



April 24, 2013

Mr. Gregg Strakaluse, PE
The City of Naples
295 Riverside Circle
Naples, Florida 34102

RE: Proposal for City of Naples Water Quality Sampling and Analysis Support

Dear Mr. Strakaluse:

AMEC Environment & Infrastructure, Inc. (AMEC) has been requested to provide environmental services to the City of Naples (City) for their City-wide Water Quality Sampling and Analysis. AMEC is pleased to provide this proposal to the City for this program. The scope of work is based largely on continuation and redirection of stormwater and lake water quality monitoring that has been conducted continuously since the fourth calendar quarter of 2010. Based on lessons learned during the past year, AMEC proposes to modify the continuation of that program with a reduced budgetary commitment.

City staff also requested development of scopes of work and cost estimates for several prospective tasks. These include:

- Monthly Naples Bay Water Quality Monitoring – City staff monitor Naples Bay water quality monthly. City staff could be more productive performing other departmental priorities, so the City has requested a proposal to take over the established Naples Bay water quality sampling effort.
- Gordon River and Naples Bay Watershed Pollutant Loading – In 2011 AMEC developed pollutant loading estimates to these waterbodies from City stormwater lakes. In this task AMEC proposes to estimate loadings from all sources to better understand the City's contribution to impairment of the water bodies. Estimates will rely, in part, on data from other published sources including Collier County Watershed Management Plan and Florida Department of Environmental Protection (FDEP) Total Maximum Daily Load (TMDL) Reports.

This proposal describes prospective tasks for consideration by the City. A separate proposal is in development for engineering design services for Lake Manor improvements.

Task 01 – Continued Quarterly Monitoring of Pump Stations

Stormwater samples will be collected quarterly from pump stations identified as 11-PUMP, 14-PUMP and PW-PUMP in our previous reports. All samples will be analyzed for total nitrogen (TN), total phosphorus (TP), total suspended solids (TSS), copper, fecal coliform and enterococcus. Temperature, dissolved oxygen, and conductivity will be measured in the field using an YSI multiprobe meter. The three pump stations will continue to be monitored on a quarterly basis to provide a better indication of baseflow loadings to downstream waterbodies. This scope remains the same as in 2012.

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Task 02 – Lake Condition Assessment and Source Identification

Water samples will be collected twice during 2013 from 15 stormwater lakes, for a total of 30 samples. This plan represents a reduction in scope from 2012 during which 19 lakes were sampled twice per year. Lakes 7, 8, 16 and 21 are not recommended for sampling in 2013 due to relatively low priority as defined by AMEC (2013). All samples will be analyzed for TN, TP, TSS, copper, fecal coliform and enterococcus. Sampling frequency will be semi-annual (one wet season, one dry season). Continued sampling at priority locations provide a consistent long term data set that supports evaluation of baseline, trends, and the effects of City actions.

In addition, 10 samples are proposed at locations to be specified by City staff in consultation with Contractor, primarily in stormwater conveyances or at locations expected to have high pollutant concentrations. The basis for anticipated elevated pollutant concentrations will be all past data, as well as the results of the prioritization analysis performed as part of 2011 and 2012 work efforts.

In addition, the cost estimate provides for analysis of caffeine in eight (8) additional samples collected during either Task 01 or Task 02. In other words, eight (8) of the 12 quarterly pump station samples, 30 biannual lake assessment samples, or 10 source identifications samples will be analyzed for caffeine, at the discretion of the City. AMEC will develop a list of sample locations, already identified for Task 01 or Task 02, for analysis of caffeine prior to each sampling event, and these analyses will be performed with the City's concurrence.

Task 03 – Naples Bay Water Quality Monitoring

Monthly samples will be collected from the locations indicated in Attachment 2. Samples will be submitted to Collier County Pollution Control Laboratory (CCPCL) under the City's current agreement. Field logs will be completed for each monitoring event and submitted to City. Field logs will document general sample event information including sample time, date, weather, sample method, sample depth, and any deviation from standard sampling procedures. The cost estimate for this task does not account for laboratory analysis fees; it is assumed that the City will maintain its current contract with CCPCL and will transfer payment for laboratory fees directly to CCPCL.

Task 04 – Gordon River and Naples Bay Watershed Pollutant Loading Allocation

AMEC will perform a review of available hydrologic, nutrient and pollutant loading analyses performed for the Gordon River and Naples Bay contributing drainage basins. Loadings will be summarized by jurisdiction, including City of Naples, Unincorporated Collier County, or Other. Reference documents may include, but not be limited to, Collier County Watershed Management Plan and FDEP TMDL Reports. Summary of loading allocations will be provided as a technical memorandum.

Task 05 – Reports and Meeting

AMEC will report water quality monitoring data as acquired to the City and FDEP (Task 04), within 30 days of receipt. Following completion of all efforts previously described, AMEC will submit a draft final report to the City for review. The draft final report will summarize the work performed as detailed above, with any technical memoranda or documents previously submitted included as appendices to the draft final report. AMEC will finalize the draft final report upon receipt of comments from the City. AMEC staff will meet with City staff to present the findings of the work completed to date and assess future data gaps. The meeting with City staff may be substituted by one (1) briefing / workshop for City Council, at the direction of the City.

Schedule

AMEC will mobilize for the first biannual and quarterly sampling event within 15 business days of receipt of authorization. For any stormwater lake water quality monitoring results (Tasks 01 and 02)