ONONDAGA COUNTY

DEPARTMENT OF WATER ENVIRONMENT PROTECTION
http://www.ongov.net
http://savetherain.us

REQUEST FOR PROPOSAL

Baldwinsville-Seneca Knolls WWTP
Asset Renewal Project

PROPOSAL DUE DATE: March 16, 2017, 3:00 P.M.

February 2, 2017
RFP No. 17-3330-001

Save the Rain

ONONDAGA COUNTY REQUEST FOR PROPOSAL
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VISION

To be a respected leader in wastewater treatment, storm water management, and the protection of our environment using state-of-the-art, innovative technologies and sound scientific principles as our guide.

MISSION

To protect and improve the water environment of Onondaga County in a cost-effective manner ensuring the health and sustainability of our community and economy.

CORE VALUES

E*xcellence*
T*eamwork*
H*onesty*
I*nnovation*
C*ost-Effectiveness*
S*afety*

1. INTRODUCTION AND INSTRUCTIONS

1.1. Introduction

The County is seeking professional engineering services for design and construction administration services for the Baldwinsville Seneca-Knolls WWTP asset renewal project. Specifically, the implementation of the recommended 5-year Capital Improvement Plan identified in the final report for the "Baldwinsville Seneca-Knolls WWTP Condition Assessment Report" dated December 2015, as well as other select asset renewal tasks identified herein.

It should also be noted that the County intends to pursue NYSEFC financing for the design and construction portions of this project.

1.2. RFP Certification

Pursuant to the provisions of New York State General Municipal Law, the Onondaga County Division of Purchase has determined that the services required are not subject to competitive bidding under the professional service exemption. Onondaga County purchasing rules require selection of services through a Request for Proposal process.

1.3. Schedule of Events

The schedule of events set out herein represents the County of Onondaga's best estimate of the schedule that will be followed. However, delays to the procurement process may occur which may necessitate adjustments to the proposed schedule. If a component of this schedule, such as the close date, is delayed, the rest of the schedule may be shifted as appropriate. Any changes to the dates up to the closing date of the RFP will be sent out as an official, written addendum prior to the closing date of this RFP. After the close of the RFP, the County reserves the right to adjust the remainder of the proposed dates, including the dates for evaluation, negotiations, contract award, and the contract term on an as-needed basis with or without notice.

Release Date:	2/2/17	Proposal Submission Deadline:	3/16/17
Pre-Proposal Meeting:	2/16/17	Expected Award Date:	5/11/17
Final Date for Submission of Questions:	2/23/17	Expected Contract Start Date:	6/1/17
Addendum Answering all Questions Issued by County: (Posted on our website at www.ongov.net/wep/rfp.html)	3/2/17		

1.4. Submission of Proposals

1.4.1. Sealed proposals, (one [1] original and one [1] electronic copy), shall be submitted to the Department of Water Environment Protection (WEP), 650 Hiawatha Boulevard West, Syracuse, New York 13204-1194 not later than 3/16/17, 3:00 p.m. EST.

1.4.2. Adobe PDF is the preferred format for electronic submissions. Disable all security features in the PDF document. For instance, do not password protect the document, and do not mark Content Extraction or Copying as "not allowed."

1.4.2.1. Try to keep the number of files submitted to one or two files.

1.4.2.2. Do not use these characters in a file name: \ / : * ? < > [ ] & $, l ( ) @.

1.4.2.3. Do not submit files in .zip or compressed format

1.4.3. All submissions are to be marked "Baldwinsville Seneca-Knolls WWTP Asset Renewal Project, RFP No. 17-3330-001". A separate transmittal letter shall

accompany the submissions which will, upon receipt, be date and time stamped by WEP. Proposals will remain sealed until the submission deadline date has expired, after which the "opening committee" will verify the proposals were properly received and opened.

1.4.4. No proposal will be considered which is not accompanied by pricing as requested and signed by an authorized official of the firm. Note: Packages not containing the required number of copies will be rejected.

1.4.5. Proposals must be received on or before the time and date specified. Proposals received after the time specified will not be considered and will be returned unopened.

1.4.6. Proposal information is restricted and not publicly available until after the award of the contract by Onondaga County.

1.5. Modifications or Withdrawal of Proposal

A proposal that is in the possession of the Department of Water Environment Protection may be altered by a letter bearing the signature or name of the authorized person, provided it is received prior to the date and time of the opening. Facsimile, telephone, or verbal alterations will not be accepted. A proposal that is in the possession of the Department of Water Environment Protection may be withdrawn by the vendor up to the time of the opening. Failure of the successful vendor to furnish the service awarded as a result of this advertisement shall eliminate the vendor from the active vendors list for a period of time as determined by the purchasing director.

1.6. Proposal Requirements

1.6.1. Technical Proposal

The technical portion of the proposal shall, as a minimum, include the following:

1.6.1.1. Your understanding of the project scope and specific issues. This should correspond to the tasks outlined in the Scope of Services.

1.6.1.2. Your approach to the project and any recommended variations from the scope of the project and professional services as presented therein.

1.6.1.3. A project schedule showing as a minimum, completion of final design and completion of construction. Where applicable, a sequence of construction schedule is to be provided.

1.6.1.4. A project organization chart identifying the make-up your team and identifying the officer responsible for the project, project manager, other key staff, and their involvement on the project.

1.6.1.5. Resumes for the individuals identified on the organization chart indicating their name, title, reporting office location, project assignment, and relevant experience.

1.6.1.6. A listing of similar projects of this type and scope which your responsible officer has successfully completed as prime Engineer within the past five (5) years, briefly describing the project scope, owner, and total cost. Inclusion of project references is encouraged. Similarly, list projects of this type and scope which the project manager has completed in the past three (3) years.

1.6.1.7. The name and involvement of any subcontractor or subcontractors to be utilized on the project.

1.6.1.8. Where applicable, a list of anticipated engineering drawings for this project.

1.6.2. Fee Proposal

The fee portion of your proposal shall include the following:

1.6.2.1. The total cost to the County for completing all the services identified in this RFP, including all services performed by others and reimbursable direct expenses. The method of payment to be utilized will be actual wage rates times a multiplier, plus the cost of direct expenses and services by others, if any. The multiplier for actual wages is not to exceed 3.10. Lesser fee multipliers for construction related services are encouraged.

1.6.2.2. A total fee for each of the project tasks identified in the Scope of Work of the RFP shall be clearly labeled, including all services by others and reimbursable expenses.

1.6.2.3. A detailed cost breakdown for each of the project tasks defined in this RFP, resource assignments/titles, estimated hours for each title for completion of each task, total man hours per task, average wage rates for each title, total task completion cost, services by others, and reimbursable direct expenses.

1.6.2.4. A description and cost of all reimbursable direct expenses and the amount of markup, if any. Be advised that meals are not reimbursable expenses under this project.

1.6.2.5. A detailed description and cost breakdown of services by others and the markup to be applied, if any. The breakdown shall be as indicated above. The Engineer is advised that the mark-up for services provided by others is not to exceed 1.05, with a not-to-exceed mark-up for services in excess of $100,000 of 1.03.

1.6.2.6. Fee multipliers for wages are to be clearly and separately shown. The fee multiplier for services is at the proposer's discretion; however, it shall not exceed 3.10.

1.6.2.7. Completed Fee Proposal Summary Sheet - Attachment B.

1.7. Award Contract Information

1.7.1. Onondaga County encourages its contractors to make every good faith effort to promote and assist the participation of New York State Certified Minority and Women-owned Business Enterprises (M/WBE) as subcontractors and suppliers. MWBE and EEO compliance and participation will be a priority in evaluating responses to this RFP.

Onondaga County requires all respondents to this RFP for professional services: (1) to be a certified MWBE prime contractor, or (2) to subcontract services and/or purchase supplies from a MWBE partner (or MWBE Partners) sufficient so that not less than 30% of the total value of the work and supplies purchased by the County from your company, or, if such 30% requirement is unattainable, to submit a written explanation for why the 30% requirement is unattainable, along with a description of any attempted efforts to meet the 30% requirement. The County will consider M/WBE contractors that have applied for New York State Certification. Onondaga County will consider on a case by case basis City of Syracuse or other M/WBE certifications your company has attained.

Suppliers that submit proposals in response to this RFP will be required to submit a conceptual plan identifying the services and / or supplies that will be subcontracted or purchased, respectively, from your identified M/WBE partners.

1.7.2. The Vendor also agrees that should this firm be awarded a contract, Vendor shall not discriminate against any person who performs work hereunder because of age, race, color, sex, creed, sexual orientation, national origin, or disability.

1.7.3. The vendor expressly warrants to the County that it has the ability and expertise to perform its responsibilities hereunder, and in so doing shall use the highest standards of professional workmanship.

1.7.4. Onondaga County reserves the right to reject any or all proposals, to waive any informality or technical defect in the proposals, or to award the contract in whole or in part if deemed to be in the best interest of the County to do so.

1.7.5. The successful vendor will be required to enter into and sign a formal contract with the County with reasonable adjustments acceptable to the County. This RFP and the response of the successful vendor will become a part of the contract and will be in effect for the duration of the contract period. The contract language will control over any language contained within this RFP that conflict with the signed and fully executed contract.

1.7.6. The successful vendor shall comply with the Americans with Disabilities Act.

1.7.7. Onondaga County will make this contract available to all municipalities, subject to eligibility under state law. Contracted vendors can provide substantially the same goods and services under the same terms and conditions detailed in the RFP, provided local law permits and the requesting municipality makes its own payment arrangements. The vendor may not increase the price on the contract but may negotiate a reduction. Onondaga County is not responsible for determining a municipality's ability to piggyback, and that right is reserved exclusively to local

counsel. Although extension of the contract to additional municipalities is optional for the vendor, providing this service is a priority for the County.

1.7.8. By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief each bidder is not on the list created as a person engaging in investment activities in Iran in accordance with section 165-a of the state finance law.

1.8. Preparation of Proposal

1.8.1. No proposal will be considered which modifies in any manner any of the provisions, specifications, or minimum requirements set forth in the Request for Proposal.

1.8.2. In case of error in the extension of prices in the proposal, unit prices will govern.

1.8.3. Vendors are expected to examine special provisions, specifications, schedules, and instructions included in this request. Failure to do so will be at the vendor's risk.

1.8.4. Failure to respond (i.e. submission of a proposal, or notice in writing that you are unable to offer but wish to remain on the active mailing list) to request for proposals will be understood by Onondaga County to indicate a lack of interest and will result in the removal of the firm's name from the applicable mailing list.

2. ONONDAGA COUNTY GREEN AND SUSTAINABLE PRACTICES

Sustainable Practices

It is the goal of Onondaga County to limit its carbon footprint, reduce its use of scarce resources and energy, and the environmental impact of its activities through its carbon calculator by achieving one percent each year over the next 25 years. If Contractor participates in any sustainable practices such as, but not limited to, alternative fuels in Contractor vehicles, recyclable materials used in advertising, or sustainable features at any support facility, please include them here for consideration. County may consider high priority sustainability solutions through products or services of the contractor after reviewing full and compliant responses to inquiries made in the RFP.

3. PROPOSAL SUBMITTAL

3.1. Original Proposal

The complete proposal shall be submitted in a sealed package with one (1) original and one (1) electronic copy, prior to the opening date and time. All proposals shall be marked "Baldwinsville Seneca-Knolls WWTP Asset Renewal Project, RFP No. 16-3330-00X". Vendors shall include all documents necessary to support their proposal in the sealed package. Vendors shall submit an accompanying, separate cover letter referencing the attachment(s). Vendors shall be responsible for the delivery of proposals during business hours to the address indicated in the cover letter. It shall not be sufficient to show that the proposal was mailed in time to be received before scheduled closing time.

3.2. Proposal Format

Proposals must be typed or printed on 8 1/2 x 11 inch paper (larger paper is permissible for charts, spreadsheets, etc.) and placed with tabs delineating each section. Pages must be sequentially numbered within major document sections, which are clearly defined below. Sales materials or brochures, if submitted, must be in a separately bound appendix. The

proposal must be organized and indexed in the following format and must contain, at a minimum, all listed items in the sequence indicated.

3.2.1. Cover Page:

3.2.1.1. Full proposal name and number.

3.2.1.2. Submission date and time.

3.2.1.3. Prime Contractor name (vendor who is responsible), address, telephone, fax, and email)

3.2.2. Table of Contents:

All items listed in proposal format in the sequence listed.

3.2.3. Executive Summary:

3.2.3.1. Summarize understanding of the scope of the RFP (project).

3.2.3.2. Explain how your solution or approach addresses the requirements provided in this RFP.

3.2.3.3. Provide a summary or overview of each proposed solution for each corresponding component of Scope of Work offered in this proposal.

3.2.3.4. State exceptions and omissions to stated requirements.

3.2.3.5. Summarize any assumptions (made by the vendor) in order to adequately respond to the requirements of this RFP.

3.2.3.6. Summarize all resources, assumed or expected, to be provided by Onondaga County. This summary should clearly identify what the Vendor expects or anticipates by way of County personnel or resources. This is to be summarized by component.

3.2.3.7. Summarize any value-added concepts to benefit the County, suggested by the proposer which may not have been specified in the RFP.

3.2.4. Compliance Statement:

State agreement with all general provisions, special provisions, equipment, standard of performance, and reliability.

3.2.5. Project Coordination and Scheduling:

Provide a work plan with start date, duration, and physical requirements; to be provided for each component if proposed separately.

3.2.6. Price Proposal Sheets:

Proposal must contain all applicable price sheets in a clear format and in detail as prepared by the proposer as well as the fee proposal summary sheets as provided herein.

3.2.7. Vendor Responsibilities:

3.2.7.1. Proposal certification, verification, and signature. Proposals not signed by an authorized officer of the vendor's organization will be eliminated; refer to signature page herein.

3.2.7.2. It is the sole responsibility of the PROPOSER to assure that they have received the entire Request for Proposal. Proposal and any addenda may be secured by contacting the Department of Water Environment Protection's designated contact person (Section 4.2).

3.3. Sealing and Receipt

All submissions are to be sealed and marked "Baldwinsville Seneca-Knolls WWTP Asset Renewal Project, RFP No. 17-3330-001". A separate transmittal letter shall accompany the submissions, which will be date and time stamped by WEP upon receipt. Proposals will remain sealed until after the submission deadline has expired, after which the "opening committee" will verify that the proposals were properly received and opened.

4. QUESTIONS

4.1. During the period between the earliest notice of the RFP to vendors and the contract award, no County employee can accept oral, written, or electronic contact from vendors regarding the procurement, except as authorized in Section 4 of the RFP. All proposals will remain sealed until after the submission deadline.

4.2. All questions regarding the RFP must be submitted in writing only to:

Contact Person: Mary Gates, Administrative Assistant
Onondaga County Department of Water Environment Protection
650 Hiawatha Boulevard West
Syracuse, New York 13204-1194

4.3. Questions may also be directed to Mary Gates by email at marygates@ongov.net . All questions must be received by the date listed in Section 1.3 (Schedule of Events) of this RFP. Proposers are advised not to contact or lobby any other persons other than the contact person listed during the procurement period. Inappropriate contact may result in removal of the proposer from this and future procurements.

5. REIMBURSEMENT/PROHIBITION OF GIFTS

5.1. Denial of Reimbursement

The County will not reimburse vendors for any costs associated with the preparation and submittal of any proposal or for any travel and/or per diem costs that are incurred.

5.2. Gratuity Prohibition

Vendors shall not offer any gratuities, favors, or anything of monetary value to any official, employee, or agent of the County for the purpose of influencing consideration of this proposal.

6. GENERAL PROVISIONS

6.1. Hold Harmless, Defense, and Indemnification (Refer to Section 10 – Engineering Agreement, for a link to the sample agreement.)

6.1.1. Contractor covenants and agrees to indemnify, defend, and hold harmless--to the fullest extent permitted by law--the County of Onondaga, its officers, agents and employees, and representatives in connection with this agreement from and against any and all loss or expense that may arise by reason of liability for damage, injury, or death, or for invasion of personal or property rights, of every name and nature including, but not limited to (i) claims of property damage; (ii) claims of personal injury to Contractor if self-employed, Contractor's employees, agents, or subcontractors; (iii) claims of personal injury to third parties; and (iv) reasonable attorneys' fees whether incurred as the result of a third party claim or to enforce this contract arising out of or resulting directly or indirectly from the performance of the work or the enforcement of this contract, irrespective of whether there is a breach of a statutory obligation or rule of apportioned liability and whether casual or continuing trespass or nuisance and any other claim for damages arising at law and equity alleged to have been caused or sustained in whole or in part by or because of misfeasance, omission of duty, negligence, or wrongful act on the part of the Contractor, its employees, or agents.

6.1.2. Without otherwise limiting the scope of the indemnity provisions set forth in paragraph (6.1.1.) herein, if Contractor serves upon the County, within ten (10) calendar days of being notified by the County of a claim a duly executed copy of a letter from Contractor to Contractor's various insurers, providing notice of the Claim requesting that the Insurer provide defense therefore, and if within sixty (60) days thereafter, Contractor provides to the County a duly certified letter from Contractor's insurer (s):

(i) Giving notice to Contactor that the claim is not within the scope of coverage of Insurance contracts that Contractor is obligated to obtain and maintain in force pursuant to terms of the AGREEMENT or;

(ii) A Reservation of Rights Letter; Together with Contractor's duly signed consent to joinder in any pending action and participation in settlement of the consent to joinder in any pending action and participation in settlement of the claim, the County shall assume the cost of defending the claim. Provided, however, that the County reserves all rights pursuant to applicable law and Paragraph 6.1.1. of this Section to seek recovery of all costs incurred by the County in defending the claim to the fullest extent allowed by applicable law. The County's reservation of rights as set forth herein is without prejudice to Contractor's right to seek to limit the obligation to indemnify the County for defense costs incurred by the County to the percentage of the claim or damages caused by the negligence or other fault of the Contractor.

6.1.3. The Contractor further covenants and agrees to obtain the necessary insurance as required by the General Obligations Law of the State of New York and this contract to effectuate this Hold Harmless clause and shall name the County of Onondaga as an additional insured on all applicable insurance and indemnification. (See also insurance provision).

6.2. Insurance

Contractor shall purchase and maintain insurance of the type and coverage set forth below, written on an occurrence basis reasonably acceptable to the County of Onondaga and which will provide primary liability coverage to the Contractor **AND WITH THE COUNTY NAMED AS AN ADDITIONAL INSURED ON A PRIMARY AND NON-CONTRIBUTING BASIS** for claims which may arise out of or result from Contractor's operations under the contract, including without limitation (i) claims because of bodily injury, occupational sickness or disease, or death, whether to Contractor if self-employed, Contractor's employees, or others and whether or not under a workers' compensation or other similar act or law for the benefit of employees; and (ii) claims because of injury to or destruction of tangible property, including loss of use resulting therefrom.

All policies shall be written so that the County of Onondaga will be notified of cancellation or restrictive amendment at least thirty (30) days prior to the effective date of such cancellation or amendment. Certificates or insurance from the carrier or their authorized agent with the appropriate additional insured endorsement attached showing the County of Onondaga as an additional insured and stating the limits of liability, expiration date which are acceptable to the County of Onondaga shall be filed with and accepted by the County of Onondaga before operations are begun. The intent is that this insurance, with the County of Onondaga being named as an additional insured, is to be primary over and above the County of Onondaga's own general liability coverage.

Contractor agrees to obtain and maintain General Liability Insurance including Comprehensive Form, Premises-Operations, Products/Completed Operations, Blanket Broad Form Contractual, Independent Contractors, and Broad Form Property Damage Coverage with minimum limits of not less than one million dollars ($1,000,000.00) Combined Single Limit for Bodily Injury and Property Damage.

Contractor also agrees to obtain and maintain Automobile Liability insurance for owned, hired, and non-owned vehicles with minimum limits of not less than one million dollars ($1,000,000.00) Combined Single Limit for Bodily Injury and Property Damage.

In addition, the Contractor shall obtain and maintain Professional Liability Insurance with minimum limits of not less than one million dollars ($1,000,000.00). Also, the Contractor shall obtain and maintain Umbrella Insurance with minimum limits of not less than one million dollars ($1,000,000.00).

Contractor shall deliver to the County's Department of Law, before this contract may be made of performed and from time to time thereafter as is reasonable, both a form certificate of insurance approved for use by New York's Superintendent of Insurance and copies of the declarations of each insurance contract referred to by such certificate of insurance as evidence that the insurance coverage required for this contract is maintained by the Contractor. At the request of the County, Contractor shall deliver to the County's Department of Law a copy of any insurance contract referred to by such certificate of insurance.

Contractor further agrees to comply with the requirements of the New York State Workers' Compensation Board regarding proof of compliance with the New York State Workers' Compensation Law. The New York State Workers' Compensation Board requires the County

to obtain from contractors proof of Workers' Compensation insurance coverage, self insurance, or exemption from the requirement of obtaining Workers' Compensation Insurance coverage. Proof must be submitted to the County on forms specified by the Workers' Compensation Board and stamped as received by the Workers' Compensation Board.

6.3. Assignment

Contractor is prohibited from assigning, transferring, conveying, subletting, or otherwise disposing of this agreement or Contractor's right, title, or interest in this agreement or Contractor's power to execute this agreement to any other person or entity without the previous consent in writing of the County.

6.4. Independent Contractor

Contractor is an independent contractor. Neither Contractor, nor Contractor's officers, employees, agents, or servants shall hold themselves out as, or claim to be, officers, employees, agents, or servants of the County.

6.5. Conflict of Interest

At the time Contractor submits a proposal, bid or if no bid is submitted, prior to performing any services under this agreement, Contractor shall deliver to County's Department of Law the attached affidavit certifying that Contractor has no interest and will not acquire any interest, direct or indirect, that would conflict in any manner or degree with the performance of services to County. The affidavit shall further state that in rendering services to the County, no persons having any such interest shall be employed by Contractor. Contractor assumes full responsibility for knowing whether Contractor's officers, employees, agents, or servants have any such interest and for certifying the absence of such conflict to the County. During the course of performing services for the County, Contractor shall disclose immediately to the County, by affidavit, every known or apparent conflict of interest and every ostensible or potential conflict of interest of Contractor, Contractor's officers, Contractor's employees, Contractor's agents, and Contractor's servants. The duty to disclose is a continuing duty. Such disclosure is a material obligation of this agreement and Contractor's failure to comply with these provisions affords the County the right to pursue any and all remedies for breach of agreement. In the event of an apparent or actual conflict of interest during the course of performance, Contractor shall suspend all work and services, and County's payments to Contractor shall be suspended pending final approval by County or County's Board of Ethics. If the conflict cannot be resolved to the satisfaction of the County, County may terminate the agreement by written notice. Nothing herein shall be construed as limiting or waiving County's right to pursue damages or other remedies.

A conflict of interest includes any circumstance which might influence or appear to influence the judgment of Contractor, and Contractor shall disclose the same. Contractor shall disclose further the acceptance of compensation, monetary or otherwise, from more than one (l) payor or party for services on the same project or related project. Contractor shall disclose further the direct or indirect solicitation or acceptance of financial or other consideration from parties other than County for work on the project to which this agreement pertains. If applicable, Contractor shall disclose further the direct or indirect acquisition of any interest in the real estate which is the subject of the project, or in the immediate vicinity thereof. A conflict of interest of Contractor's officers, Contractor's employees, Contractor's agents, or Contractor's

servants shall be deemed a conflict of interest of Contractor, giving rise to the duty to disclose.

Contractor shall not disclose any data, facts, or information concerning services performed for County or obtained while performing such services, except as authorized by County in writing or as may be required by law.

6.6. Account Representative

The successful Vendor shall appoint, by name, a company representative who shall be responsible for servicing this account. The appointed representative shall be responsible to provide the services required to insure that the account would be administered in an organized systematic manner.

6.7. Responsiveness

Vendors are expected to examine specifications, schedules, and instructions included in the package. Failure to do so will be at the Vendor's risk.

6.8. Effective Dates of Proposal

All terms, conditions and costs quoted in the Vendor's response will be binding on the vendor for 180 days from the last date to submit the proposal.

6.9. Advertising Award

The successful Vendor must receive written approval from the County before advertising the award of the contract or the services to be provided under the contract. The Vendor agrees not to refer to awards in commercial advertising in such a manner as to state or imply that the firm or its services are endorsed or preferred by the County.

6.10. Beginning Work

The successful Vendor will not commence any work which could be billed until a valid contract has been executed between the Vendor and the County.

6.11. Statement of Assumptions

The Vendor will clearly describe any assumptions made (by them) in order to successfully complete the proposal. These assumptions include, but are not limited to, any assumptions that Onondaga County will provide space, people, materials, and other resources, etc.

6.12. Contract

The contract between the County and the Vendor shall include:

6.12.1. The Request for Proposal (RFP) and any amendments thereto and the proposal submitted by the Contractor in response to the RFP. In the event of a conflict in language between the RFP and the proposal, the provisions and requirements set forth and/or referenced in the RFP shall govern. Onondaga County reserves the right to clarify any contractual relationship in writing with the concurrence of the Contractor, and such written clarification shall govern in case of conflict with the applicable requirements stated in the RFP or the Contractor's proposal. In all other matters not affected by the written clarifications, if any, the RFP shall govern.

6.12.2. The standard Onondaga County vendor contract, a copy of which is available upon request.

6.13. Extensions and Amendment

In performing the Contract, both parties agree to comply with all applicable state, federal, and local laws, rules, and regulations.

6.14. Replacement Contract

In the event a replacement contract is required but not issued, any contract let and awarded hereto under by the County may be extended unilaterally by the County, for an additional period of one month, upon notice to the contractor, with the same terms and conditions as the original contract. With the concurrence of the vendor, this extension may be for a period of up to three months; however, the extension terminates should the replacement contract be issued in the interim. The County reserves the right to unilaterally extend such contract for an additional period of one month, upon notice to the contractor, with the same terms and conditions as the original contract. With the concurrence of the vendor, this extension may be for a period of up to three months.

6.15. Audit

The County or any of their duly authorized representatives shall have access to any books, documents, papers, and records of Contractor which are directly pertinent to the Contract for the purpose of making audit, examination, excerpts, and transactions.

6.16. Ownership of Documents/Work Product

It is agreed that all finished or unfinished documents, data, or reports, prepared by Contractor under the Contract shall be considered the property of the County, and upon completion of the services to be performed, or upon termination of the Contract for cause, or for the convenience of the County, will be turned over to the County.

6.17. Proprietary Information

All RFP materials are subject to a Freedom of Information Request under the New York State Public Officers Law. If any request is received regarding this RFP, you will be afforded the opportunity to submit justification to exempt any section you have identified in your proposal as proprietary. The County will not accept any request by a potential vendor to declare the whole RFP response as proprietary, or to declare any pricing pages as proprietary. The County reserves the right to determine whether the proposal will be released in whole or in part.

6.18. Appropriations

This agreement is executory only to the extent of the monies appropriated and available for the purpose of this agreement and no liability on account thereof shall be incurred by County beyond monies appropriated and available for the purpose thereof.

6.19. Funding

Onondaga County warrants that the funds are available during the current fiscal period, and that the County shall use its best efforts to obtain funds to make payments in each subsequent fiscal period through the end of the contract term. If a funding request to the Legislative

body--for any part of the contract term--is denied, the County may terminate the contract on the last day of the fiscal period for which funds have been appropriated.

7. SCOPE OF SERVICE

7.1. Introduction – Project Background

The Baldwinsville-Seneca Knolls WWTP was put into service in 1982. The facility has an average design flow of 9 MGD with average daily flows of 4 MGD. The facility primarily treats domestic wastewater from approximately 36,000 residents. There is one large industrial user, Agrana Foods. Treatment is conducted via a high purity oxygen (HPO) activated sludge process. The facility consists of influent screening and grit removal followed by primary settling, activated sludge biological treatment, secondary settling, and effluent disinfection. Waste sludge is aerobically digested and then dewatered and hauled offsite for disposal.

For additional information regarding the process, the facility fact sheet can be viewed at: http://static.ongov.net/WEP/BaldwinsvilleSK_WWTP/Bville-Seneca_Knolls_2015_Fact_Sheet.pdf

In 2013, the County contracted with GHD Consulting Services to perform a comprehensive condition assessment and series of evaluations of the physical infrastructure and plant processes at the Baldwinsville WWTP. As previously noted, the facility was constructed in 1982 and much of the original equipment is still in use. The goal of the comprehensive facility inspection was to identify repairs, replacement needs, and modifications so that the WWTP maintains compliance with anticipated permit limits and codes, and is capable of maintaining the facility's asset value and reliable operation into the foreseeable future. The results of the evaluation were individual recommendations on improvements, a detailed Capital Improvement Plan (CIP) immediate term (<1 yr), short-term (1-yr), and for the 5-year planning periods and a general CIP for the 10 and 20-year planning periods. The assessment included on-site investigations of the mechanical, electrical, control, structural, architectural and site assets followed by a CIP analysis to identify critical capital improvements anticipated to be needed within the next 20 years. In addition to physical assessments, evaluations of odor control systems, effluent flow monitoring, biosolids handling and disposal, phosphorus removal and disinfection were conducted. The findings from this effort are summarized in the report prepared by GHD titled Condition Assessment Report, Baldwinsville Wastewater Treatment Plant, dated December 2015. A copy of same can be viewed at: http://static.ongov.net/WEP/BaldwinsvilleSK_WWTP/BSK_Condition_Assessment_Report_with_Appendix.pdf

It is noted that WEP has completed the short-term improvements (also referred to as immediate improvements) recommended for the facility. As such, this project is not part of this RFP scope. The details for this project can be viewed at http://static.ongov.net/WEP/BaldwinsvilleSK_WWTP/Baldwinsville-Seneca_Knolls_WWTP_Immediate_Improvements_Record_Drawings.pdf

The focus of this project is to provide extensive upgrades to the aging plant to maintain the viability of the infrastructure for future years with an emphasis on the implementation of the 5 – YR recommended capital improvements included in the Report. Most areas of the

treatment facility are included within this project and project elements have been broken down into Site, Architectural, Structural, Electrical, and HVAC elements (following the organizational layout in the aforementioned report from GHD).

On June 9, 2014, the County was issued a modified and renewed SPDES permit for the Baldwinsville WWTP by the New York State Department of Environmental Conservation (NYSDEC). This new permit reduced the Total Residual Chlorine (TRC) limit from an interim limit of 2 mg/l to 0.8 mg/l, effective May 15, 2018. The Baldwinsville SPDES Permit can be viewed at:
http://static.ongov.net/WEP/BaldwinsvilleSK_WWTP/BaldwinsvilleSenecaKnolls_SPDES_Permit_06092014.pdf

To that end, this facility is currently under design for disinfection system improvements to meet newly imposed SPDES permit requirements. This work is scheduled to be completed by spring 2018 and is part of a separate and distinct project. The recommendations included in the *Condition Assessment Report* from Section 2.8 (Disinfection Tanks and Storage) have been incorporated into the Disinfection Improvements project and **will not** be a required part of this scope.

This Asset Renewal project requires the implementation of the 5 - YR CIP recommendations identified in the Condition Assessment Report. In addition, the County has added additional tasks; such as motorized actuators on all recently installed gates and recommendations from the Wendel Flex Tech Report not previously identified in the GHD report. A facility site plan is included in Attachment A.

7.2. Services to be Provided

The Engineer shall perform final design and construction phase services required for the following tasks associated with the Asset Renewal project at the Baldwinsville WWTP. The design shall be based primarily on the 5yr CIP recommendations in the aforementioned report. In addition to those items referenced in the report, additional design elements identified by WEP have been added to this scope of work. The design, where applicable, shall meet the minimum requirements established in the *Recommended Standards for Wastewater Facilities (10 State Standards)* and where not in conflict with 10 States Standards, the requirements of New England Interstate Water Pollution Control Commission (NEIWPCC) *Guide for the Design of Wastewater Treatment Works (TR-16).* In addition, the Engineer shall complete the design in accordance with applicable codes (National Electric Code, NYS Uniform Fire Prevention and Building Code, NYS Mechanical Code, etc.) and standards (National Fire Protection Association, Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities, etc.). The Engineer shall include green and sustainable recommendations where warranted, while focusing on value-added and innovative solutions as part of this evaluation. Please be sure to include energy efficiency considerations during design.

It is noted that the conceptual costs prepared by GHD were described for planning level purposes only, and do not necessarily include all of the tasks identified herein.

Upon termination of the contract for whatever reason, the Engineer shall provide, as may be required by the County, all project documents and information to conclude work under the project.

7.2.1. The County requires several upgrades and modifications related to the 5-year CIP for the Baldwinsville WWTP. Based on the detailed assessments and evaluations, the following tasks have been identified for implementation under the 5-year CIP. For a summary of the facility assets included in this project, as well as cost estimates, refer to the *Condition Assessment* report, Appendix I. It should be noted the overall goal shall be reliable performance, simplified maintenance, and lower lifecycle costs. The following task items are summarized in the *Condition Assessment Report* in Section 11, Table 11-1.

7.2.1.1. Seneca River Siphons and Inlet and Outlet Improvements

As described in Section 2.1 in the *Condition Assessment* report, and summarized in Section 11, this task will require:

- Replace rusted vent on the downstream vault.
- Provide gate manufacturer's service for rehabilitation of the sluice gate.

7.2.1.2. Control Building and Influent Pump Station

As described in Section 2.2 in the *Condition Assessment* report, and summarized in Section 11 and itemized in Appendix I, this task will require:

Mechanical

- Replace the influent screens with finer screens and include washer compactors. (Refer to Table 2-4 and Appendix C of the report).
- Replace the influent pumps with four new pumps to provide at a minimum redundant capacity for 18 MGD.
- Replace all valves and associated piping for each influent pump.
- Remove the electrolyte heat exchanger jackets on Pumps 1 and 3 discharge lines and replace with spool piece.
- Replace the Belt Filter Presses (BFP) with new dewatering equipment and associated polymer feed equipment. Cross reference section 7.2.18 Pilot Testing of Dewatering Technologies must be completed.
- Add sludge load leveler for sludge disposal truck.

Structural

- Replace deteriorated concrete and other structural concerns as identified in section 2.2.2 recommendations 2 & 3 and listed in Table 11-1. Include work referenced in section 7.2.1.15 (Concrete and Structural Repairs).

Electrical

- Replace influent pump variable frequency drives and harmonic filters. This replacement allows all the influent pumps to be a matched system (including the new No.4 pump). Install a temperature sensor on all four (4) influent pump variable frequency drives, connected into the control and alarm system and mounted in the enclosure to alarm upon high interior temperatures. The existing PLC (PLC_B04) panel will be able to handle the additional pump requirement with some minor programming

(to be done in-house). Conduit and wiring will be required for monitor and control of the drives by the PLC.

- Add electrical valve operators for the new influent pump isolation valves.
- Provide the repairs and upgrades listed in section 2.2.3 of the report for electrical code compliance and safety.
    - Provide caps, cover plates, and rubber gaskets on all open conduits, pull fittings, and junction boxes as required.
    - In wet locations, replace all non-wet location rated junction boxes with rated junction boxes.
    - Clean and paint minor rust corrosion in electrical channel. In channel with major corrosion and damage, remove and replace with stainless steel channel and hardware.
    - Replace receptacles with major corrosion damage.
    - Fix or replace any broken and separated conduit and fittings throughout buildings.
    - Provide junction boxes for all spliced wires; all wire splices shall be in junction box.
    - Clean and paint all electrical equipment enclosures showing rust.
    - Replace rusted mounting hardware with stainless steel hardware in wet locations.
    - Pull fittings not sealed tight; tighten fitting covers; replace gaskets as required.
    - Provide volume control in each space for public address system speakers.
    - Replace all interior metal halide wall packs with energy efficient LED light fixtures.
    - In the belt press area, replace overhead low bay metal halide-type lights with new energy efficient lighting.
    - For all motors outside on tank building area, replace all coated FMC with UV-resistant coated FMC.
- Provide new fire alarm and CO systems throughout the entire facility and connect to SCADA.
- Provide modifications to stormwater catch basin (CB13) which includes a hinged 30”x30” grating (or equivalent) and 24” sluice gate to isolate storm sewers in the event of a chemical spill. The hinged or assisted grating is to facilitate installation of a sump pump for material transfer. Refer to yard piping drawing G-7, G-15, and/or P-1.

<u>HVAC</u>

- Implement all recommendations for HVAC code compliance (section 2.2.4.5 on page 18 of the Condition Assessment Report).
- The HVAC system shall also account for the replacement of the Penn Compressors (7.2.1.5) and loss of recovered heat from the old system.
- Decommission any unnecessary heat recovery equipment.

Facility-wide Architectural Improvements

- Complete all recommended 5 – YR CIP items listed in Section 2.2.5 and itemized in Table 11-1 for Building Exteriors and Building Interiors.
    - Paint underside of soffits and remove all soffit venting and replace with new venting at all buildings and structures.
    - Remove all exterior doors and hardware and install new doors and the proper hardware for door function. Provide security access hardware where required.
    - Remove all overhead doors and install new overhead doors.
    - Remove and replace louvers.
    - Prior to removal, Engineer to sample all caulking for PCBs. Include removal of all caulking/sealant at joints between panels and install new caulking/sealant at joints.
    - Install new roof access hatches at all current access hatch location. Install new ladder or ship ladder stairs to roofs and provide fall safety equipment.
    - Replace all windows and skylights with new energy efficient units.
    - Remove and replace all existing carpeting with new hard floor surface.
    - Remove all interior doors and install new doors and hardware to be in compliance with the hardware function required for each location. Include all deteriorated doors and frames in the galleries.
    - Fully renovate the laboratory in the Control Building.
    - Fully renovate the two main break rooms in the Control Building.
    - Fully renovate the main men's and women's restrooms in the Control Building. Meet all handicap accessibility requirements.
    - Construct new janitor's closet.
    - Remove the existing dumbwaiter and create a new elevator shaft enclosure at this location and extend to the basement for installation of a new elevator to access all floors. Modify lower level meeting room and office.
    - Replace existing building signage.
    - Remove and replace all acoustic ceiling tiles.

7.2.1.3. Aerated Grit Chamber and Grit Building

As described in Section 2.3 in the *Condition Assessment* report, and summarized in Section 11 and itemized in Appendix I, this task will require:

Mechanical

- Replace two air blowers with new VFDs, gauges, valves, and air piping insulation. Each blower shall also include independent piping with cross-over connections for redundancy.
- Replace two primary sludge degritters and associated piping with new.

Structural

- Repair deteriorated concrete in Grit Building and grit chamber areas. All concrete surfaces shall have a penetrating seal coating.
- Repair and re-anchor broken guiderail in aerated grit chamber #2 and any damaged concrete in this area.

Electrical

- Update lighting and increase lighting levels. Provide disconnect switches at units, within sight of the unit.

7.2.1.4. Primary Settling Tanks and Major Mechanicals

As described in Section 2.4 in the *Condition Assessment* report, and summarized in Section 11 and itemized in Appendix I, this task will require:

Structural

- Repair concrete cracks and spalled areas. Apply penetrating seal to new concrete surfaces.
- Replace tank, walkway, and cross collector walkway expansion joints.
- Apply penetrating seal for concrete to exterior wall and walkway.

7.2.1.5. Oxygen Generation Technologies and Liquid Oxygen Storage

As described in Section 2.5 in the *Condition Assessment* report, and summarized in Section 11 and itemized in Appendix I, this task will require:

Mechanical

- Repair or replace aeration tank purge blowers; goal is to extend lifecycle to an additional 10 years.
- Replace air compressors with new compressors to reduce noise and save energy. Reference C&S Companies memorandum http://static.ongov.net/WEP/BaldwinsvilleSK_WWTP/BSK_Compressor_Technical_memo.pdf
- Add or replace silencer equipment on the rooftop air intakes for the two main HPO compressors and on the common blow-off line for the valve skid and PSA vessels.
- Repair or rehabilitation of liquid oxygen tank (and associated appurtenances; supply lines, valves, fittings, etc.) based on condition analysis at time of design.

Structural

- Repair concrete cracks and spall areas.
- Replace concrete wearing surface joints.
- Apply a concrete penetrating sealer to the exterior walls and roof slab concrete wearing surface of the oxygen generation building.

HVAC

- Add additional waste heat ventilation in the Compressor Room.
- Provide mechanical cooling of PLC cabinet (PLC located in 'K' Panel at the PSA Skid in the Compressor Room). PLC_B02 in the adjoining Electrical Room also requires cooling (original cabinets with the removable panels).
- Modifications to the HVAC system will be required since heat recovery will be altered due to new compressors listed above. (Refer to section

7.2.1.2).

7.2.1.6. First and Second-Stage Aeration Tanks and Major Mechanicals

As described in Section 2.6 in the *Condition Assessment* report, and summarized in Section 11 and itemized in Appendix I, this task will require:

Structural

- Repair severely deteriorated interior columns supporting the aerator units, the deteriorated floors below the aerator impeller, and the exterior tank wall surface areas located at the ends of the trench drains.
- Add stainless steel jackets around the columns and stainless steel plates to the concrete floor below the aerator impeller.
- Repair interior and exterior vertical cracks.
- Replace interior joint seal system.
- Replace exterior walls and top slab expansion joints and construction joints.
- Add concrete penetrating sealer to the exterior wall and top slab of the aeration tanks.
- Add removable access panels for personnel/maintenance access for each tank.
- Rehabilitate effluent end of stage #1 secondary clarifier to include new weirs, fiberglass end trough and slide gates 45-49.

7.2.1.7. Gallery Nos. 1 through 8

As described in Section 2.9 in the *Condition Assessment* report, and summarized in Section 11 and itemized in Appendix I, this task will require:

Mechanical

- Replace primary plunger-type scum pumps and demolish/remove existing secondary scum pumps. PLC/SCADA control and conduits required for new scum pumps.
- Add secondary scum drain system
- Replace thickened sludge pumps 3, 4 and 5 with rotary lobe pumps. Pump 4 should include a sludge grinder. Provide controls with connection to SCADA. Requires VFDs and SCADA control. This is new work and will require conduit and wiring for monitor and control of the drives by the PLC based on flow rate. New flow meters (including conduit and wiring to the PLC) will be required for these pumps.
- Demo existing digested sludge pumps No. 1 and No. 2 and replace with one rotary lobe pump to transfer sludge between digesters or sludge loading to tankers. Requires VFDs and SCADA control. This is new work and will require conduit and wiring for monitor and control of the drives by the PLC based on flow rate. New flow meters (including conduit and wiring to the PLC) will be required for these pumps. Add effluent pump system and controls and conduit with connection to SCADA.
- Add new independent waste pump flow meters for both 1st and 2nd stage WAS with connection to SCADA. PLC/SCADA control and conduit

required to operate WAS pumps based off flow rates.

- Add new independent flow meters for all RAS trains with connection to SCADA. PLC/SCADA control and conduits required to operate RAS pumps based off flow rates.
- Add new polymer feed system to distribute polymer to both the effluent of aeration Stage 1 and Stage 2.

Structural

- Replace failed expansion joints located above the concrete ceiling beams in Gallery No. 7
- Repair concrete ceiling beam.
- Repair Beam B53 in Gallery No. 1
- Sandblast and recoat splitter boxes in Gallery No. 2.
- Replace expansion joint located above the concrete ceiling beam.
- Repair severely cracked interior concrete column in Gallery No. 4.
- Repair crack between the cantilever support and stair landing in Gallery No. 5.
- Repair severely deteriorated exterior vertical joint between Gallery No. 2 and Digester No. 3.
- Repair severely cracked interior column in Gallery No. 8.
- Sandblast and recoat splitter boxes in Gallery No. 2.
- Repair remaining interior delaminated areas.
- Replace deteriorated areas of the concrete wearing surface and the waterproofing membrane.
- Replace concrete wearing joints.
- Add Concrete penetrating sealer to the concrete wearing surface.
- Repair vertical and horizontal cracks located on the walls.
- Repair deteriorated areas of the ceiling.
- Replace expansion joint located in the ceiling above the column in Gallery No. 4.
- Repair exterior and interior concrete cracks, spall areas, and the top of the westerly series feed channel wall in Gallery No. 7.

Electrical

- Provide new PLC w/ HMI for WAS/RAS pump control
- Provide a new or additional emergency area and egress lighting.
- Add vestibule for hazardous areas separation between Gallery No. 1 and grit area, including ventilation and alarms.
- Provide GFCI receptacles in wet areas.
- Add smoke detector and alarm system.
- Repair wiring and raceway systems.
- Raise transformers in Gallery No. 3.
- Repair public address system speakers.
- In Gallery Nos. 5 and 6, replace disconnects' safety switches showing severe corrosion damage and supporting channels.

HVAC

- Replace all HVAC systems and clean associated duct work to be re-used that have exceeded their median expected service life (Table 2-29). Renovate and repair HVU #2/3. Install flow switches and local/remote

alarms.

- Add listed duct smoke detectors and additional controls for HVU#3.
- Upgrade ventilation system to declassify area under NFPA 820, include air flow detection and loss of air flow alarming.

7.2.1.8. Pre and Post- Thickeners

As described in Section 2.10 in the *Condition Assessment* report, and summarized in Section 11 and itemized in Appendix I, this task will require:

Mechanical

- Replace caulking located around the bearing plates for the access bridge.
- Remove hardened bluish material from rake arms and scrapes.
- Provide ability to off-load sludge from either thickener by tanker.

Structural

- Replace sealant in the effluent trough on Post-Thickener No. 1

7.2.1.9. Aerobic Digesters:

A majority of the work for the digesters was completed under the Immediate Improvement Project. However, the following task items still need to be completed:

Mechanical

- Rehabilitate digester holding tank mixing system
- Modify existing digester exhaust (odor control line) by moving three valves on second stage and adding two isolation valves.

Structural

- Apply penetrating sealer for concrete to exposed walls and roof slabs for all digesters.

7.2.1.10. Garage, Office, and Switchgear Room

As described in Section 2.12 in the *Condition Assessment* report, and summarized in Section 11 and itemized in Appendix I, this task will require:

Structural

- Apply sealer to exterior walls and crack surfaces. Repair all cracked floors and spalled walls.

Electrical

- Provide panic hardware and change door swings

HVAC

- Replace all systems that have exceeded their median expected service life (Table 2-35) and clean existing ductwork to be reused.
- Replace packaged rooftop air handling unit (ACS #2) and the electric reheat coils. Replace warped, sagging, and discolored ceiling tiles.
- Replace fume hoods. Relocate supply air diffusers from in front of the fume hoods or replace diffusers with three-way directional type directed away from hood. Replace rooftop exhaust fans with new explosion proof and corrosion-resistant units.
- Increase number of air changes per hour in ferrous sulfate storage

building.

7.2.1.11. Facility Pavement, Sidewalks, and Grounds

As described in Section 2.14 in the *Condition Assessment* report, and summarized in Section 11 and itemized in Appendix I, this task will require:

Site/Civil

- Review and correct the grading and drainage of all flat areas. Review the subsoil conditions to make sure the subgrade is sound and no additional drainage course is necessary.
- Replace pavement as identified in report with the exception of sludge drying beds.
- Remove drainage ditches along the road, add grassy or gravel shoulders, and vegetative drainage swales. Add guardrail.
- Replace fence and gates.
- Construct new covered road salt storage area.

Electrical

- Replace flexible metal conduit connecting conduit systems to motors on several above-tank motors.
- Replace deteriorated mounting stand supports for disconnect switches and control stations.

7.2.1.12. Slide Gates

Mechanical

- Replace gate 13 and include motorized actuator.
- Provide motorized actuators for the following existing gates: 11, 15, 18, 22, 42, 43, 44, 53, 54 and 55.
- Replace gates: 21, 29, 32, 33, 34, 35, 36, 37, and 52 equipping all with vertical hand wheel operators with an adaptor allowing for remote operator drill.
- Provide reconfigured gearboxes with vertical hand wheel operators with an adaptor allowing remote operator for the following existing gates: 16, 17, 19, 20, 23, 24, 25, 26, 27, 28, 29, 30, and 31.

7.2.1.13. Odor Control

- Cover tanks and channels for post-thickeners, aerated grit chamber, and primary clarifier influent channel and treat odors with a new carbon vessel biofilter.
- Exhaust air from dewatering room and sludge loading area to new exterior mounted carbon vessel.

7.2.1.14. Biosolids

- Add provisions for sludge off-loading from other sources as described in the report.

7.2.1.15. Concrete and structural repairs

- Re-evaluate existing concrete conditions since the preparation of the Condition Assessment Report since further deterioration has occurred and prepare list of areas requiring repair. Design these repairs in addition to those listed specifically in above and in the Condition Assessment Report.
- All concrete walkway areas shall have coating applied for wear surfaces (specific walkways to be identified during design).
- All concrete surfaces (horizontal and vertical) shall have sealer applied.

7.2.1.16. Safety Upgrades

- Eyewash and Showers Replace all eyewash and showers with tepid systems and connect with conduits to SCADA as applicable.
- Tie all emergency eyewash/shower stations to notification system to alert someone when in use/activated.
- Evaluate and subsequently install confined space entry signs in all necessary areas; include hearing protection area signage as applicable.

7.2.1.17. Site Security Improvements

This project includes improvements to building and gate access security improvements.

- Site Security will include the addition of a motorized gate with proximity card access system (compatible with County's existing system), and a two-way communication system installed between the gate and the operations control center.
- Surveillance Monitoring will include conduits, cables and security cameras for seven (7) locations as identified in Attachment A-2, including the security camera for the new gate entrance. Cameras shall be outdoor rated with zoom and oscillating capabilities and connected to a video surveillance system (equivalent to the QNAP VioStor Surveillance System). A monitoring station/area should be included with digital recording capability. In addition, proximity card readers shall be provided for key building entrances (primary access and overhead doors) and the main gate as noted above; include contacts, locks, readers and keypads as required (equivalent to the Galaxy Access System®). Any violation of door access should send an alarm to SCADA (locally and remote).

7.2.1.18. Pilot Testing of Dewatering Technologies

As described in Section 5 – Biosolids Evaluation in the *Condition Assessment* report an analysis of dewatering technologies was conducted. Based on this analysis, a pilot test of belt filter press, screw press, and centrifuge is required prior to choosing a technology for replacement of the belt filter presses as identified in task 7.2.1.2. The results of this pilot study should be prepared in accordance with task 7.7.1 for the 25% design deliverable.

7.2.1.19. Energy Conservation Measures (ECM)

As part of the County Executive's 2012 Climate Action report, WEP has

conducted an energy efficiency study under NYSDERDA's FlexTech Program. This study looked at measures that would decrease energy consumption while improving the general condition of the facilities. This work is documented in the Final FlexTech Study report (Wendel Report) prepared by Wendel, dated 1/22/2016 and is included on the website at: http://static.ongov.net/WEP/ReferenceDocuments/FlexTech_Report_FINAL_01-22-16.pdf

The results of this effort include recommended ECMs for each facility. In this project, the County wishes to pursue ECM #s 31, 33b, and 34 from the report.

ECM #31- Process Water Systems

Provide energy saving enhancements to the process water system as described in the Wendel Report to include:

- Replace existing PWP-2 with a new 20-hp, variable speed, horizontal split case pump and motor with a design duty point of 250 gpm at 180-feet of head. Requires VFDs (install a new 20-hp VFD for PWP-2) and SCADA control. This is new work and will require conduit and wiring for monitor and control of the drives by the PLC.
- Replace the existing impeller on PWP-1.
- Apply a high-efficiency coating to the impellers and volute of both pumps to increase efficiency.
- Replace existing bearings and mechanical seals on PWP-1 to increase efficiency.
- Modify existing pump operation program so that PWP-2 begins operating automatically during Flow Condition No.2 to supplement the capacity of PWP-1 as necessary and to maintain a minimum system pressure.

ECM #33b- HVAC Controls Upgrade - Carrier Automation

Provide for centralized HVAC control and integrated equipment to include temperature set-points for occupied and unoccupied spaces as described in the Wendel report. All conduit shall be SCH 80 PVC.

- Install new sensor and controls wiring/programming
- Provide new front end computer with system graphics, sequences and schedules.
- Tie-in the following units: Elec UH's & Fin; (29) Office and (24) Process, Partial integration of HVU-1, HVU-2, HVU-3
- ACS-1, ACS-2
- The Carrier IVu network should be integrated into the main unit at Metro. Once the controls are programmed the system will function automatically. Programming changes can be made through the network (at Metro) or with a laptop with the IVu software.

ECM #34 – Retro-commissioning

Implement retro-commissioning on targeted HVAC systems identified in the Wendel report. This work will be performed after installation of all new

HVAC equipment as part of this project.

7.2.1.20. Existing Facility Arc Flash Analysis

The Engineer shall evaluate the entire facility for Arc Flash Analysis after project work described in this RFP is completed - the expectation is the deliverable of a single Arc Flash Analysis report including both the new installations and the existing facility. Issues found under this evaluation are to be discussed with owner for resolution as part of this project. Please be advised, that this task is in addition (i.e., separate and distinct) to the requirements detailed in Section 7.5.3. The facility analysis shall conform to the same standards identified in *Arc Flash Analysis for New Installations* on the website at:
http://static.ongov.net/WEP/ReferenceDocuments/IE_Arc_Flash_New_Installation_041416.pdf

7.2.1.21. SCADA Programming, Instrumentation Design and Connectivity

The Engineer shall provide SCADA programming services such that all the equipment installed for the project functions in accordance with design intent and WEP operational goals and needs to facilitate related modifications as noted above. Note all replacement equipment will include both conduit and wiring for SCADA. The Engineer shall be responsible for all SCADA programming and related documentation, including the development of a Control Narrative. Control Narrative to be submitted for review with 95% design submittal; logic diagrams to be provided at 50% design submittal.

The Engineer's proposal shall include a brief description of the aeration and RAS/WAS systems SCADA configuration and how the system will operate (include the estimated number of screens and I/O points for the "system" as the basis for this task – not just the individual assets). The SCADA design and programming includes the following:

- For the new aeration system, include HMI panels in the following locations: each of the three (3) blower room enclosures and one (1) for the aerated grit chamber system.
- Screens shall be based on industry standard for aeration system or package provided by manufacturer.
- Engineer will complete a point-by-point inspection of all contractor installed interfaces with SCADA system.
- Engineer is responsible for programming of all non-OEM PLCs, including program modifications to new and existing PLCs as required. The engineer is also responsible for SCADA integration (including SCADA screens and HMI screens for all non-OEM PLCs)
- Engineer is responsible for developing the SCADA and local HMI graphics required to facilitate remote monitoring and control of new and modified processes.
- Engineer is responsible for the development of a Control System Architecture drawing for the new equipment. This should minimally

detail all new network (Ethernet and other as applicable) connections with IP addresses, node names and numbers, and media used.

- Engineer is responsible for the associated network programming for remote viewing at the Metro Board.
- The Engineer will be responsible for the design of the PLC control panel layout/assembly drawing(s) with all detailed PLC cabinet and I/O schematics. The Department is transferring the responsibility of controls integration and programming from the construction contractor to the engineering consultant. Rather than schematic level design, the Engineer shall prepare fabrication-level panel design drawings, which in the past have been prepared by the construction contractor's panel manufacturer. This provides the Department with greater control over panel content and layout and reduces change order potential and associated schedule delays.
- The Engineer shall develop submittal-level panel drawings; include process flow diagrams, development of a Control Narrative, I/O list, and specifications/panel components.

Fabrication Panel Design

With regards to fabrication-level panel design and P&ID drawings, the following level of detail is required such that WEP can review and approve the design:

- Fabrication-level design drawings shall include the amount of detail required for the Contractor to fabricate the Engineer's panel design without deferring any of the panel design onto the Contractor, including sizing of fuses, circuit breakers, power supplies, UPS, etc.
- Fabrication-level designs are required for new PLC-based control panels programmed by Engineer, existing PLC-based control panels modified and programmed by the Engineer, and other non-PLC-based control panels.
- The Engineer's panel design shall acknowledge and coordinate new PLC control panels provided and programmed by the OEM.
- Individual design drawings for each designed panel shall include the following:
  - Panel Arrangement and Bill of Materials Drawing(s) - Illustrating scaled layouts of the subpanel and exterior enclosure and Bill of Materials for all components complete with manufacturer, complete model numbers, and quantities of each component.
  - Power Distribution Drawing(s) illustrating the distribution of AC and DC circuits, fusing and disconnects, and all consumers of AC and DC power.
  - For PLC Enclosures – Wiring diagrams for each PLC input and/or output module with no more than two (2) I/O modules detailed per drawing.
- The Engineer is responsible for developing "fault tolerant" Ethernet IP communications between PLC programs.
- "Typical" drawings are not acceptable in a fabrication-level design drawing package.

- When modifying existing PLC control panel(s), the Engineer shall use available AutoCAD drawings and modify the original AutoCAD drawings. Scanned documentation may only be used in the event that AutoCAD drawings are not available from the County. The Engineer shall then reissue a complete updated set of AutoCAD drawings for the modified control panel.
- P&IDs are required illustrating all new and modified processes including tag numbers assigned in coordination with the Owner.
- The Engineer shall not assume that existing control panel drawings and documentation are available for all existing panels and systems that require modification under this project; including control narratives."

Control System Narrative

With regards to the Control System Narrative, the following level of detail is required:

- Control System Narrative shall describe the automated control and monitoring of all connected devices. This should include detailed information regarding all SCADA/HMI graphics, alarms, alarm acknowledgement, SCADA/HMI set points, trends, reports, and field push-button/pilot light devices. All manual modes of operation available through SCADA/HMI graphics shall be described. In addition, all PID loop controls shall be described.

SCADA shall be implemented in accordance with the department's most current SCADA Standards for Monitoring and Controls which can be found on WEP's website at:
http://static.ongov.net/WEP/ReferenceDocuments/WEP_SCADA_Standards_Version_7_12172014.pdf)

7.2.1.22. SCADA Security

During the 25% design phase investigate the existing BSK SCADA system and also its communications with Oak Orchard and Metro to evaluate SCADA system security vulnerability as follows:

- Evaluation Report - assess vulnerabilities, including security measures for access control hardware, software and protocols. Evaluate SCADA system firewalls. Evaluate remote access protocols and standards for the SCADA controlled systems.
- Mitigation Report - after evaluation report review and approval with County, assume two (2) meetings of 1.5 hours each for approval, develop a Mitigation Report for the site/system with prioritized specific mitigations for vulnerabilities in the SCADA system for the BSK facility. Working with County direction on mitigation measures to implement, integrate security threat mitigation into final SCADA control design. Evaluation Report and Mitigation Report documents shall be carefully managed as secure documents and maintained as confidential to further protect the facility from security threats.

7.2.1.23. Consolidated Sub-Surface Drawings

As part of WEP's asset management initiative, the Engineer shall provide updated and consolidated record drawings for all sub-surface utilities within the plant property boundaries. The basis of the consolidated drawings will be the review of existing record drawings, contract drawings and/or other known/documented modifications. No sub-surface verification or ground penetrating radar will be required as part of this effort. Drawings shall consist of three (3) primary sheets/views in PDF and AutoCAD format: general site overview with all subsurface utilities, electrical and mechanical specific drawings with GPS and station references. It should be noted that GPS coordinates would be provided for transition points in the underground utilities based of the existing records, allowing department staff to locate the underground asset with GPS devised rather than solely scaling off the existing buildings and structures. Submittal of the deliverable/drawings shall be in accordance with the requirements of Section 7.12 and 7.14. The following is noted with regards to the deliverable.

- The drawings shall be prepared in 2-D format (no 3-D drawings are needed).
- The Engineer shall be responsible for the quality of the drawings and that they are accurate relative to the information provided by WEP.
- Valves and/or junctions installed on each utility shall be included.
- Separate AutoCAD layers shall be prepared for each utility.
- A legend shall be provided that identifies the base mapping used for the updated consolidated drawing deliverable.
- Drawing information shall include the following parameter information. The parameter information shall be included on the drawings themselves and also as a separate Excel spreadsheet.
  - Utility (potable water, natural gas, etc.,)
  - Utility Owner
  - Pipe Size
  - Pipe Material
  - Slope (as applicable)
  - Flow Direction
  - Call-out notes with repair information (as supplied by WEP)
  - Installation Date
  - Invert Elevation
  - Datum
- It is the County's expectation that the consolidated sub-surface drawings will be finalized at the end of the project and shall include any new sub-surface utilities included in the construction efforts associated with this project.
- The Engineer shall refer to Section 7.14 regarding instructions and procedures for providing Record Drawings and transmittals to WEP.

7.3. Kick-off Meeting

Following the Notice-to-Proceed, the Engineer shall conduct a project kick-off meeting with County personnel and other affected or interested government agencies. At this meeting,

project contacts, responsibilities, scope of work, document distribution, project schedule, and requirements shall be discussed and agreed upon. The meeting shall be attended by at least two (2) of the Engineer's personnel who will be directly involved in the project. Assume that the meeting will last two (2) hours. The Engineer shall prepare and distribute minutes of the meeting within ten (10) days of the meeting.

7.4. Review Background Information – The Engineer shall review background information, including, but not limited to, the following:

- Available and Applicable Contract or Record Drawings
- Condition Assessment Report, Baldwinsville Wastewater Treatment Plant, dated December – 2015: http://static.ongov.net/WEP/BaldwinsvilleSK_WWTP/BSK_Condition_Assessment_Report_with_Appendix.pdf
- FlexTech Study report prepared by Wendel, dated December 22, 2016: http://static.ongov.net/WEP/ReferenceDocuments/FlexTech_Report_FINAL_01-22-16.pdf
- Available analytical and flow monitoring data
- Available maintenance records, if applicable.

7.5. Final Design

7.5.1. The Engineer shall field-verify conditions that relate to the project's design. The Engineer shall prepare the final design and contract drawings, specifications, and associated documents suitable for bidding the Baldwinsville Seneca-Knolls WWTP Asset Renewal Project. A final pre-bid Engineer's construction estimate shall be developed for that design. Further, all design services shall meet the requirements of applicable standards. The County reserves the right to require the use of its standard administrative provisions and general specifications in the construction contracts. In addition to tasks otherwise identified, the Engineer shall provide technical services related to investigating and reviewing existing information.

7.5.2. The engineer shall also be responsible for topographic surveys and borings necessary for completion of the final design and for obtaining appropriate permits related to completion of the project. The proposal shall include the Engineer's proposed geotechnical approach, including the anticipated number of borings and other necessary testing with regards to foundation design.

7.5.3. The Engineer shall be responsible for Arc Flash Analysis for new equipment associated with this project. Please refer to *Arc Flash Analysis for New Installations* on the website at: http://static.ongov.net/WEP/ReferenceDocuments/IE_Arc_Flash_New_Installation_041416.pdf

7.5.4. The Engineer shall incorporate a detailed sequence of construction into the contract documents so that the required improvements can be implemented with minimum disruption to facility operations and the surrounding area.

7.5.5. The Engineer, upon authorization from the Commissioner or his designee, shall be responsible for developing a scope of services and cost estimate associated with

unforeseen engineering services that may be identified during the design process. For this project, assume an allowance of $50,000 for design and construction administration tasks to accommodate unanticipated engineering services.

7.5.6. During the Final Design Phase, the Engineer shall conduct at least three (3) design review meetings with County personnel at the approximate 25 percent, 50 percent, and 95 percent points to discuss alternatives, resolve issues, and provide opportunity for County input to the design. Assume at least two (2) Engineer personnel will attend each meeting and that each meeting will last two (2) hours. The Engineer shall prepare and distribute minutes of the meetings within ten (10) days of said meetings. The 25 percent design shall mean that the design includes preliminary details of all project aspects/alternatives. The 95 percent design shall mean that the drawings and specifications are 100 percent complete for review by the County. In addition, two (2) meetings will be assumed for coordination and review with the NYSDEC representatives; assume the same level of personnel, length of meeting, and meeting minute requirements as identified above.

7.5.7. As part of the Final Design Phase, the Engineer shall provide updated total construction cost estimates with all design deliverables, specifically the 25 percent design or Basis of Design Report, the 50 percent, and 95 percent deliverables.

7.5.8. Contract Document Comment Log - The Engineer shall prepare and maintain a log listing all comments received on the project contract documents: to include comment number; comment originator; comment summary; response; and status. The log will be used by the Engineer and WEP to ensure all comments are satisfactorily addressed.

7.5.9. Contract Drawings - The Engineer shall prepare contract drawings as virgin files; that is, tiff, pdf, and other similar image types of files are not to be used for backgrounds. The goal is for WEP to be provided with comprehensive and high-quality drawings that are clear for all to read and understand.

7.6. Fifty Percent Design – Equipment Identification

7.6.1. At the 50 percent design point, the design consultant shall provide a list of three suitable pieces of equipment for each significant project component. Cut sheets with cost estimates for the equipment are also to be provided. This list will be discussed by the WEP project team and design consultant, until an agreement is reached as to what three pieces of equipment shall be included in the contract documents with a goal of establishing a final specification offering excellent service and three (3) competitive vendors if at all possible. This equipment list shall be finalized by the submission of the 95 percent review document submittals. Please note the Engineer shall avoid conflicting interests including financial or other considerations, including free engineering designs, from material or equipment suppliers for specifying their product(s). Engineers shall not solicit or accept financial or other valuable considerations, directly or indirectly, from outside suppliers in connection with the work for which they are representing the County.

7.6.2. Equipment Selection Technical Memos - The Engineer shall prepare technical

(justification) memos for instances in which there are less than three (3) manufacturers specified for major pieces of equipment in the contract documents; to be provided at 50% design point. Where there are three (3) equipment manufacturers and models specified, no technical memo is needed.

7.6.3. Asset nomenclature contained in all projects shall be reviewed by the owner as part of the 50% submission and consists of two categories: asset renewal and new assets. In the case of asset renewal, the existing nomenclature shall be used. For new assets, the nomenclature should follow industry standards with input from the owner. In all cases, a list of new and replacement assets, with proposed nomenclature, shall be submitted for review as part of the 50% submission. The consultant shall incorporate all changes identified by the owner into all aspects of the 95% submission.

7.7. Twenty-five Percent and Fifty Percent Design Deliverables and Meetings

7.7.1. In accordance with the dates listed in the project schedule included herein, the Engineer shall conduct a meeting with OCDWEP representatives to evaluate preliminary design documents and/or the list of potential alternatives. For projects involving preliminary engineering evaluations, the 25 percent design deliverable or Basis of Design Report, shall consist of (i) applicable design memorandums and preliminary drawings, fully describing all alternatives evaluated—including associated costs; (ii) logistics of implementation; (iii) advantages and disadvantages; (iv) specific recommendations; (v) other considerations and pertinent factors; and (vi) preliminary or likely list of special inspections. In addition the Basis of Design report shall completed in accordance with the guidance provided in Appendix G, Engineering Report Template, of NYS Clean Water State Revolving Fund Intended Use Plan.

7.7.2. Eight (8) copies of the 25 percent design memorandum/Basis of Design Report shall be submitted to the County in accordance with the project schedule. The inclusion of summary tables within that submission is recommended. After consultation with the Engineer at the 25 percent design review meeting, the County shall select the engineering alternatives to be proceeded to final design. The Engineer shall then progress the selected alternatives to the 50 percent design point. Eight (8) copies of the 50 percent plans and specifications shall be submitted to the County in accordance with the project schedule.

7.7.3. The Engineer shall be responsible for preparing a Basis of Design report to the New York State Environmental Facilities Corporation (NYSEFC) and NYSDEC for review and approval. As such, the report must comport with NYSEFC and NYSDEC regulations and guidance. The report will not be distributed until reviewed and approved by this Department.

7.7.4. At the 25 percent phase, the County reserves the right to evaluate the project status and the design phase services with the further right to discontinue work if funding for additional phases is not forthcoming or seek alternative service providers for continued serves, or consider alternative project procurement techniques or methods including “design-build” or similar procurement process to the fullest extent permitted by law.

7.8. Ninety-five Percent Design Deliverable and Meetings

7.8.1. Nine (9) copies of the 95 percent plans and specifications shall be submitted to the County in accordance with the project schedule. The Engineer shall conduct a 95 percent design review meeting with OCDWEP personnel to discuss and review the draft final design plans and specifications. Included with the 95 percent plans and specifications, the Engineer shall provide a valve schedule for County review. Again, the 95 percent design shall mean that the design is 100 percent complete for review by the County. Following the 95 percent review meeting, the Engineer shall revise the submissions as necessary and submit nine (9) hard copies, and an Adobe PDF, of the final plans and specifications for Regulatory Review.

7.8.2. NYS Building Code Compliance Review - While every attempt will be made to incorporate all WEP reviews and comments in the design phase reviews, it may still be required that (if required by occupancy) the Onondaga County Building Code Office reviews for life safety will have to be coordinated and completed after 95% design review and on 'final' drawings. Additionally, for the purpose of proposal development, the Engineer should assume that two (2) staff members involved with the project shall meet with WEP and County Codes representatives for a 2-hr meeting to review the project and address code concerns. This effort shall include, but not be limited to providing Building and Energy Code Worksheets, Tables for Architectural drawings, and general coordination the Building Code Office, as necessary.

7.8.3. In addition, the Engineer should assume that two (2) staff members involved with the project shall meet with WEP and NYSDEC representatives for a 2-hr meeting to review the 95%/Regulatory Review submittal and address technical and compliance concerns.

7.8.4. Estimated construction schedule and phasing – at the 95% design phase the Engineer shall provide a comprehensive proposed construction schedule and recommend construction phasing. Address options and alternatives to reduce total construction time, construction costs, process/operation shut downs, and identify construction phasing and contract milestones. Develop a brief companion memo on recommended liquidated damages to facilitate construction schedule optimization and compliance

7.9. Permitting, NYSEFC Financing, NYSERDA/National Grid Assistance and SEQR

The Engineer shall provide assistance in completing the most current NYSEFC Revolving Fund required forms and procedures, consisting of the Administrative Checklist and the Technical Checklist, submitting drawings and specifications, and responding to comments and questions by the NYSEFC, NYSDEC, and other regulatory agencies, including NYSEFC and/or NYSDEC Project close-out documents.

Please note that NYSEFC assistance will be required for construction. The Engineer will be required to comply with the most recent requirements of the NYSEFC for funding for construction contracts, please visit www.efc.ny.gov for up to date information. In addition, the Engineer shall incorporate the required version of the NY State Revolving Fund MWBE/EEO Bid Packet for Construction Contracts into the contract documents.

7.9.1. The Engineer shall provide energy incentive application assistance such that WEP

can take full advantage of applicable offerings from National Grid, New York State Energy Research and Development Authority (NYSERDA) - including NYSERDA Program Opportunity Notices, and the New York State Environmental Facilities Corporation (NYSEFC). Work to include incentive review, all necessary engineering analysis, and the comparison of existing energy use (for existing equipment) to that of various proposed equipment for the project (or energy projections for new equipment). The details and results of that analysis, along with opportunity recommendations, shall be provided to WEP as a separate and distinct deliverable. Assuming pursuit of incentives, the Engineer shall complete the necessary incentive applications. Engineer shall work directly with incentive provider in the supply of information and application process. For the purpose of proposal development, assume that a total of two (2) incentive applications shall be necessary: one (1) for National Grid; and one (1) for NYSERDA. Construction cost estimates shall be prepared in an itemized fashion so as to clearly identify control and equipment cost to be used for incentive application purposes.

7.9.2. Additionally, for the purpose of proposal development, the Engineer should assume that two (2) staff members involved with the project shall meet with WEP representatives for a two (2) hour meeting to review the aforementioned technical memorandum. Assuming incentive approval, WEP shall be responsible for processing the subsequent paperwork.

7.9.3. It should be noted that this project has been identified as a SEQR Type II action by Onondaga County, and does not require further review.

7.10. Erosion and Sediment Control Plan It is anticipated that the limited site disturbance from this project will not require a formal Storm Pollution Prevention Plan (SWPPP). However, an erosion and sediment control plan shall be developed, as needed, and will include the following phases:

7.10.1. Site Evaluation and Design Development: The Engineer shall collect information relative to the existing site including, but not limited to, site topography, and drainage patterns. The Engineer shall develop a preliminary site plan for the project elements that are to be constructed.

7.10.2. Assessment: The Engineer shall evaluate the impact of the project on existing site conditions including, but not limited to, changes in land use/cover, and drainage areas.

7.10.3. Control Selection/Plan Design: The Engineer shall identify erosion and sediment control practices and stormwater management controls in an Erosion and Sediment Control (ESC) detail, with a site map indicating the location of all practices, construction activity coordination.

7.10.4. Construction/Implementation/Inspection: The Engineer shall incorporate the erosion and sediment control plan details in the design documents.

7.11. Construction Phase Services

The following tasks shall be conducted as part of the Construction Phase Services. (Assume twenty-four (24) months for construction. The Engineer will complete all inspections, including NYS Building Code special inspections, as part of this proposal.)

7.11.1. Provide administrative services including the following:

- Provide administration of the Contract between the County and the Contractor in accordance with the Contract Documents.
- Advise and consult with the County during the Construction Phase Services.
- Make periodic visits to the site to observe the progress and the quality of the executed work and to determine if the work is proceeding in accordance with the Contract Documents, the New York State Uniform Fire Prevention and Building Code, Federal handicapped accessibility requirements, ANSI/CABO 92, and the requirements of the NYSDEC or NYSEFC;
- The engineer shall interpret and decide matters concerning performance under, and requirements of, the Contract Documents and interpretations and/or decision shall be in writing or in the form of drawings. When making such interpretations and decisions, the Engineer shall endeavor to secure faithful performance by both County and Contractor(s), shall not show partiality to either, and shall not be liable for results of such interpretations or decisions between Contractor and County if rendered in good faith. The Engineer's decisions on matters relating to aesthetic effect shall be final if consistent with the intent expressed in the Contract Documents;
- The engineer shall review the Contractor's submittal schedule and shall not unreasonably delay or withhold approval.
- Based upon on-site observations, as an experienced and qualified design professional, the Engineer shall review the Contractor's applications for payment, determine the amount owing to the Contractor(s) and approve in writing payment to the Contractor(s) in such amounts based on work progress.

7.11.2 Bid Phase

The Engineers shall provide up to forty (40) copies of the final contract documents for the project and issue same to prospective bidders; prepare and issue addenda as may be required during bidding; assist with receipt and evaluation of bids; and furnish original and five (5) confirmed copies of the contract for execution by the successful bidder(s).

7.11.3 Pre-bid Meeting

The Engineer shall schedule and conduct a pre-bid meeting to be held at a county-determined location. Prepare and issue addenda as required following the meeting. The meeting shall serve as a question-answer session for Contractors. The Engineer shall prepare written responses to all questions and distribute to all parties within five (5) business days of said meeting.

7.11.4 Job Meetings

Attend regularly scheduled job meetings, progress meetings, pay estimate meetings and coordination meetings. When required by the County, the Project Manager shall

be designated to attend all or certain of these meetings. The Engineer shall provide detailed summaries of same.

7.11.5 Shop Drawings and Samples Review

Prepare and maintain a submittal log identifying all required shop drawings, date received, date responded to, status, and sample submittals. The County may request to review certain submittals concurrently with the Engineer; if not requested, the County will review after the Engineer. The County shall be allotted two (2) weeks for said reviews. For the purpose of proposal development assume that two (2) shop drawing reviews will be required for each piece of equipment. In addition, the Engineer shall respond to all shop drawings and submittals within two (2) weeks of receipt. The Engineer shall maintain a record of submittals and copies of submittals supplied by the Contractor(s) in accordance with the requirements of the Contract Documents;

7.11.6 Change Orders/Modifications and Claims:

Evaluate proposed modifications to the plans and/or specifications of the PROJECT and evaluate construction claims:

- Provide the County with written recommendations, including clear and supportive justifications, for approval or disapproval of such modifications or claims; and prepare change orders as required by County.
- The engineer may authorize minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. Subject to this Contract, the Engineer shall prepare Change Orders and Construction Change Directives for the County's approval and execution in accordance with the Contract Documents.
- The Engineer shall maintain records relative to the changes in the Work.

7.11.7. Request for Information (RFI) Logs and Field Order Logs

Prepare and maintain, for each contract, logs identifying all requests for information received from construction contractors: to include date of RFI; request description; Engineer's response; response date; resolution status - complete or pending; and applicable comments. In addition, prepare and maintain, for each contract, separate logs identifying all Field Orders issued to the contractor: order description, issue date, constructions status (complete or pending), applicable comments, and costs.

7.11.8. Special Inspections

The Engineer shall be responsible for performing all necessary special inspections associated with International Building Code and/or NYS Building Code so as to comply with necessary regulations and ensure project construction was properly executed (constructed as designed, code compliance, etc.,). This responsibility is irrespective of the County's construction inspection role (oversight). The Engineer shall provide summary of the special inspections required at the 100% design submittal. Please note that the County will provide third party services for material testing such as the collection of concrete cylinders for verification of compressive strength and on-site soils compaction testing; higher level materials testing, if deemed necessary by the Engineer, will be the responsibility of the Engineer and shall be included in Proposal Pricing.

7.11.9. Construction Close-out

- The Engineer, in the company of the County, shall conduct all official interim and final inspections of the Project for conformance with the Project design concept and compliance with the Contract Documents.
- The Engineer shall conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion; receive from the Contractor(s) and forward to the County, for the County's review and records, written warranties and related documents required by the Contract documents and assembled by the Contractor(s); and issue a final Certificate for Payment based upon a final inspection indicating that the Work complied with the requirements of the Contract Documents.
- Obtain all guarantees and certifications from the Contractor(s) and deliver the same to the County.
- Certify to the County, in writing, that in the Engineer's opinion and to the best of its knowledge the Work is complete and in substantial conformance with the Contract Documents, is operating as intended, and, if applicable, conforms with New York State Uniform Fire Prevention and Building Code (19 N.Y.C.R.R.) except for approved variances; meets all applicable ANSI/CABO 92 standards for acceptance and recommends start of the guarantee period(s); and approve in writing final payment to the Contractor(s).
- When the Work is found to be substantially complete, the Engineer shall inform the County about the balance of the Contract Sum remaining to be paid the Contractor(s), including the amount to be retained from the Contract Sum, if any, for final completion or correction of the Work.
- The Engineer shall forward to the County the following information received from the Contractor(s): (1) consent of surety or sureties, if any to reduction in or partial release of retainage or the making of final payment; (2) affidavits, receipts, releases and waivers of liens or bonds indemnifying the County against liens; and (3) any other documentation required of the Contractor(s) under the Contract Documents.
- Upon request of the County, and prior to the expiration of one year from the date of Substantial Completion, the Engineer shall, without additional compensation, conduct a meeting with the County to review the facility operations and performance.

7.11.10. Certification of Project Completion

Provide NYS P.E. certification to the NYSEFC, NYSDEC, and/or other regulatory agencies that the constructed project has been constructed in accordance with applicable codes, regulations, and the contract documents. This responsibility is irrespective of the County's construction inspection role (full-time or oversight). The following serves as an example of the certification language required for recent WEP projects. It is noted that the NYSDEC may require different certification, and is in addition to certifications that may be required from NYSEFC.

"The supervision engineer shall certify in writing to the Department and Onondaga County that the constructed facilities have been under his/her supervision and that the work has been fully completed in accordance with the approved plans and specifications. Certification must be received in our office no later than 30 days after

the date of completion."

7.11.11. Start-up Testing

The Engineer will be required to provide the following services at the time of starting up new equipment associated with this project:

- Start-up and initial testing for all equipment upgrades, replacements and/or modifications shall be provided and conducted by a qualified equipment manufacturer's representative.
- The Engineer shall perform an integrated system test for each installed system. The system test shall consist of operating the system, including all associated instrumentation and controls, through its entire operating range. The Engineer's work for each system shall include:
  a) Preparation and submittal of a system testing; and
  b) Preparation of a report on the results of the system test.
- Provide detailed information regarding pertinent operational settings of all equipment provided under this contract. All start-up/testing and training shall be conducted after receiving an approved O&M manual from the manufacturer's representative.
- A two (2) week advance notice shall be given to the County to coordinate and schedule personnel for training. Training shall be conducted within the 14-day performance period and shall be split in two equal sessions. A minimum of one (1) day on-site training shall be provided.
- The Engineer will be responsible for providing two (2) training sessions specifically regarding the SCADA system modifications and improvements. First session will be prior to start-up, and the second session will be after the facility is online. Assume training session will be one (1) hour in length. This deliverable shall include a PowerPoint presentation for County use for future training of new personnel.

7.11.12. Construction Inspection Services

The Engineer shall provide detailed field inspection of the construction. For the purpose of proposal development, include the services of one (1) full-time representative for a period of twenty-four (24) months. The inspection staff shall provide the following services during construction:

- Engineer shall maintain a web-based or "cloud" based system for records storage and access throughout the project. The system shall allow access for engineer, owner and contractor(s).
- Maintain a project records via a system that conforms to industry standards.
- Observe the work to determine substantial conformance with contract documents, reject or require corrective action be taken for all work which is found to be unacceptable or defective.
- Review documents and submissions by contractors pertaining to scheduling and advise the County as to their acceptability.
- Attend and lead progress meetings and pre-installation meetings. Prepare, maintain, and distribute meeting minutes.
- Arrange for and conduct or witness field, laboratory, or shop tests of construction materials and installations as required by the contract documents; monitor the suitability of materials; interpret the contract documents, measure, compute, and

record the quantity of completed work.

- Collect and file chronologically certified payrolls for all prime and subcontractors involved in the project.
- Review and approve Contractor progress payment requisitions.
- Routinely record deviations from contract plans and prepare record drawings.
- In conjunction with County representatives, the Engineer shall perform an inspection of the completed project work approximately one-year after the issuance of the Certificate of Substantial Completion, just prior to the expiration of the contractor's warranty period. For sewer infrastructure projects, this shall include a complete video inspection of the installations.
- Provide recommendations for all modifications and field orders. Maintain modification, change and field order logs.

7.11.13 Contingent Construction Phase Services

The Engineer, upon authorization from the Commissioner or his designee, shall be responsible for additional Construction Phase Administration and Inspection Services associated with unforeseen construction delays or unforeseen extensions of the term of the construction phases of the work which is of no fault of the Engineer. For this project proposal, provide pricing for contingent services for an assumed 16 weeks of "additional" construction time. Contingent Construction Phase Services would be used only upon authorization of the Commissioner and would be billed at the hourly rate proposed as needed.

7.12. Record Drawings

- The Engineer shall perform a post-construction survey as necessary and prepare as-built record drawings from required change order information maintained by the resident field inspector and the Contractor.
- The engineer shall perform Record Drawing services within 90 calendar days of the start of the guarantee period.
- CAD files of the Record Drawings shall be provided to the County at the end of the project.
- The engineer shall guarantee the accuracy of the Record Drawings for a period of one year from the date of acceptance by the OWNER. If the OWNER finds any errors or omissions in the Record Drawings the engineer shall make the necessary corrections at no additional cost when requested by the OWNER
- Record drawings shall show the precise as-built locations of all installed and/or modified work by the contractor. Examples of changes include, but are not limited to, the following:
  - Changes in location, elevations of project components and/or equipment.
  - Changes in materials (i.e., piping, wiring, etc.).
  - Changes in topographical contours of finished earth surfaces and in elevations of finished grades, streets, etc.
  - Additions and/or exclusions to project.
  - Relocation of underground utilities as a result of interference with project components.
  - Modifications made to existing structures made necessary by requirements of work.
  - Changes in mechanical trades' components (e.g., electrical, heating, ventilation, and plumbing).

7.13. Equipment Operation and Maintenance (O&M) Manuals

The Engineer shall provide original equipment manufacturer O&M Manuals to WEP for each piece of equipment installed as part of the project.

Four paper copies shall be supplied for each piece of equipment one week prior to the start of the 14-day equipment test period. Each paper copy shall contain a CD with an electronic copy of the manual in PDF format. Thereafter, the Engineer shall provide WEP with electronic PDF copies of all Equipment O&M Manuals on the same CD supplied for Record Drawings.

7.14. Record Drawing and Equipment (O&M) Manual Transmittal Procedures

WEP employs Microsoft Sharepoint® as a document management platform to maintain and organize its Record Drawing and Equipment O&M Manual information. The system is designed to allow various WEP staff to search for Record Drawings and/or O&M Manuals in a variety of ways. WEP has developed Record Drawing and O&M Manual Indexes to facilitate the upload of such information into the SharePoint system. The Engineer shall adhere to the instructions and procedures listed on WEP's website, http://static.ongov.net/WEP/ReferenceDocuments/OCDWEP_RD_O&M_Manual_Transmittal_Procedures_V03062015.pdf, when providing Record Drawing and O&M Manual Transmittals to WEP.

7.15. References

Please provide the names of current and past accounts of similar size and configuration. Include (a) a current, long-term customer, (b) a current customer implemented in the past 18 months, and (c) a former customer terminated within the past 18 months for reasons other than consolidation.

7.16. Budget Adherence

The Engineer is advised of the following.

- No out of scope work shall be performed/completed without a written amendment.
- It is the responsibility of the Engineer to stay within the Total Project Budget and individual Work Task item budgets. This includes the Engineer's applicable subcontractors and direct expenses.
- There shall be no re-allocations of hours and/or monies for individual Work Task items within the Total Project budget without a contract amendment.
- No adjustments in selected MBE/WBE percentages shall be made, relative to signed contract between WEP and the Engineer, without prior written authorization from WEP and the County Purchasing Department.
- It is the responsibility of the Engineer to fulfill their contracted MBE/WBE and EEO requirements.

7.17. Costing Proposal

7.17.1. Please include your pricing proposals for the Baldwinsville Seneca-Knolls WWTP, RFP No. 17-3330-001 – Attachment B (Cost Proposal Summary Form).

7.17.2. Please include costs associated with any additional services you will provide to Onondaga County.

7.17.3. Provide details of price components, including hours and allocation of skilled and

sub-consultants staff. Also, if necessary, include details on any increases (actual dollar amount, not percentage) in wage rates on an annual basis for the term of the contract. Proposals that fail to provide the required hourly rates and estimated hours for technical sub-consultants will be considered deficient and dismissed from further consideration.

7.17.4. Details for sub-contractor hours must be provided.

8. PROJECT SCHEDULE

The County anticipates the selection of a consultant and execution of the design service agreement to be completed by the date listed below. Upon completion of engineering service agreement or receipt of notice to proceed, consultant is expected to complete design and construction phase services within the timeframes listed below. If the Engineer takes exception to the schedule, it shall be so noted in the Proposal and an alternate schedule offered. It is noted that the County is amenable to accelerating the project schedule.

TASK	SCHEDULE DATE
Conduct Pre-proposal Meeting (BSK WWTP)	2/16/17
Submit Proposal to County	3/16/17
Select Consultant/Issue Notice to Proceed	5/11/17
Kick-off Meeting (WEP)	TBD
Submission of Basis of Design Report (25% Design Submittal)	Kick-off meeting +10 months
Progress Meeting (WEP)	TBD
Submission of 50% Design	Kick-off meeting + 17 months
50% Design Review Meeting	TBD
Submission of 95%	Kick-off meeting +20 months
95% Design Review Meeting	TBD
Final Design Complete with NYSDEC Approval	Kick-off meeting +23 months
Commencement of Construction	March 2019
Desired Construction Completion Date – On or Before	March 2021
One Year Warranty Walkthrough	March 2022

9. EVALUATION METHODOLOGY

9.1. Contract will be awarded to the vendor who is most responsive and responsible and not solely on the basis of price.

9.2. Criteria to be evaluated by the Department of Water Environment Protection and will include the following:

- Compliance with the RFP format requirements
- Experience
- Future Contract Costs and Risks
- Company Statistics
- Responsiveness to the items in Section 7, Scope of Work
- References
- Price

- Oral Presentations
- Credibility of Vendor
- Minority and Women's Business Enterprises Compliance
- Sustainability Solutions and Practices

10. ENGINEERING AGREEMENT

An agreement, substantially in the form of a standard Onondaga County engineering agreement, will be prepared for personnel and non-personnel services related to completing all engineering work for the identified project with the terms, conditions, and costs to be determined based on negotiations between the selected consultant and the County. Time is of the essence as part of this contract and the agreement shall incorporate a provision for damages, if the consultant under contract defaults or fails to provide timely provision of services such that the County is subjected to court-ordered monetary penalties and/or any other damages that may occur as a result of said failure. The County requires various forms of insurance and indemnification by the Consultant, including naming of the County and others as additional insured on all liability forms.

The following is a link to the Standard Onondaga County Engineering agreement: http://static.ongov.net/WEP/ReferenceDocuments/Standard_Onondaga_County_Engineering_Agreement_08112016.pdf

Onondaga County Department of
WATER ENVIRONMENT PROTECTION

Joanne M. Mahoney, County Executive
Tom Rhoads, P.E., Commissioner
650 Hiawatha Blvd. West
Syracuse, NY 13204-1194
(315) 435-2260 or (315) 435-6820
FAX (315) 435-5023
http://www.ongov.net/wep/

REQUEST FOR PROPOSAL

TITLE: BALDWINSVILLE SENECA-KNOLLS WWTP
ASSET RENEWAL PROJECT
NUMBER: 17-3330-001
CLOSING DATE AND TIME: March 16, 2017, 3:00 P.M. EST
DELIVER TO: 650 Hiawatha Boulevard, Syracuse, NY 13204-1194

In compliance with the RFP specifications and the conditions of proposing, I, the undersigned, offer and agree to furnish any or all materials and/or services, upon which prices are offered at the price set opposite each, to the County within the time specified. I certify that this proposal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a proposal for the same materials, supplies, equipment, or services and is in all respects fair and without collusion or fraud. I understand collusive bidding is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards. I agree to abide by all conditions of the proposal and certify that I am authorized to sign this proposal for the offeror.

By my signature below, Contractor subscribes and Contractor affirms as true under penalties of perjury the following statement:

> By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, an in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of it knowledge and belief that each bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of section 165-a of the state finance law.

Name and Address of Record:

_____

State of Incorporation _____Telephone Number_____

Mailing Address_____

Federal ID Number_____

Authorized Signature_____

Typed or Printed Name_____

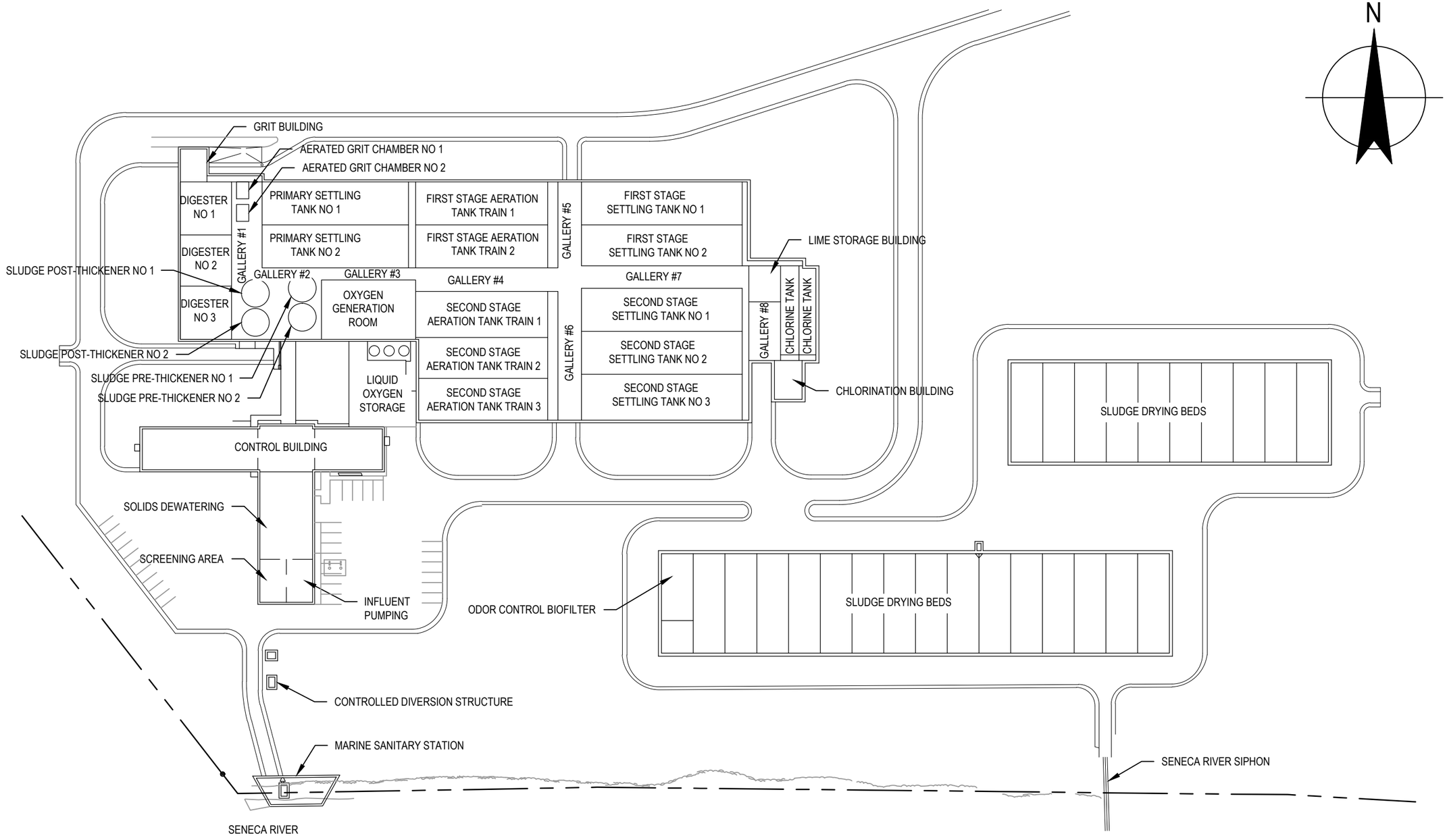
Title of Authorized Person_____

Receipt of addenda numbers _____is hereby acknowledged. (Where none received, place the figure zero (0) in this space.)

NO LATE PROPOSALS WILL BE ACCEPTED.

Attachment A

(Baldwinsville Seneca-Knolls - Site Plan)



0 50 100 150 200'

SCALE 1"=100' AT ORIGINAL SIZE

BALDWINSVILLE - SENECA KNOLLS WWTP

EXISTING SITE PLAN

Job Number 86-15142
Revision A
Date 06/2013

Figure 1-1

One Remington Park Drive, Cazenovia NY 13035 USA **T** 1 315 679 5800 **F** 1 315 679 5801 **E** cazmail@ghd.com **W** www.ghd.com

Plot Date: 23 October 2013 - 9:17 AM Cad File No: G:\86\15142\CADD\Drawings\Figures\15142-FIG 1-1.dwg

Attachment B

(Cost Proposal Summary Form)

Attachment B

Cost Proposal Summary Form
Prime Contractor and Sub-Contractors (Labor and Direct Expenses)
RFP Tracking No. 17-3330-001
Baldwinsville Wastewater Treatment Plant (WWTP) Asset Renewal Project

Task No.	Task Description	Prime Contractor Labor (Total)	Sub-Contractor Labor (Total)	Sub-Contractor Labor with Mark-up (Total)	Direct Expenses (Total)	Direct Expenses with Mark-up (Total)	Total
7.2.1.20	Existing Facility Arc Flash Analysis						
7.2.1.21	SCADA Programming, Instrumentation Design and Connectivity						
7.2.1.22	SCADA Security						
7.2.1.23	Consolidated Sub-Surface Drawings						
7.3	Kick-off Meeting						
7.4 - 7.8	**Services for Section 7.2.1 through 7.2.1.19** Final Design, Basis of Design Report, 50% and 95% Design Deliverables and Meetings (7.5.3 - Arc Flash Analysis (New Installation), and 7.5.5 - Unanticipated Engineering Services)						
7.5.3	Arc Flash Analysis (New Installation)						
7.5.5	Unanticipated Engineering Services (Allowance)						$ 50,000
7.9	Permitting, NYSEFC Financing, NYSERDA/National Grid Assistance and SEQR						
7.10	Erosion and Sediment Control Plan						
7.11	Construction Phase Services						
7.12	Record Drawings						
7.13	Equipment Operation and Maintenance (O&M) Manuals						
Individual Total							
Total Proposal Cost							
MBE Percentage of Total Proposal Cost							
WBE Percentage of Total Proposal Cost							
Salary Multiplier - Excluding Construction Phase Service							
Salary Multiplier - Construction Phase Service							
Sub-Contractor/Expense Mark-up							