



## INDIAN RIVER COUNTY, FLORIDA DEPARTMENT OF UTILITY SERVICES

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**Date:** December 9, 2016  
**To:** Jason E. Brown, County Administrator  
**From:** Vincent Burke, P.E., Director of Utility Services  
**Prepared By:** Arjuna Weragoda, P.E., Capital Projects Manager  
**Subject:** North Sebastian Septic to Sewer Approval of Financing Mechanism – Phase 1

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### **DESCRIPTIONS AND CONDITIONS:**

On August 20, 2013, the Indian River County Board of County Commissioners (BCC) approved Work Order No. 6 for Masteller and Moler, Inc. (M&M) to provide professional services investigating the feasibility of installing centralized sewer services in the North Sebastian area. On February 11, 2014, the results of the study were presented to the BCC, and the BCC directed staff to present the findings to the City of Sebastian (COS/City). On February 12, 2014, staff presented the findings to the COS's city council, and a follow-up workshop was held at the COS chambers on March 19, 2014. Staff also presented the information to the Friends of Sebastian River on May 27, 2014. On October 21, 2014, the BCC approved Work Order No. 7 for M&M to provide professional services in relation to designing, permitting and preparing construction plans. On November 23, 2016, staff presented project costs and potential financing options to the COS city council.

The purpose of the subject agenda is to outline possible financing options that will enable benefitting property owners to connect to a central sewer system in a way that encourages maximum participation.

### **ANALYSIS/ENGINEERING:**

M&M evaluated four (4) alternatives in the sewer feasibility study for the north Sebastian area. The study recommended the gravity collection alternative as the preferred method for a centralized sewer system in this area. The construction of the centralized sewer for residential and commercial properties in the north Sebastian area will be accomplished in a phased approach. The commercial area east of US Highway 1 has been designed and is to be constructed in the first phase. The BCC authorized staff to pursue this project, pending successful grant application. Staff applied for grant awards that would help defray some of the costs of installing such a system. The county was successful in securing a grant in July 2016 through the Fiscal Year 2015-2016 Cost Share Program administered by the St. Johns River Water Management District (SJRWMD). This grant covers 33% of the construction cost. Therefore, the remaining 67% of the construction cost must be funded via other sources. Staff is ready to bid the project but needs approval on the financing mechanism before doing so. A separate agenda item will be presented for the BCC's consideration to retain M&M for bidding and construction phase assistance.

Other funding sources are required to further reduce the construction and connection costs in order to minimize the financial burden on property owners and to entice them to connect to the centralized system.

## **FINANCING/FUNDING:**

Staff reached out to the COS on this project as they are a major stakeholder. The COS has voiced their willingness to support the county's efforts for a centralized sewer system but has cautioned that the capital portion of the project should not be borne by the COS but rather by the county and/or the county's utility. On November 23, 2016, the COS city council directed their city manager to engage in discussions with the county administrator on how best to proceed for connecting property owners (once the project is built) such as using the COS's Community Redevelopment Area (CRA) funds or the COS's grant from the Indian River Lagoon Council (IRLC). Such financial details need to be approved. A city council meeting to be held Wednesday, December 14, 2016, proposes to use the \$100,000 IRLC grant and the remaining \$230,000 in the city's septic to sewer fund. Within the program it is proposed to allocate \$10,000 per qualified applicant from the City's CRA funds and \$5,000 per applicant from the Indian River Lagoon Council grant for a total of \$15,000 per applicant.

The purpose of the presentation to the COS city council on November 23, 2016, and to the BCC on December 20, 2016, is to illustrate estimated costs associated with installing centralized sewer for phase 1. Such costs can be divided into two main categories: 1) project costs and 2) connection costs.

Project costs represent the totality of *all* the costs that go into the design and building of the project. The "soft costs" include tasks such as engineering design, survey work, and permit fees. The majority of the remaining costs are the construction costs that include all material and labor needed to build the project. Simply, construction costs plus soft costs equals project cost. The SJRWMD grant is only tied to the construction costs; and as such, all soft costs have been paid for using utility funding. The connection costs represent those fees necessary to connect to a system once it is built. They include costs such as running a line on a property from a structure to the roadway, abandonment of the septic tank, and impact fees. All users who connect to the system must pay for their impact on the system, which includes the demand of their connection on transmission mains and treatment plant capacity. Impact fees are in addition to construction costs.

Other funding options such as Optional Sales Tax and Utility Funds were considered to assist in reducing the financial impact to commercial property owners.

In Phase 1, the costs per benefitting parcel were evaluated under the following criteria:

- Hydraulic Fair Share (converted to potential ERUs)
- Linear footage of parcel fronting the sewer main
- Square footage or area of the benefitting parcel

M&M's proposal for Commercial Area Phase I tabulated the number of potential ERUs that could come on-line based on zoning, underlining land use and past site plan applications for vacant parcels. Where applicable, for parcels that had structures, existing water usage and ERUs currently allocated were utilized. Staff recommends the BCC consider the following funding mechanism for North Sebastian Septic to Sewer Phase I.

Note this breakdown is in draft form, subject to change, and not a final determination.

**NORTH SEBASTIAN PHASE I - SEPTIC TO SEWER**

**Project Specifics**

|   | Total               | Unincorporated County       | City of Sebastian                     | Comments                                |                                |
|---|---------------------|-----------------------------|---------------------------------------|---|--------------------------------|
| Total Number of Parcels =   | 61                  | 19                          | 42                                    |   |                                |
| Total Number of Potential ERU's =                                       | 228                 | 150                         | 78                                    |   |                                |
| Total Square Footage (ft2 ) =   | 3096343             | 1711609                     | 1384734                               |   |                                |
| Total Linear Footage of sewer main (LF) =                               | 11980               | 4510                        | 7470                                  |   |                                |
| Average Share Combining ERU, SF & LF =                                  |                     | 53%                         | 47%                                   |   |                                |
| Fair Share of the Construction Cost =                                   |                     | \$1,040,843                 | \$926,551                             |   |                                |
| Design, permitting & 100% construction plans                            | \$155,220.00        |                             |                                       | Funded by Indian River County-Utilities |                                |
| Bidding/Construction Phase Assistance                                   | \$125,000.00        |                             |                                       | Funded by Indian River County-Utilities |                                |
|   |                     | <b>Phase I Project Cost</b> | <b>Per Hydraulic Share or Per ERU</b> | <b>Per Square Footage (ft2 )</b>        | <b>Per Linear Footage (LF)</b> |
|   | <b>Construction</b> | \$1,967,394.70              | \$8,628.92                            | \$0.64                                  | \$164.22                       |
| <b>Construction Cost Breakdown :</b>                                    |                     |                             |                                       |   |                                |
| Cost Share Grant (33% of Construction Cost Up to a of Max \$649,240.00) |                     | \$649,240                   | \$2,847.54                            | \$0.2097                                | \$54.19                        |
| Utility Assessment Fund (473)   |                     | \$393,479                   | \$1,725.78                            | \$0.1271                                | \$32.84                        |
| Sales Tax Contribution  |                     | \$393,479                   | \$1,725.78                            | \$0.1271                                | \$32.84                        |
| <b>Total Other Sources</b>  |                     | <b>\$1,436,198</b>          | <b>\$6,299.11</b>                     | <b>\$0.4638</b>                         | <b>\$119.88</b>                |
| <b>Assessment- (Owner) Portion</b>                                      |                     | <b>\$531,197</b>            | <b>\$2,330</b>                        | <b>\$0.1716</b>                         | <b>\$44.34</b>                 |
| <b>Impact Fee Breakdown</b>   |                     |                             |                                       |   |                                |
| Impact Fee (100%) @ (228* \$2,796) =                                    | \$637,488           |                             | \$2,796.00                            |   |                                |
|   |                     | Unincorporated - County     | COS                                   |   |                                |
| Less: City of Sebastian: CRA, Lagoon Council Grant & City Match         | \$218,088           | \$0.00                      | \$2,796.00                            |   |                                |
| Less: Sales Tax Contribution of 75%                                     | \$314,550           | \$2,097.00                  | \$0.00                                |   |                                |
| <b>Connection Charges (Owner Portion)</b>                               | <b>\$104,850</b>    | \$699                       | \$0.00                                |   |                                |
| <b>COST OF IMPACT FEES TO BE PAID BY OWNER=</b>                         |                     | \$699                       | \$0.00                                |   |                                |

|   |                |                |
|---|----------------|----------------|
| <b>TOTAL COST TO BE PAID BY OWNER, PER ERU=</b> | <b>\$3,029</b> | <b>\$2,330</b> |
|---|----------------|----------------|

**Construction Costs**

Of the \$1.97M construction cost, the grant funding, optional sales tax assistance and utility fund contribution reduce the remaining costs to \$531,197. The other funding sources represent approximately 73% of the construction costs. Dividing the remaining owner portion number by the potential ERUs to be served equates to a per-ERU cost estimate of \$2,330 to all properties (inside and outside the COS).

|                                    |                   |                       |
|------------------------------------|-------------------|-----------------------|
| Construction Cost                  |                   | \$1,967,394.70        |
|                                    | <b>Percentage</b> | <b>Amount</b>         |
| Cost Share Grant                   | 33%               | \$649,240.00          |
| Utility Assessment Fund (473)      | 20%               | \$393,479.00          |
| Sales Tax Contribution             | 20%               | \$393,479.00          |
| <b>Total Other Sources</b>         | <b>73%</b>        | <b>\$1,436,198.00</b> |
| <b>Assessment- (Owner) Portion</b> |                   | <b>\$531,197.00</b>   |

**Impact Fee Costs**

An estimated 228 ERUs are to be connected from existing structures and future growth. Of that number, it is estimated that 78 ERUs are inside the COS and 150 are in unincorporated county. Assuming a full impact fee demand of \$637,488, these costs will affect property owners, depending on their location.

As noted prior, the city council is meeting as of the writing of this agenda to allocate CRA funds, COS funds and IRLC grants to qualified property owners in assist with connection costs. It is feasible that a qualified property owner could have their sewer impact fee cost covered by the COS’s funding sources so that their only obligation would be the estimated reduced capital recovery costs of \$2,330/ERU. County residents would be required to pay a portion of the impact fee as shown below:

|   |                   |               |
|---|-------------------|---------------|
| <b>Impact Fee</b> (228 ERU x \$2,796/ERU) |                   | \$637,488     |
|   | <b>Percentage</b> | <b>Amount</b> |
| <b>IRC Properties-150 ERUs</b>            |                   |               |
| Sales Tax Contribution (\$2,076/ERU)      | 75%               | \$314,550*    |
| Qualified Owners (\$699/ERU)              | 25%               | \$104,850     |
|   |                   |               |
| <b>City of Sebastian-78 ERUs</b>          |                   |               |
| City Funds (CRA, IRLC, COS match)         | 100%              | \$218,088     |
| Qualified Owner                           | 0%                | \$ 0          |

\* Illustration is for 75% subsidy but other options exist.

**SCHEDULE/TIMELINE:**

On October 4, 2016, the Board approved the SJRWMD cost share funding agreement for the septic to sewer project for a maximum reimbursement of up to \$649,020.35, or 33% of the construction cost of the project. There are some key dates/milestones to remember:

| Date               | Description   |
|--------------------|---|
| 12/20/2016         | BCC approve funding mechanism                                 |
| 12/2016 to 04/2017 | Bid project   |
| 05/2017            | Begin project if a responsive and responsible bidder submits* |
| 05/2018            | Finish Project**  |
| Summer 2018        | Begin to connect property owners                              |

\* The grant agreement specifically states: *“If the construction, which is eligible for District reimbursement, does not begin before June 30, 2017, or if the first invoice for non-construction projects is not submitted by June 30, 2017, the cost-share agreement will be subject to termination and the funds subject to reallocation.”*

\*\* The grant agreement terminates on June 30, 2018. There is an option for extension, but such requests must be made on or before April 1, 2018. There is a tight timeline imposed by the SJRWMD to expedite completion of the work.

Attachment 4 contains the SJRWMD cost share grant.

**CONNECTIONS:**

In addition to determining the financing mechanism for the project, a connection policy should be revisited.

**New Construction**

The County’s land development regulations (LDR) spell out the requirements for new development as it relates to utility connections. Section 918.05 - Water and Wastewater Connection Requirements for New Development has a connection matrix (as shown in table 3.A.16 and 3.B.19). For parcels inside the Urban Service Area (USA) where centralized water and/or sewer services exist, the LDRs require that those parcels connect to the system. No changes to the LDR section 918.05 are proposed.

**Existing Structures**

In order to assist in the financial viability of this project, the BCC should consider whether or not mandatory connections are applicable. Awaiting voluntary connections would transfer the full financial obligation of the project onto the utility for an unspecified amount of time. Unused capacity in the system would cost the utility more in terms of maintenance or premature replacement costs. Having sewer lines designed and built for optimum build-out but presently underutilized due to limited demand can cause flows to stagnate, build-up of solids, blockages due to hardening of material deposits and unwanted methane or decomposition gases in partially full lines. Such gases wreak havoc on associated parts and pieces of a centralized system due to their corrosive nature.

The sustainability of a project such as this depends on the number of connections achieved after the centralized sewer has been installed. Out of 61 parcels in the Phase 1 area, 38 parcels have structures currently served by on-site treatment and disposal systems (OSTDS), otherwise known as septic tanks. The 38 parcels would need to connect to the proposed centralized system in order to realize the approximate annual elimination of 2,190 pounds of Total Nitrogen (TN) and 365 pounds of Total Phosphorous (TP).

Presently, if their tanks fail or need repair, a Florida Department of Health (FDOH) permit is required. A FDOH permit is issued if no such centralized system is in place. However, should the project be built, any future septic tank failures along US Highway 1 within the project area could be required to connect in concert with the following local and state laws:

**IRC Ordinance Section 201.03** – Connection with Sewer System required. *“The owner of each lot or parcel of land within the county shall cause the plumbing of any building, mobile home, or trailer thereon to be*

*connected with the public sewer facilities of the sewer system of the county or franchised private utility system upon approval of the department, and use such facilities within sixty (60) days following notification to do so by the department. All such connections shall be made in accordance with the rules and regulations which shall be adopted from time to time by the county. No connection of existing structures will be required to be made unless capacity is available.”*

The BCC should consider whether this ordinance applies to those parcels that have an active and working septic tank, yet would be able to connect to a newly constructed centralized system. The COS has the following:

**COS Ordinance Section 102.33**-Connection required. *“The owner of improved real property wherein either sewer collection service or water distribution service, or both services, becomes available, shall cause the connections of such available services to the improvements on the premises within 30 days of receipt of notification that the utility has installed the necessary meters. The city council may extend this 30-day period for good cause upon written request by the owner.”*

According to **Florida Statutes Title XXIX, Chapter 381.00655**: *(1)(a) The owner of a properly functioning onsite sewage treatment and disposal system, excluding an approved onsite graywater system, must connect the system or the building’s plumbing to an available publicly owned or investor-owned sewerage system within 365 days after written notification by the owner of the publicly owned or investor-owned sewerage system that the system is available for connection.*

Note: There are some exceptions to this connection requirement under 381.0655 (2)(a-c). See Attachment 3 for the statute language.

This policy would be a new approach in dealing with existing structures from what has been practiced in the past. The upside to the new approach would be a policy that could allow a utility to thoughtfully prepare projects, pursue additional grants and more realistically budget a project based on a set of known variables in order to determine costs, financing options and funding solutions. The down side of a new approach will be those property owners that do not have the financial wherewithal to pay for these improvements, or the perception that their local government is forcing restrictive obligations onto them.

### **FINANCING:**

Currently, any utility assessment project can be financed at a 5% annual interest rate. This rate is set by the BCC each January. Staff would propose two options for Board consideration: 1) a reduction of the annual interest rate and 2) a sliding scale cost subsidy.

The annual interest rate of 5% for assessment projects has been in place for several years and was reduced during the great recession time period. The reduction was to assist property owners who may have been affected by the economic downturn. An additional reduction for just the Phase 1 S2S project from a 5% to a 2% annual interest rate is proposed so that borrowing costs to the property owners is as low as possible while still allowing the utility to cover nominal administrative and financial service costs needed to service these loans. For comparative purposes, staff looked at the State of Florida revolving fund program. A State Revolving Fund (SRF) is a fund administered by a U.S. state for the purpose of providing low-interest loans for investments in water and sanitation infrastructure (e.g., sewage treatment, stormwater management facilities, drinking water treatment), as well as for the implementation of nonpoint source pollution control and estuary protection projects. SRF receives its initial capital from federal grants and state contributions. The current rate is just below 2%, therefore an interest rate of 2% was utilized in the calculations.

The sliding scale impact free cost subsidy could be used to help entice property owners to connect sooner. Such a program may take place over a five-year period. Below is a hypothetical scenario whereby all of the subsidy funds would be available to qualified property owners in the first year. As time goes by, funding

availability is reduced by 20% for each and every year thereafter. If an owner does not connect within year 5, all the subsidized costs are no longer applicable.

| Year | Subsidized Cost | Impact fee paid by IRC | Impact fee/Property Owner Responsibility |
|------|-----------------|------------------------|--|
| 1    | 100 %           | \$2,796.00             | \$ 0.00                                  |
| 2    | 80 %            | \$2,236.80             | \$ 559.20                                |
| 3    | 60 %            | \$1,677.60             | \$1,118.40                               |
| 4    | 40 %            | \$1,118.40             | \$1,677.60                               |
| 5    | 20 %            | \$ 559.20              | \$2,236.80                               |
| 6    | 0 %             | \$ 0.00                | \$2,796.00                               |

Funds for this project are derived from utility assessment funds and optional sales tax contributions. Furthermore, new growth has created the need for the expansion or construction of the facilities, and that new growth will benefit from the expansion or construction of the facilities.

**RECOMMENDATION:**

For the Commercial Area Phase 1 Septic to Sewer (S2S) project to move ahead, the following options should be considered for review and approval:

1. Approve the county’s funding mechanism. Allocate the necessary dollars to reduce the construction and connection costs as much as possible for property owners.

**Construction Cost Funding**

| Description                           | Account Number        | Amount    |
|---------------------------------------|-----------------------|-----------|
| Utility Assessment Fund (473) (20%)   | 473-169000-15501      | \$393,479 |
| Optional Sales Tax Contribution (20%) | 31526836-066510-15501 | \$393,479 |
| Property Owner Assessment (27%)       | Assessment            | \$531,197 |

Choose one of the following:

**Impact Fee Funding- Option A**

| Description                           | Account Number        | Amount    |
|---------------------------------------|-----------------------|-----------|
| Optional Sales Tax Contribution (75%) | 31526836-066510-15501 | \$314,550 |
| Property Owner-IRC (25%)              | Assessment            | \$104,850 |

Or

**Impact Fee Funding- Option B**

| Description                            | Account Number        | Amount    |
|--|-----------------------|-----------|
| Optional Sales Tax Contribution (100%) | 31526836-066510-15501 | \$419,400 |
| Property Owner-IRC (0%)                | N/A                   | \$0       |

2. Begin implementation of a Phase 1 septic to sewer assessment project for the construction costs for all properties both inside the City of Sebastian and unincorporated county.
  - o Direct staff to follow assessment procedures for notifying benefitting property owners, preparation of assessment roll and the necessary resolutions.
  - o Hold necessary public meetings for property owners and interested parties

3. Approve a special, lower interest rate (2% APR) for the Commercial Phase 1 S2S project area.
4. Direct staff to finalize bid package and go out for competitive bids.
5. Formalize a connection policy for existing structures within the North County Phase 1 S2S area.

**ATTACHMENT(s):**

1. Examples of Alternative Financing Options
2. Phase 1 Septic to Sewer Map
3. Preliminary Assessment Roll
4. SJRWMD Cost Share Grant
5. Florida Statutes 381.00655
6. Draft of Projected Revenues