

**Engineering Services Contract  
Burgess & Niple, Inc.**

**Southerly Wastewater Treatment Plant  
Effluent Disinfection Improvements, Project No. 650355**

**Proposed Modification No. 5**

The names of all companies bidding, or submitting an RFP or RFSQ, for the original contract

Owen Engineering & Management Consultants, Inc.  
Camp Dresser & McKee  
Burgess & Niple, Inc.  
BBS Corporation

The location by City and State of all companies bidding, or submitting an RFP or RFSQ, for the original contract

Owen Engineering & Management Consultants, Inc., Columbus Ohio  
Camp Dresser & McKee, Worthington Ohio  
Burgess & Niple, Inc., Columbus Ohio  
BBS Corporation, Columbus Ohio

The status, Majority, MBE, FBE, of all companies bidding, or submitting an RFP or RFSQ, for the original contract

Owen Engineering & Management Consultants, Inc., majority firm  
Camp Dresser & McKee, majority firm  
Burgess & Niple, Inc., majority firm  
BBS Corporation, majority firm

The name and location of the firm awarded the original contract and the Contract Number.

Burgess & Niple, Inc., 5085 Reed Road, Columbus Ohio 43220  
Contract No. CT19477

A description of work performed to date as part of the contract and a full description of work to be performed during any future phasing of the contract.

The contract provides engineering services for the Southerly Wastewater Treatment Plant Effluent Disinfection Improvements, Project No. 650355. The project improvements are being accomplished in two sequential phases. Project Phase 1 (construction Contract S59) provides for construction of new plant effluent disinfection facilities, including installation of tanks for additional process capacity and conversion to chemical processes that are safer than those previously employed. Project Phase 2 (construction Contract S69) expands the facility to provide additional process capacity for proper processing of the high flows that occur during wet weather.

The Project Phase 1 construction is completed. Burgess & Niple's services performed for Project Phase 1 included developing an engineering design for the improvements that is detailed in technical specifications and drawings for bidding the construction work, assisting with the bidding process and bid evaluation, performing technical and field services during construction, and providing documentation for the constructed facilities. Burgess & Niple's services are nearly completed, with only a small amount of documentation work remaining.

For Project Phase 2, Burgess & Niple has completed development of the engineering design and bidding documents, and services for construction bidding and bid evaluation. Authorizing legislation for award of the Project Phase 2 construction contract has been forwarded for City Council approval.

No additional phases for this project are planned.

An updated contract timeline to contract completion.

The Contract Notice to Proceed for the Preliminary Design work was issued July 2, 1998. Burgess & Niple proceeded with work to investigate existing conditions and develop a general plan for the project improvements. A draft Detailed Design Memorandum (DDM) documenting the investigative efforts, alternatives, general plan and recommendations for project improvements was submitted to the City for review on August 26, 1998. On March 30, 1999, a final version of the DDM was submitted that included revisions resulting from the City's reviews.

The detailed design work then began for production of specifications and drawings for bidding project Phase 1 construction, Contract S59. The construction contract was advertised for bids, and bids were received on January 12, 2000. The construction contract was awarded and the Notice to Proceed was issued on July 10, 2000. Project Phase 1 construction was originally scheduled to be completed in March, 2002, but was extended for added work that was completed in June, 2005.

Engineering design work to produce bidding documents for Project Phase 2 construction, Contract S69, was started July 19, 2004, and was completed March 4, 2005. The construction contract was advertised for bids, and bids were received on April 20, 2005. Selection of a contractor is completed, and authorizing legislation for the construction contract has been forwarded for City Council approval. Contract S69 construction is required to be completed 14 months after issuance of a Notice To Proceed. Burgess & Niple's services will continue beyond completion of construction to provide "as-built" record drawings of the constructed facilities, provide manuals for facility operation and maintenance, and also to provide reporting on the status of operation of the constructed facilities one year after completion.

A description of any and all modifications to date including the amounts of each modification and the Contract Number associated with any modification to date. (List each modification separately)

MODIFICATION NO. 1: \$1,157,000.00 (EL000433)

Funding is provided for performance of technical and field services during Project Phase 1 construction. The work includes providing interpretations and clarifications of the construction contract documents, responding to contractor's inquiries for information, reviewing and approving the contractor's submitted documentation, designing and documenting needed changes to the construction work, observing and verifying construction work, providing evaluations and recommendations on the acceptability of the contractor's work, observing facility testing and startup, preparing manuals for facility operation, and preparing record drawings of the work as actually constructed.

MODIFICATION NO. 2: \$407,517.00 (EL000856)

Funding is provided for additional Project Phase1 engineering design tasks. The additional work included:

1. An investigation of project alternatives identified in a value engineering (VE) study was performed. Alternatives included construction of one chlorine contact tank versus two tanks, reduction of the number of chemical storage tanks, and other issues.
2. Contract S59 documents were revised at the 60% complete point to provide for construction of only one chlorine contact tank instead of two tanks.
3. Contract S59 documents were further revised during development to improve effluent metering, add construction entrance roadway pavement, add a chlorine contact tank foam reduction system, add a second electrical power feed to the Chlorine Control Building, add elevated water tank improvements, incorporate updated instrumentation and

electrical specifications, modify the Chlorine Control Building toilet area, add flushing water and potable water system improvements, and revise the river bank improvements in the vicinity of the plant's effluent discharge to the river.

4. Work was performed to develop a valve index and reference diagrams for the Southerly Plant flushing water and potable water systems, for use in plant operation and maintenance.

MODIFICATION NO. 3: \$391,468.00 (EL003178)

Additional funding is provided for Project Phase 1 technical services during construction for the following reasons:

1. The number of man-hours expended to respond to the construction contractor's requests for information and to review the construction contractor's submitted documentation were greater than the number of man-hours funded by contract Modification No. 1.
2. Additional costs were incurred to continue Burgess and Niple's services through an extended period of construction and equipment startup.
3. The costs to revise the Standard Operational Procedure (SOP) Manuals to incorporate this project's improvements were greater than funding provided in contract Modification No. 1.

MODIFICATION NO. 4: \$448,500.00 (EL004617)

This modification primarily provides funding for the development of the Project Phase 2 engineering design and bidding documents, and assistance with bidding the construction work. Funding is also provided for the following added tasks and costs:

1. Development of specifications and drawings to add variable-frequency type motor controls for the two new plant effluent pumps installed in Project Phase 1 construction, and revise the overall control strategy for operation of all eight plant effluent pumps.
2. Performance of field observations and evaluations to resolve two problems; the presence of sulfur dioxide fumes in the chemical storage room, and; excessive vibration in the new effluent pumps.
3. Costs to continue construction related services through an extended period of construction and equipment startup.

A full description of the work to be performed as part of the proposed contract modification. (Indicating the work to be a logical extension of the contract is not sufficient explanation)

PROPOSED MODIFICATION NO. 5: \$904,719.00

This modification primarily provides funding for services needed during Project Phase 2 construction. Technical and field services will be performed similar to those performed during the Phase 1 construction, as described above under Modification No. 1. Construction management services will also be performed that include verification of the contractor's schedule and costs, review of the contractor's payment applications, evaluation of proposed changes in the construction work, evaluation of claims for additional cost or time by the construction contractor, coordination of construction work with plant operations, materials testing, monitoring construction progress and periodic reporting to the City.

This modification also provides funding for added engineering design tasks for Project Phase 2:

1. An evaluation and incorporation of features that would be advantageous for future expansions of this facility.

2. An evaluation and incorporation of improvements to the air-blower equipment design that were suggested by plant operations personnel.
3. Add the rehabilitation of existing blowers to the construction work.
4. Add several operation, maintenance and safety enhancements to the design details.

This modification also provides funding for additional tasks and costs for Project Phase 1:

1. Additional work was required to revise the Standard Operational Procedure (SOP) Manuals for the water tower control panels, due to revisions in the design.
2. A study was performed to determine the cause of overheating of a Flushing Water system booster pump.
3. A study of the uninterruptible power supply system was performed.
4. Additional effort was required to review the construction contractor's Maintenance & Operation documentation submittals due to the submittals' lack of organization and completeness.
5. Additional work was required to resolve the problems of sulfur dioxide fumes being present in the chemical storage room, and excessive vibration in the new effluent pumps.
6. Costs to continue construction related services through an extended period of construction and equipment startup.

If the contract modification was not anticipated and explained in the original contract legislation a full explanation as to the reasons the work could not have been anticipated is required. (Changed or field conditions is not sufficient explanation. Describe in full the changed conditions that require modification of the contract scope and amount.)

This contract modification was planned in order to provide the funding for services needed during construction of Project Phase 2.

Also, in any construction project, and especially a project that includes rehabilitation of existing facilities, changes to engineering and construction work are expected. In general, reasons for additional work include: 1) components of the existing facility are concealed and conditions cannot be accurately determined prior to contract work; 2) details of equipment and systems specified to be provided are reviewed and sometimes refined during construction in order to provide a facility that is optimally configured; 3) latent errors or omissions may exist in the design.

The added work tasks funded by this contract modification primarily provide refinements in facility operation, maintenance and safety that were realized to be worthwhile after construction work started.

An explanation of why the work to be performed as part of the contract modification cannot be bid out. (Indicating the work to be a logical extension of the contract is not sufficient explanation)

The funding provided by this contract modification is for continuation of the existing work of the contract. It is not deemed either feasible or reasonable to suspend work with the entity currently under contract, and undertake continuation of the work under a new procurement. The lengthy process for initiating a new procurement, and for a new entity to gain understanding of the project, would likely cause an unacceptable project delay and additional cost.

A cost summary to include the original contract amount, the cost of each modification to date (List each modification separately), the cost of the modification being requested in the legislation, the estimated cost of any future known modifications and a total estimate of the contract cost.

Original Contract	\$1,540,872.00
Modification No. 1	\$1,157,000.00
Modification No. 2	\$ 407,517.00
Modification No. 3	\$ 391,468.00
Modification No. 4	\$ 448,500.00
Proposed Modification No. 5	\$ 904,719.00
Anticipated Future Modifications	<u>\$ 0.00</u>
CONTRACT TOTAL	<u>\$4,850,076.00</u>

Note: The Contract should be considered to include any and all work that is anticipated to be awarded to the company awarded the original contract throughout the contract/project timeline. This includes the original contract and any and all future anticipated modifications to the contract to complete the contract/project.

6/20/05