



CITY OF COLUMBIA
AGENDA MEMORANDUM

MEETING DATE: July 19, 2016

DEPARTMENT: Utilities and Engineering

FROM: *Joey Jaco, Director of Utilities and Engineering*

SUBJECT: Mill Creek Pump Station Force Main Improvements CA3

FINANCIAL IMPACT: Funding for this Amendment was budgeted from the Capital Outlay Projects Budget (5529999-SS6764-658650).

ORIGINAL BUDGET: \$725,021.00 (original budget) \$351,229.00 (this Amendment request)

BUSINESS PROGRAM: Mentor Protege Program

CLEAN WATER 2020?: Yes

FEMA DR-SC4241?: No

STRATEGIC GOALS: Invest in Infrastructure

The above referenced Amendment is to provide additional inspection services and the addition of a Reclaimed Water Evaluation. Inspection services will be extended for a period of six months to account for the 18 month construction phase. Part-time services will be for a period of two months, beginning with construction at the Waste Water Treatment Plant and ending with construction under the Interstate 77 overpass; full- time services will be provided for a period of 12 months beginning with the construction under the Interstate 77 overpass and terminating at substantial completion. The scope is more fully described in the attached.

Staff has negotiated a fee totaling Three Hundred Fifty One Thousand Two Hundred Twenty Nine Dollars and No/100 (\$351,229.00) for the specified needs above with CDM Smith, a firm headquartered in Boston, MA with a local office in Columbia, SC. CDM Smith is an approved Mentor in the Mentor Protégé Program with Civil Engineering Consulting Services, Inc. as their protégé. Funding for this Amendment was budgeted from the Capital Outlay Projects Budget (5529999-SS6764-658650).

Original Contract Amount: \$725,021.00
Contract Amendment #1 added \$28,991.00
Contract Amendment #2 added \$0.00 (time extension June 30, 2018)
Contract Amendment #3 (this amendment) add \$351,229.00
New Agreement total: \$1,105,241.00

Sub consulting services:

\$76,000.00 (21.6% of the total contract value) awarded to Survey & Mapping Services of SC, Inc. will provide surveying & mapping of property plats.

\$74,506.00 (21.2% of the total contract value) awarded to Civil Engineering Consulting Services, Inc. will provide public outreach, utility coordination, sub-surface utility engineering & construction inspection.

\$12,000.00 (3.42% of the total contract value) awarded to Red Bay Environmental will provide wetland delineation environmental permitting.

\$42,063.00 (11.97% of the total contract value) awarded to Terracon, Inc. will provide geotechnical investigations and construction phase material testing.

\$2,289.00 (0.7% of the total contract value) awarded to New South Associates will provide archaeological survey SHPO permitting.

Services to be performed will impact all City Council Districts. The Legal Department has reviewed the Agreement and the Director of Utilities and Engineering recommends its approval and ACM for Operations recommends its approval.

Agreement for Engineering Services for
Mill Creek Pump Station Force Main Improvements;
CIP SS6764

CDM Smith and City of Columbia, SC

Contract Amendment #3

May 27, 2016

Description of Change: Request change in Agreement for Engineering Services between the City of Columbia (City) and CDM Smith (Engineer) dated July 10, 2012 (Agreement), amended by Contract Amendment #1 dated January 23, 2014 and Contract Amendment #2 dated April 13, 2015. This Amendment is to provide additional inspection services during the construction of the force main along Bluff Road, Columbia, SC.

All other provisions of the Agreement, except as herein modified or changed, remain in full force and effect.

Proposed Change and Basis for Payment:

Original Contract Price:	\$ 725,021.00
Previous Change Orders:	\$ 28,991.00
This Change (addition/deletion):	\$ 351,229.00
Revised Contract Price:	\$1,105,241.00

Additional funds are to be provided in the following manner: 5529999-SS6764-658650

This Change is Acceptable:

By: _____ CDM Smith
Title:

Recommended for Approval: _____ Director of Utilities and Engineering
Joseph D. Jaco, P.E.

Recommended for Approval _____ Assistant City Manager for Operations
Melissa Gentry, P.E.

Approval of Change: _____ City Manager
Teresa Wilson

APPROVED AS TO FORM

Legal Department City of Columbia, SC



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COST CHANGE AMENDMENT 3

March 11, 2016

Mr. John Riggs, PE
Assistant Wastewater Engineer
City of Columbia
Utilities and Engineering
1136 Washington Street
Columbia, South Carolina 29201

Subject: **PROJECT NAME: Mill Creek Pump Station Force Main Improvements**
CIP NUMBER: SS6764-11

Dear Mr. Riggs,

Under a previously executed City of Columbia contract for SS6764-11, CDM Smith is providing engineering services during the construction of approximately 24,000 linear feet of 30" diameter force main adjacent to Bluff Road from the Mill Creek Pump Station to the Metro Wastewater Treatment Plant. The original scope for this project included Construction Contract Administration for a construction period of 12 months and did not include onsite Resident Project Representation.

Following the completion of design and an analysis of the nature and complexity of the construction associated with this project, CDM Smith has allowed for a 15-month to substantial completion construction period and an overall 18-month construction period to final acceptance. As a means to provide additional protection for the City, CDM Smith also recommends the addition of an onsite Resident Project Representative to observe construction through the anticipated date of substantial completion as well as additional construction observation by CDM Smith's Geotechnical Engineering staff of the Horizontal Direction Drilling (HDD) to be performed by the contractor.

The City is also interested in having CDM Smith evaluate the feasibility of providing reclaimed water from the Columbia Metro Wastewater Treatment Plant (WWTP) for irrigation on agricultural fields adjacent to the WWTP and for potential non-potable uses at a nearby industrial park in the vicinity of the Mill Creek pump station.

Noted on the following pages are the Scope addition/deletion, Compensation, and Schedule adjustments necessary for these changes.



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I. SCOPE ADDITION/DELETION

The scope is to be modified to include Construction Contract Administration services beyond that which were included in the original scope, the addition of Resident Project Representation services, and the addition of a Reclaimed Water Evaluation. Construction Contract Administration services will be extended for a period of six months to account for the 18-month construction contract timeline and will also include additional construction observation of the HDD portion of the project. Part-time Resident Project Representation will be provided for a period of two months, beginning with construction at the WWTP and ending with construction under the Interstate 77 overpass; full time Resident Project Representation will be provided for a period of twelve months, beginning with construction under the Interstate 77 overpass and terminating at substantial completion.

II. COMPENSATION

Task Number	Task Title	Original Contract	Previous Amendment(s)	Current Amendment(s)	New Contract Value
Task 100	Project Administration	\$24,024	\$0	\$0	\$24,024
Task 200	Preliminary Engineering Report	\$57,250	\$0	\$0	\$57,250
Task 300	Survey & Mapping	\$64,800	\$0	\$0	\$64,800
Task 400	Geotechnical Investigation	\$54,640	\$6,070	\$0	\$60,710
Task 500	Final Design	\$237,125	\$21,871	\$0	\$258,996
Task 600	Permitting	\$43,500	\$1,050	\$0	\$44,550
Task 700	Bidding	\$16,800	\$0	\$0	\$16,800
Task 800	Construction Contract Administration	\$152,637	\$0	\$92,824	\$245,461
Task 900	Resident Project Representation	\$0	\$0	\$220,405	\$220,405
Task 1000	Record Drawings	\$21,082	\$0	\$0	\$21,082
Task 1100	Additional Services	\$53,163	\$0	\$0	\$53,163
Task 1200	Reclaimed Water Evaluation	\$0	\$0	\$38,000	\$38,000
Total Fee		\$725,021	\$28,991	\$351,229	\$1,105,241

Note: all Tasks are Lump Sum with the exception of Task 1100, which is Not-To-Exceed.



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III. SCHEDULE

There is no need for additional time to be added to the schedule. While the construction period has been extended from 12 months to 18 months, Contract Amendment #2, executed by the City in June 2015, extended the Agreement expiration date for the project to June 30, 2018. This date is sufficient to allow for the completion of the project assuming a Notice to Proceed date in March or April 2016.

CDM Smith appreciates the opportunity to provide these additional services to the City of Columbia for the Mill Creek Pump Station Force Main Improvements project. If you have any questions please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Bryan L. Cully". The signature is stylized and cursive.

Bryan L. Cully, PE
CDM Smith

cc: Clean Water 2020 Project Manager

Enclosures



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COST CHANGE AMENDMENT 3 – Task Details

PROJECT NAME: Mill Creek Pump Station Force Main Improvements
CIP NUMBER: SS6764-11

I. SCOPE ADDITION/DELETION

The following changes to Tasks 800, 900, and 1200 are required to perform additional services during the construction phase of the Mill Creek Pump Station Force Main Improvements project.

Task 800 – Construction Contract Administration

In the current project scope, CDM Smith is to provide Construction Contract Administration, to include up to two site visits per week, for a construction period of 12 months. CDM Smith intended to subcontract a portion of the site visits to Civil Engineering Consulting Services, Inc. (CECS). As part of this amendment, CDM Smith proposes to provide additional construction administration efforts, to include up to 14 site visits by Geotechnical Engineering staff, during the Horizontal Directional Drilling (HDD) portion of construction. CDM Smith also proposes to extend Construction Contract administration services, at a level of effort equal to that noted in the original scope of services, for an additional six months until the date of final project acceptance. CDM Smith intends to continue the level of participation by CECS throughout the extended construction time period. An updated summary of proposed sub-consultants is provided as Exhibit A of this amendment.

Task 900 – Resident Project Representation

Under this new task, CDM Smith shall provide a Resident Project Representative (RPR) for 16 hours per week for two months, beginning with construction of the new 30-inch diameter force main at the WWTP and ending with construction under the Interstate 77 overpass. CDM Smith shall provide an RPR for 40 hours per week for 12 months beginning with construction under the Interstate 77 overpass and ending upon substantial completion of construction activities for the project, to include connection of the new 30-inch diameter force main to the Mill Creek Pump Station. CDM Smith shall receive additional compensation for any additional or extended RPR services required, such as coverage of Contractor work beyond 40 hours per week or coverage beyond Substantial



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Completion, via further amendment of this Agreement. The duties, responsibilities, and limitations of authority of the RPR shall be as referenced in Exhibit B of this amendment.

Task 1200 – Reclaimed Water Evaluation

Under this new task, CDM Smith shall provide a preliminary conceptual evaluation to determine the feasibility of implementing a reuse system from the Columbia Metro WWTP. If determined feasible by this conceptual evaluation, a more in-depth study (outside of this scope of work) should be conducted to evaluate details and specific improvements required to implement a reuse system.

- **Task 1200.1 – Identify Potential Customer Needs for Reuse & Reclaimed Water**

CDM Smith will identify and conduct interviews with the owner(s) of the agricultural fields adjacent to the WWTP to determine the potential for use of reclaimed water for irrigation. Information collected will include amount of land irrigated, current source and amount of water used for irrigation, seasonal variations in demand, potential water delivery points (ponds, direct to irrigation system, other), and general interest in using reclaimed water.

With the City's input, CDM Smith will develop an assumed non-potable water demand and water quality requirements for potential users in the industrial park. This will be developed based on the acreage of the area, assumed type of industrial development, and reclaimed water demand for similar users in other communities.

If available, CDM Smith will also review potable water billing data for existing customers along the route from the WWTP to the industrial park to determine if there may be additional potential reclaimed water users. Reclaimed water demand for potential intermediate users, if any, will be estimated based on the water billing data.

- **Task 1200.2 – Identify Regulatory Requirements**

CDM Smith will review the South Carolina regulations on non-potable reclaimed water for land application and provide a discussion and analysis of the regulatory requirements as they relate to effluent quality and distribution system design and operation. CDM Smith will review historical Columbia Metro WWTP effluent water



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quality data with respect to reclaimed water treatment standards and compatibility with the intended reclaimed water uses. CDM Smith will provide recommendations on additional effluent water quality parameters to be collected and analyzed, as necessary, to confirm that the quality of the reclaimed water is compatible with its intended use. All laboratory analysis will be performed or paid by the City.

- **Task 1200.3 – Develop Conceptual Reuse System Alternatives**

CDM Smith will use information gathered in Tasks 1 and 2 to develop conceptual alternatives for providing reclaimed water to the agricultural fields adjacent to the WWTP and the industrial park. The conceptual alternatives will consider preliminary pipeline routing, preliminary pipe sizing based on typical peaking factors, diurnal storage, pumping, and additional treatment and/or process monitoring and control. Planning costs for capital improvements will be developed for the alternatives and presented on a cost per gallon of reclaimed water basis.

- **Task 1200.4 – Technical Memorandum**

CDM Smith will develop a draft technical memorandum summarizing the results of the reclaimed water conceptual evaluation and providing recommendations, as appropriate, that may include future, more detailed study. CDM Smith will schedule and attend one meeting with the City to discuss and review the draft memorandum. Following the meeting CDM Smith will revise the memorandum to address one round of written comments provided by the City, and issue a final technical memorandum.

II. COMPENSATION

The following changes to the current SS6764-11 contract are recommended to incorporate additional efforts associated with this proposed amendment:

- Task 800 – “Construction Contract Administration” - \$92,824 (lump sum)
- Task 900 – “Resident Project Representation” - \$220,405 (lump sum)
- Task 1200 – “Reclaimed Water Evaluation” - \$38,000 (lump sum)



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The new contract values based on the above recommended changes are presented as follows:

Task Number	Task Title	Original Contract	Previous Amendment(s)	Current Amendment(s)	New Contract Value
Task 100	Project Administration	\$24,024	\$0	\$0	\$24,024
Task 200	Preliminary Engineering Report	\$57,250	\$0	\$0	\$57,250
Task 300	Survey & Mapping	\$64,800	\$0	\$0	\$64,800
Task 400	Geotechnical Investigation	\$54,640	\$6,070	\$0	\$60,710
Task 500	Final Design	\$237,125	\$21,871	\$0	\$258,996
Task 600	Permitting	\$43,500	\$1,050	\$0	\$44,550
Task 700	Bidding	\$16,800	\$0	\$0	\$16,800
Task 800	Construction Contract Administration	\$152,637	\$0	\$92,824	\$245,461
Task 900	Resident Project Representation	\$0	\$0	\$220,405	\$220,405
Task 1000	Record Drawings	\$21,082	\$0	\$0	\$21,082
Task 1100	Additional Services	\$53,163	\$0	\$0	\$53,163
Task 1200	Reclaimed Water Evaluation	\$0	\$0	\$38,000	\$38,000
Total Fee		\$725,021	\$28,991	\$351,229	\$1,105,241

Note: all Tasks are Lump Sum with the exception of Task 1100, which is Not-To-Exceed.

III. SCHEDULE

Contract Amendment #2, executed by the City in June 2015, extended the Agreement expiration date for the project to June 30, 2018. This date is sufficient to allow for the completion of the project; no schedule changes are required as a result of this amendment.

IV. MENTOR PROTÉGÉ PROGRAM (MPP)

This project is an MPP project and is updated with the City's Office of Business Opportunities (OBO) quarterly. The project predates the current MPP policy regarding



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minimum protégé participation. The protégé participation under the original contract was 6.6%; the protégé participation associated with this amendment is 7.7%.

V. ASSUMPTIONS BY ENGINEER/ASSISTANCE TO BE PROVIDED BY CITY

- Any construction observation provided by the City will occur in addition to the RPR services provided by CDM Smith under this contract amendment. At no time will construction observation by the City be used to replace onsite RPR services by CDM Smith.
- If the construction period extends beyond that which is noted above, a subsequent contract amendment may be required to account for additional Construction Contract Administration and Resident Project Representation efforts as appropriate.

EXHIBIT A

SUBCONSULTANT FIRM INFORMATION RECORDS

City of Columbia

CIP # SS6764-11

Mill Creek Pump Station Force Main Improvements

The Engineer shall list all firms, including minority and female owned firms, providing sub consulting services under this Agreement. The list shall be submitted in the format provided below. Any proposed changes must be submitted in writing to the City, including the reason(s) for the proposed changes, prior to initiation of any action by the Engineer. Any invoices submitted for payment under this Agreement must include the dollar amount to be paid to each firm listed below for the invoice period.

Firm Name and Address	Contact Name and Telephone Number	Group (MBE, FBE SBE, Non M/F/SBE)	Services to be Provided	Dollar Value of Services
Survey & Mapping Services of S.C., Inc* 126 Commerce Court Pittsboro, NC 27312	Boyce Crow (803) 796-8214	Non M/F/SBE	Surveying and Mapping Property Plats	\$76,000
Civil Engineering Consulting Services, Inc. 2000 Park Street, Suite 201 Columbia, SC 29201	Theresa Hodge, P.E. (803) 779-0311 (ext 224)	DBE/WBE Mentor-Protégé	Public Outreach, Utility Coordination, Subsurface Utility Engineering, & Construction Inspection	\$74,506 Was \$47,514 under original agreement
Red Bay Environmental 720 Hawksbill Ct. Mt. Pleasant, SC 29464	Judd Goff (843) 810-3311	Non M/F/SBE	Wetland Delineation Environmental Permitting	\$12,000
Terracon Inc. ** 521 Clemson Road Columbia, SC 29229	Kevin Sohrabina, PE (803) 741-9000	Non M/F/SBE	Geotechnical Investigations and Construction Phase Material Testing	\$42,063
New South Associates 722-A South Blanding Street Columbia, SC 29201	Natalie Adams Pope, RPA (803) 771-7083	DBE/WBE	Archaeological Survey SHPO Permitting	\$2,289

*Survey and Mapping's fee includes \$30,000 for plats which will be performed on a unit price basis, final quantities may vary.

** Terracon's fee includes \$23,163 for construction phase material testing. This is a unit price item, final quantities may vary.

**EXHIBIT B TO AGREEMENT
BETWEEN
OWNER AND ENGINEER**

**DUTIES, RESPONSIBILITIES AND LIMITATIONS OF AUTHORITY
OF THE RESIDENT PROJECT REPRESENTATIVE**

This is an Exhibit attached to, made a part of and incorporated by reference with the Agreement made on July 17, 2012 between City of Columbia (OWNER) and CDM Smith (ENGINEER) for providing professional services.

ENGINEER shall furnish a Resident Project Representative ("RPR"), assistants and other field staff to assist ENGINEER in observing progress and quality of the work of Contractor.

Through more extensive on-site observations of the work in progress and field checks of materials and equipment by the RPR and assistants, ENGINEER shall endeavor to provide further protection for OWNER against defects and deficiencies in the work of Contractor. However, ENGINEER shall not, as a result of such observations of Contractor's work, supervise, direct, or have control over any Constructor's work nor shall ENGINEER have authority over or responsibility for the means, methods, techniques, sequences or procedures selected by any Constructor, for safety precautions and programs incident to the work of any Constructor, for any failure of any Constructor to comply with laws, rules, regulations, ordinances, codes or orders applicable to performing and furnishing the work, or responsibility of construction for Contractor's failure to furnish and perform the Work in accordance with the Construction Contract Documents.

The duties and responsibilities of the RPR are limited to those of ENGINEER in ENGINEER's Agreement with the OWNER and in the construction Contract Documents, and are further limited and described as follows:

A. General

RPR is ENGINEER's agent at the site, will act as directed by and under the supervision of ENGINEER, and will confer with ENGINEER regarding RPR's actions. RPR's dealings in matters pertaining to the on-site work shall in general be with ENGINEER and Contractor, keeping OWNER advised as necessary. RPR's dealings with subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with OWNER with the knowledge of and under the direction of ENGINEER.

B. Duties and Responsibilities of RPR

1. *Schedules*: Review the progress schedule, schedule of Shop Drawing submittals schedule of values, and other schedules prepared by Contractor and consult with ENGINEER concerning their acceptability.
2. *Conferences and Meetings*: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings (but not Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.
3. *Safety Compliance*: Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.

4. *Liaison:*
 - a. Serve as ENGINEER's liaison with Contractor, working principally through Contractor's superintendent and assist in understanding the intent of the Construction Contract Documents; and assist ENGINEER in serving as OWNER's liaison with Contractor when Contractor's operations affect OWNER's on-site operations.
 - b. Assist in obtaining from OWNER additional details or information, when required for proper execution of the Work.
5. *Shop Drawings and Samples:*
 - a. Record date of receipt of Shop Drawings and Samples.
 - b. Receive Samples that are furnished at the site by Contractor, and notify ENGINEER of availability of Samples for examination.
 - c. Advise ENGINEER and Contractor of the commencement of any Work requiring a Shop Drawing or Sample if the submittal has not been approved by ENGINEER.
6. *Review of Work, Defective Work, Inspections, Tests and Start-ups:*
 - a. Report to ENGINEER whenever RPR believes that any part of the Work is defective under the terms and standards set forth in the Construction Contract Documents, and provide recommendations as to whether such Work should be corrected, removed and replaced, or accepted as provided in the Construction Contract Documents.
 - b. Inform ENGINEER of any Work that RPR believes is not defective under the terms and standards set forth in the Construction Contract Documents, but is nonetheless not compatible with the design concept of the completed Project as a functioning whole, and provide recommendations to Engineer for addressing such Work.
 - c. Advise Engineer of that part of the Work that RPR believes should be uncovered for observation, or requires special testing, inspection, or approval.
 - d. Consult with Engineer in advance of scheduled inspections, tests, and systems start-ups.
 - e. Verify that tests, equipment and systems start-ups and operating and maintenance training are conducted in the presence of appropriate personnel, and that Contractor maintains adequate records thereof; and observe, record and report to ENGINEER appropriate details relative to the test procedures and start-ups.
 - f. Accompany visiting inspectors representing public or other agencies having jurisdiction over the work, record the results of these inspections and report to ENGINEER.
7. *Interpretation of Contract Documents:* Report to ENGINEER when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by ENGINEER.
8. *Modifications:* Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report with RPR's recommendations to ENGINEER. Transmit to Contractor in writing decisions as issued by ENGINEER.

9. *Records:*

- a. Maintain at the job site orderly files for correspondence, reports of job conferences, Shop Drawings and Samples, copies of Construction Contract Documents including all Work Change, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Construction Contract, RFIs, ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, approved Shop Drawing submittals and other Project-related documents.
- b. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the job site, Subcontractors present at the Site weather conditions, data relative to questions of Work Change Directives, Change Orders or changed conditions, list of job site visitors, deliveries of equipment or materials, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to ENGINEER.
- c. Record names, addresses, e-mail addresses, websites and telephone numbers of all Contractors, Subcontractors and major suppliers of materials and equipment.

10. *Reports:*

- a. Furnish to ENGINEER periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.
- b. Consult with ENGINEER in advance of scheduled major tests, inspections or start of important phases of the Work.
- c. Draft proposed Change Orders and Work Change Directives, obtaining backup material from Contractor and recommend to ENGINEER Change Orders, Work Change Directives, and Field Orders.
- d. Report immediately to ENGINEER and OWNER the occurrence of any accident.

11. *Payment Requests:* Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to ENGINEER, noting particularly the relationship of the payment requested to the schedule of values, Work completed and materials and equipment delivered at the site but not incorporated in the Work.

12. *Certificates, Maintenance and Operation Manuals:* During the course of the Work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to ENGINEER for review and forwarding to OWNER prior to final payment for the Work.

13. *Completion:*

- a. Before ENGINEER issues a Certificate of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.
- b. Observe whether Contractor has had performed inspections required by laws, rules, regulations, ordinances, codes, or orders applicable to the work, including but not limited to those to be performed by public agencies having jurisdiction over the work.
- c. Conduct a final inspection in the company of ENGINEER, OWNER and Contractor and prepare a final list of items to be completed or corrected.

- d. Observe whether all items on final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance and issuance of the Notice of Acceptability of the Work.

C. Limitations of Authority by RPR

Resident Project Representative:

1. Shall not authorize any deviation from the Construction Contract Documents or substitution of materials or equipment (including "or-equal" items).
2. Shall not exceed limitations of ENGINEER's authority as set forth in the Agreement or the Contract Documents.
3. Shall not undertake any of the responsibilities of Contractor, Subcontractors, Suppliers, or any Constructor.
4. Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Contract Documents.
5. Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the Work.
6. Shall not accept Shop Drawing or Sample submittals from anyone other than Contractor.
7. Shall not authorize OWNER to occupy the Project in whole or in part.
8. Shall not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by ENGINEER.

