From: Lina Camacho [mailto:lcamacho@engenuitygroup.com]

Sent: Friday, June 12, 2015 3:32 PM

To: Bull, Michelle

Subject: RE: Town of Ocean Ridge Year 4 Annual Report RAI

Good Afternoon Michelle,

Attached is the response to the request for additional information for the town of Ocean Ridge. Please let me know if you need anything else.

Thanks,

Lina M. Camacho, P.E.

Project Engineer lcamacho@engenuitygroup.com

LISA A. TROPEPE, P.E.



ENGINEERS SURVEYORS GIS MAPPERS

June 11, 2015

Florida Department of Environmental Protection NPDES Stormwater Program 2600 Blair Stone Road MS 3585 Tallahassee, FL 32399-2400

Re: NPDES Year 4, Cycle 3 Annual Report Town of Ocean Ridge Engenuity Group Project No. 00020.24

Dear Mrs. Bull:

The following information is being submitted on behalf of the Town of Ocean Ridge in response to the June 3, 2015 email for NPDES Permit No. FLS000018:

Section IV.

Discuss the difference in budget from Year 3 to Year 4.

The detail budget for year 3 and year 4 are as follow:

Year 3 showed an actual budget of \$680,000 that included two capital improvement projects (Inlet Cay and Coconut Lane) and the proposed budget for year 4 was \$235,000 including one capital improvement Project (Thompson Street). On year 4 the actual budget was reported as \$109,200 including some repair and maintenance activities and the proposed budget for Year 5 appears to be \$457,200 which includes two capital improvement projects (Eleuthera Drive, Spanish River Drive and Villas of Ocean Ridge).

Part III.A.1

Stormwater pump stations are required to be inspected semi-annually. In future reporting cycles, inspect pump stations semi-annually, or provide historical documentation that a less frequent schedule is appropriate.

The pump stations located within the town of Ocean Ridge are inspected once a year but starting on year 5 and forward the pump stations will be inspected semi-annually.

Part III.A.3

Provide loading removal calculations.

The loading calculations are attached.

Part III.A.9.c

Did not report training site plan reviewers. Training was discussed in the Year 3 audit report (5/2014). In future annual reports, list the contractor who performs this duty, and maintain documentation of annual training.

The number site plan reviewers should be 1. The site plan reviews are performed by an outside contractor (Engenuity Group, Inc.) where all the inspectors are certified through The Florida Stormwater, Erosion, and Sedimentation Control Inspector Training program.

If you should have any questions please do not hesitate to call.

Sincerely,

Lina Camacho, P.E. Project Engineer

Cc:

Kenneth Schenck Lisa Tropepe

Street Sweeping Program

A map of the street sweeping roads is attached. 18 miles of public roadway are in the program. Roadways without curb and gutter, and roadways not owned/maintained by the Town of Ocean Ridge are not included in the program. The frequency of sweeping is:

Quarterly (contracted out)

Documentation of volume of street sweeping collection from the invoices is summarized at the end of each year in the table below.

An estimate of the total phosphorus and total nitrogen collected by the street sweeping is performed based on the Florida Stormwater Association's determinations of street sweeping removal rates project. For this calculation, the land use of the area swept and the amount of material collected is needed. The log below is used for recording this information.

Street Sweeping Collection Log				
Date	Amount Collected (units)	Land Use of Area Swept		
10/27/2013	5.5 cubic yards	Residential		
1/29/2014	4 cubic yards	Residential		
4/30/2014	5 cubic yards	Residential		
7/30/2014	2 cubic yards	Residential		

1 cubic yard = 750 pounds

16.5 cubic yards * 750 pounds/cubic yard = 12,375 pounds (this amount was used to generate the TP and TN values for the Florida Stormwater Association (FSA) MS4 Load Reduction spreadsheet. Attached)

All street sweeping collection is properly disposed of in accordance with DEP's "Guidance For The Management Of Street Sweepings, Catch Basin Sediments and Stormwater System Sediments."

Florida Stormwater Association Street Sweeping Nutrient Removal Rates

Based on the May 31, 2011 Final Report "Quantifying Nutrient Loads Associated with Urban Particulate Matter (PM), and Biogenic/Litter Recovery Through Current MS4 Source Control and Maintenance Practices" and Table 8 in the report (pg.41), the following values may be used to estimate nutrient removal values from street sweeping activity:

Nutrient Values for Street Sweeping (mg/kg)				
Total Phosphorus	Total Nitrogen			
361	563			

Nutrient mass values shown here are independent of land use

Calculated Nutrient Load Reductions from MS4 Maintenance Practices FSA 2012

TOTAL BUGORNOPUS		Subtotal TP	Subtotal TP
TOTAL PHOSPHORUS	AND STATE OF THE PARTY OF THE P	Removed	Removed
Street Sweepings - Dry Mass Collected (Kg)	5,613	(Kilograms)	(Pounds)
Amount of TP Removed (Kilograms)	2	2	4
Catch Basins - Dry Mass Collected Amount of TP Removed (Kilograms)	0	0	0
BMP - Dry Mass Collected	0		
Amount of TP Removed (Kilograms)	0	0	0
GRAND TOTAL TP REM GRAND TOTAL TP R	OVED (KILOGRAMS) = EMOVED (POUNDS) =		4
		Subtotal TN	Subtotal TN
TOTAL NITROGEN	The second second	Removed	Removed
TOTAL NITROGEN Street Sweepings - Dry Mass Collected (Kg)	5,613		
	5,613	Removed	Removed (Pounds)
Street Sweepings - Dry Mass Collected (Kg)	5,613	Removed (Kilograms)	Removed (Pounds)
Street Sweepings - Dry Mass Collected (Kg) Amount of TN Removed (Kilograms)	3	Removed (Kilograms)	Removed (Pounds)
Street Sweepings - Dry Mass Collected (Kg)	0 0	Removed (Kilograms) 3	Removed (Pounds) 7
Street Sweepings - Dry Mass Collected (Kg) Amount of TN Removed (Kilograms) Catch Basins - Dry Mass Collected Amount of TN Removed (Kilograms)	0 0	Removed (Kilograms)	Removed (Pounds) 7
Street Sweepings - Dry Mass Collected (Kg)	0 0 0	Removed (Kilograms) 3	Removed (Pounds) 7