in an appropriate location. In today's dollars, a new LPS system would cost approximately \$2,800 to \$3,500. Additionally, the customer would be responsible for contracting a licensed plumber to reroute the pipes from the home to the new LPS site.

If you plan to build a new home before the wastewater infrastructure is in place, the Health Department will expect you to install a septic system now and connect to CCU

infrastructure once it's available. Depending on the timing of construction, exceptions may be possible. Please contact CCU if you find yourself in this situation and we will try to help.

What are the estimated MSBU costs?

Costs provided at this time are preliminary and subject to change based on interest rates, the securing of SRF funding and escalating construction costs, among other things. The estimated total project costs were approved by the BCC at its April 25 meeting.

The total project cost for infrastructure installation is estimated at \$3.1 million (including interest over 20 years). If this figure remains unchanged, the cost to individual property owners would be \$403.24 per year for 20 years, levied as an MSBU assessment on the tax bill. Each year until construction is complete, CCU will "true up" the estimated costs, including interest rates, design, materials and construction costs, to ensure you are paying your actual share, no more and no less.

The MSBU assessment is to cover the cost of the infrastructure, up to the service connection. Additional costs associated with LPS installation/conversion (as estimated above), as well as CCU connection fees, are also the responsibility of the property owner.

Can I pay my portion up-front? What are my payment options?

We recognize that many property owners would prefer to pay their assessment up front and in full, to avoid the accumulation of interest charges. For the Pirate Harbor MSBU, property owners will be required to pay the first year's assessment, including interest, through their tax bill. After the first year, prepayments will be allowed for those interested; property owners will be allowed to pay the balance in full and without interest charges on the remaining portion. If the cost estimates remain unchanged, this amount would be approximately \$5,300.

Important dates:

As part of the MSBU process, public hearings are held to allow property owners to express their opinions about the project to the Charlotte County Board of County Commissioners. We encourage you to attend. Ultimately, it is the CBBCC that must vote to approve or deny these projects, thus, if you have something to say, it is important that the Commissioners have the opportunity to hear from you.

MSBU Public Hearing

Wednesday, July 12, 5:01 p.m.
Murdock Administration Building, Room #119

If you have any further questions about the Pirate Harbor sewer expansion project, please contact Leigh Sprimont, CCU Community Relations Manager, at (941) 764-4520 or via e-mail at leigh.sprimont@charlottefl.com.