

April 14, 2004

Mr. Robert Brady, Utilities Supervisor  
Township of Aberdeen  
One Aberdeen Square  
Aberdeen, NJ 07747

**Re: Strathmore Pump Station Improvements  
Scope of Work  
Our File No. PAB00311.01**

Dear Mr. Brady:

On February 9, 2004, myself, Tom Noto and Ed Traina of CME Associates visited the Strathmore Pump Station with George Sisti and yourself. The purpose of the visit was to evaluate the proposed project and to determine the Scope of Work.

It was your and Mr. Sisti's stated opinion that the three (3) existing variable speed drives and pump control panels are in various states of operating condition. Failure of the variable speed drives causes the pumps to cycle on and off through the bypass starters. It was reported that the variable speed drive manufacturer no longer exists, and the equipment is no longer supported, making repairs difficult. Furthermore, the drives appear to have been assembled into an after-market package, which increases the complexity of the problem. The controls were reported to have been repaired on numerous occasions by different technicians resulting in a jury-rigged system that is also difficult to repair and has numerous functions which are no longer operable.

Based on the site visit and these discussions, the scope of work, as this office understands it, is:

- Replace the existing pump control panel and appurtenances with new equipment of similar design and supplied by the same manufacturer as those installed in the other recently rehabilitated pump stations.
- Replace the three (3) existing variable speed drives with new state-of-the-art drives with built-in bypass soft starters. The units will be the standard product of a long established manufacturer.
- Remedy the existing electrical deficiencies that have the entire three (3) pump system being fed from a single circuit breaker and feeder cable.
- Improve the ventilation of the room where the drives and control panel are to be installed to minimize heat damage to the equipment.
- Replace the level control components to match the system of submersible transducers and back-up floats installed at the recently rehabilitated pump stations.

Mr. Robert Brady, Utilities Supervisor  
Township of Aberdeen  
April 14, 2004  
Page 2

- Replace the missing hardware on the access hatches above the pumps.

Our opinion of the probable construction cost of a project involving the above Scope of Work is \$121,000.00. Based on the existing budget allocation, additional monies appear to be required.

Please confirm that our understanding of the Scope of Work is correct as presented and the Township's disposition on this project.

Should you have any questions regarding this matter, please do not hesitate to contact this office.

Very truly yours,

Timothy W. Gillen, P.E., P.P., C.M.E.  
Office of the Township Engineer

TWG/EJT/tab  
Enclosure

cc: Mark Coren

April 14, 2004

Mr. Robert Brady, Utilities Supervisor  
Township of Aberdeen  
One Aberdeen Square  
Aberdeen, NJ 07747

**Re: Pump Station #10 Improvements  
Scope of Work  
Our File No. PAB00312.01**

Dear Mr. Brady:

On February 9, 2004, myself, Tom Noto and Ed Traina of CME Associates visited Pump Station #10 with George Sisti and yourself. The purpose of the visit was to evaluate the proposed project and to determine the Scope of Work.

The existing station is of the pneumatic ejector type. The facilities consist of a buried steel "can" that utilizes a pressure chamber at the bottom, from which the sewage is ejected by introducing compressed air into the chamber. The pump station is estimated to be at least 40 years old. Due to its buried installation, it is not easily feasible to evaluate the overall condition of the steel walls of the station. Its design makes it difficult to maintain, clean and service, which, due to its age, is reported to be required more frequently.

It is proposed that a new submersible pump station be constructed to replace the existing ejector station. The submersible station would be similar to the other recently rehabilitated stations and utilize the same equipment and manufacturers for standardization. The existing electrical systems would be retained, including the improvements performed as part of the overall pump station upgrade project, as part of the new pump station. The existing generator is proposed to be replaced by the Township under a separate project with a new natural gas fueled unit.

Reviewing the available data, the existing ejector "can" appears to be 4'-0" diameter below grade. This is not large enough to install a concrete wetwell that could contain two (2) pumps; therefore, the construction of a new concrete wetwell, a minimum of 5'-0" diameter, is proposed outside of the existing fenced area, between the existing ejector station and Beach Way. Construction of a separate wetwell will provide two benefits: first, the existing ejector station may be left in service throughout the construction period, minimizing the amount of bypass pumping required; and second, the existing gravity sewer between the manhole at the intersection of South Concourse and Beach Drive and the existing ejector station, which is presently sloped in the wrong direction, can be replaced and installed correctly. Once the new station is complete and operational, the old ejector station can be demolished and filled.

Our opinion of the probable cost of a project involving the above Scope of Work is \$128,500.00. Based on the existing budget allocation, additional monies appear to be required.

Mr. Robert Brady, Utilities Supervisor  
Township of Aberdeen  
April 14, 2004  
Page 2

Please confirm that our understanding of the Scope of Work is correct as presented and the Township's disposition on this project.

Should you have any questions regarding this matter, please do not hesitate to contact this office.

Very truly yours,

Timothy W. Gillen, P.E., P.P., C.M.E.  
Office of the Township Engineer

TWG/EJT/tab  
Enclosure

cc: Mark Coren

December 28, 2004

Mr. Robert Brady, Utilities Supervisor  
Township of Aberdeen  
One Aberdeen Square  
Aberdeen, NJ 07747

**Re: Revised Cost Estimate  
Pump Station #10 Reconstruction  
Our File No. PAB00312.01**

Dear Mr. Brady:

As per your request this office has reviewed those costs as anticipated for the proposed scope of work as necessary for the conversion of pump station No. 10 from an ejection to a submersible system. Based on the latest data and based on anticipated material costs increases (i.e. steel and concrete) it is our engineering opinion that the pump station construction costs will be \$147,664 and thus we would advise that you budget \$150,000 for construction plus an additional \$15,000 for engineering construction observation/administration for a total of \$165,000.

Should you have any questions regarding this matter, please do not hesitate to contact this office.

Very truly yours,

Timothy W. Gillen, P.E., P.P., C.M.E.  
Office of the Township Engineer

TWG/sm  
Enclosure

cc: Mark Coren  
James Lauro

January 21, 2005

Mr. Robert Brady, Utilities Supervisor  
Township of Aberdeen  
One Aberdeen Square  
Aberdeen, NJ 07747

**Re: Revised Cost Estimate  
Strathmore Pump Station  
Control System Update  
Our File No. PAB00311.01**

Dear Mr. Brady:

As per your request, this office has reviewed those costs as anticipated for the proposed scope of work as necessary for the conversion of control system update for the Strathmore Pump Station utilizing three (3) 50HP VFD units. Based on the latest data and based on anticipated material cost increases (i.e. steel and concrete) our engineering opinion that the control system construction costs will be \$138,000 and thus we would advise that you budget \$140,000 for construction plus an additional \$15,000 for engineering construction observation/administration for a total of \$155,000.

Should you have any questions regarding this matter, please do not hesitate to contact this office.

Very truly yours,

Timothy W. Gillen, P.E., P.P., C.M.E.  
Office of the Township Engineer

TWG/sm

cc: Mark Coren  
James Lauro



JOHN H. ALLGAIR, 1983-01  
DAVID J. SAMUEL, P.E., P.P.  
JOHN J. STEFANI, P.E., L.S., P.P.  
JAY B. CORNELL, P.E., P.P.  
MICHAEL J. McCLELLAND, P.E., P.P.  
GREGORY R. VALES, P.E., P.P.

TIMOTHY W. GILLEN, P.E., P.P.  
BRUCE M. KOCH, P.E., P.P.  
ERNEST J. PETERS, JR., P.E., P.P.  
BEHRAM TURAN, P.E.

November 6, 2007

Mr. Stuart Brown, Township Manager  
Township of Aberdeen  
One Aberdeen Square  
Aberdeen, NJ 07747

**Re: Supplemental Authorization  
Engineering Services Proposal  
Pump Station No. 10 Rehabilitation  
Our File No. PAB00312.01**

Dear Mr. Brown:

Please consider this letter as a formal request for supplementary funds for engineering services associated with the above referenced project.

The project as originally envisioned was to be bid with another project, the rehabilitation of the Strathmore Pump Station. The Township staff requested that we divide the project into two separate contracts in order to bid Strathmore Pump Station quickly due to the critical condition of the existing pumps, whereby failure appeared to be eminent. In fact, during the construction on the Strathmore project, pumps did fail, and emergency steps had to be implemented.

The original combined project was designed in early 2005, and was then separated and was subsequently bid in October of 2005; a Treatment Works Approval (TWA) permit from the New Jersey Department of Environmental Protection for Pump Station No. 10 was applied for in November of 2005; the project was bid in April of 2006 with award in late May; contract execution was in July of 2006; shop drawings were submitted in August; and an issue developed in November of 2006 relative to a pole relocation by the utility company.



Mr. Stuart Brown, Township Manager  
Township of Aberdeen  
November 6, 2007  
Page 2

As is evident, the project was significantly impacted by the additional work associated with both the bid separation and the utility pole relocation. The work required to complete the pole relocation was greater than anticipated by our office. The pole relocation was not completed for several months, which required our office to monitor the status of the project during this time and to perform additional interaction with the utility company, contractor and the Township. The new requirements set forth by the utility company made it necessary for the Township to provide proof of ownership of the land for the new pole location. This information was not readily available from the Township and required additional participation by CME.

Separating the Strathmore Pump Station project from the Pump Station No. 10 rehabilitation required additional work that was not anticipated by our office. This work included the preparation of separate bid documents and an additional bid period, bid opening and pre-construction meeting, and other construction management tasks.

In addition, there is other work remaining to complete the project, including all of the aspects of construction administration. Based on the services to date and the additional services anticipated to complete the project, we respectfully request a supplemental authorization of \$37,500.

As the nature of the services is indeterminate and dependent upon the Township's needs and requests, the contractor's responsiveness, and the utility company's resolution of service (done), the level of our services will fluctuate. Accordingly, we propose that any services that the Township may require will be performed at our hourly rates. The above amounts will not be exceeded without specific written authorization.

Your return of a signed copy of this proposal indicating your acceptance to the terms and conditions presented herein will represent your authorization for us to proceed.

CME Associates takes great pride in our commitment to personal service and our ability to successfully address our clients' interests. We appreciate the opportunity of working with the Township of Aberdeen and its staff on this project. We trust the information as contained herein addresses your requirements.







Mr. Stuart Brown, Township Manager  
Township of Aberdeen  
November 6, 2007  
Page 3

Should you have any questions regarding the above, please do not hesitate to contact this office.

Very truly yours,

CME ASSOCIATES

Timothy W. Gillen, P.E.  
Principal  
Office of the Township Engineer

TWG/JRD/go/lm  
Enclosures

cc: Karen Ventura  
Robert Brady  
James Lauro  
Amy Terhune