

July 25, 2018

Ms. Nichole Lloyd
City of Daytona Beach Utilities Department
125 Basin Street, Suite 100
Daytona Beach, FL 32114

Subject: Wastewater Hydraulic Model Software Recommendation

Dear Ms. Lloyd:

Carollo Engineers, Inc. (Carollo) is preparing to begin the Wastewater Master Plan for the City of Daytona Beach (City). As discussed in our proposal and during initial meetings, we recommend that the City move to a new improved software in order to capture the full capabilities of the model that will be developed.

Based on a needs analysis and our discussion of the City's goals, Carollo is recommending the City implement InfoSWMM software by Innovyze, with a 10,000 link limit.

Below are reasons for our recommendation of the specific software:

- Gravity Sewer and Force Main Network Modeling – InfoSWMM is capable of simulating combined gravity and force main networks, both necessary for the City's wastewater model. The engine which drives model calculations utilizes the EPA developed Storm Water Management Model (SWMM) which can be applied to stormwater and wastewater applications.
- GIS Integration – InfoSWMM works within a GIS environment, allowing for better use of the City's existing GIS data, easier updates of the model in the future with GIS Exchange, and an interface which allows for better data viewing/collection.
- Extended Period Simulation (EPS) Capabilities – The City's current software does not allow for EPS. Model scenarios that utilize EPS allow for model simulations to occur over hours or days rather than being "instantaneous." This allows the user the ability to recreate dynamic operation scenarios, view the system at various times of the day, and simulate infiltration/inflow patterns.
- Similar User Interface to InfoWater – The City currently owns InfoWater, a similar product by Innovyze for use with the City's water model. The benefit of a similar interface with training and user group capabilities will help streamline the City's efforts and continued understanding of the software. Innovyze also offers technical support, with an internal representative who can quickly respond to any needs or issues.

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Carollo already owns this software for model development, but we recommend the City purchase this software so that we can work closely to train City staff with the model as it is developed. If you have any questions, please contact either of us directly at 407-478-4642.

Sincerely,

CAROLLO ENGINEERS, INC.



Laura Baumberger, P.E.
Project Manager



Scott Richards, P.E.
Assistant Project Manager

cc: Kirsten Burns