

LAW & FINANCE

AGENDA March 10, 2021 4:00pm

Chair: Jonathan Schopf

Members:

Phil Barrett
Tara Gaston
Kevin Tollisen
Matthew Veitch
Sandra Winney
Tom Wood

Welcome and Attendance

Approval of the minutes from February 10, 2021

LEGISLATIVE

- Adopting the 2021 Saratoga County Legislative Agenda.
Brian O’Conor, Director of Finance
BUDGET IMPACT: None.

HEALTH & HUMAN SERVICES

- Authorizing a major contracts for contact tracing services with: Alana Martin in an amount not to exceed \$45,500; Deidre Hughes in an amount not to exceed \$39,000; and Kaitlyn Ellis in an amount not to exceed \$52,000.
(Daniel Kuhles, Commissioner of Health)
BUDGET IMPACT: None. Costs associated with this contract will be covered by a Health Research Inc., grant.
- Authorizing the acceptance of \$9,133 in State Aid from the Office of Mental Health (OMH) and the Office of Addiction Services and Supports (OASAS) for Cost of Living Adjustments provided to staff with contracted local agencies.
(Michael Prezioso, Commissioner of Mental Health & Addiction Services)
BUDGET IMPACT: No Budget Impact. 100% State Aid.
- Authorizing renewal agreements with 5 separate home care agencies that provide Expanded In-Home Services for the Elderly (EISEP) for the same rates previously agreed to in 2020 and effective from April 1, 2021 until March 31, 2022.
(Sandi Cross, Director of Aging)
BUDGET IMPACT: No Budget Impact. Funding for these contracts are included in the 2021 budget.

REAL PROPERTY TAX

- Authorizing the correction to the tax roll and generation of a new tax bill for tax parcel 224.-1-49 in the Town of Charlton in the amount of \$1,942.83.
(Anna Stanko, Director of Real Property)
BUDGET IMPACT: None.
- Authorizing a correction to the tax roll and generating a new tax bill for tax parcel 186.-2-44-2 in the Town of Galway in the amount of \$1,091.20.
(Anna Stanko, Director of Real Property)
BUDGET IMPACT: None.
- Authorizing a correction to the tax roll and generating a new tax bill for tax parcel 200.-2-3 in the Town of Galway in the amount of \$926.97.
(Anna Stanko, Director of Real Property)
BUDGET IMPACT: None.
- Authorizing a correction to the tax roll and generating a new tax bill for tax parcel 210.-1-47 in the Town of Galway in the amount of \$1,190.27.
(Anna Stanko, Director of Real Property)
BUDGET IMPACT: None.
- Authorizing the cancellation of delinquent, current and prospective taxes for several tax parcels.
(Anna Stanko, Director of Real Property)
BUDGET IMPACT: None.
- Authorizing the Tax Enforcement Officer to permit the cancellation in whole of any interest to which the County shall be lawfully entitled for Tax Parcels #262.-1-4.122 and #262.-1-4.2.
(Andrew Jarosh, County Treasurer)
BUDGET IMPACT: None

VETERANS' AFFAIRS

- Authorizing the creation of a new Grant program for County municipalities in support of Veterans initiatives.
(Frank McClement, Director of Veterans' Service Agency)
BUDGET IMPACT: Up to \$105,000 in FY21 will be appropriated from either fund balance or contingency funding.

BUILDINGS & GROUNDS

- Authorizing the acceptance of a Federal Cares Act Airport Grant from the Federal Aviation Administration in the amount of \$23,000.
(Chad Cooke, Public Works Commissioner)
BUDGET IMPACT: No Budget Impact. This grant will be applied toward existing airport related expenses.
- Amending the 2021 budget to reappropriate unspent funds relating to Department of Public Works capital projects.
(Chad Cooke, Public Works Commissioner)
BUDGET IMPACT: This resolution will require an amendment to the 2021 budget in the amount of \$3,627,265. of which \$3,447,062 will be covered by State and Federal Aid, and \$180,203 will require an appropriation of fund balance.
- Adopting a Local Law authorizing the leasing of real property of the County of Saratoga to Gateway House of Peace, Inc.
(Chad Cooke, Public Works Commissioner)
BUDGET IMPACT: None.

HUMAN RESOURCES & INSURANCE

- Authorizing the amendment of Chapter 4 Section M of the Saratoga County Policies and Procedures Manual in reference to the Vacation Carryover Policy.
(Marcy McNamara, Director of Human Resources)
BUDGET IMPACT: None.
- Authorizing the ratification of the Collective Bargaining Agreement with the United Public Service Employees Union (UPSEU) to make part of the Union, Registered Professional Nurses and Head Nurse in the Saratoga County Sheriff's Department.
(Marcy McNamara, Director of Human Resources)
BUDGET IMPACT: None.
- Authorizing an agreement with Saratoga Hospital, Inc. Corporate Health Services for the physical examination and testing of County staff in accordance with its fee schedule for an amount not to exceed \$30,000 for the duration of the 2021 calendar year.
(Marcy McNamara, Director of Human Resources)
BUDGET IMPACT: None. Funds are included in the 2021 budget.
- Authorizing the Sheriff's Department to hire transfers at Step 1 instead of base salary.
(Marcy McNamara, Director of Human Resources)
BUDGET IMPACT: None. Funds are available in the 2021 budget.

- Authorizing an amendment to the 2021 Compensation Schedule to reclassify (1) Senior Account Clerk to (1) Special Clerk to the County Treasurer under the Saratoga County Treasurers Department.
(Marcy McNamara, Director of Human Resources)
BUDGET IMPACT: None. A Senior Account Clerk and Special Clerk have the same base salaries.
- Appointing Michael J. Hartnett be appointed as County Attorney, Base/Step1, for a term commencing on April 1, 2021 and ending on December 31, 2021.
(Marcy McNamara, Director of Human Resources)
BUDGET IMPACT: None.

PUBLIC SAFETY

- Authorizing the acceptance of a grant from the NYS Office of Indigent Legal Services in amount of \$423,201 for Distribution No. 11 for the period from January 1, 2021 through December 31, 2023.
(Andrew Blumenberg, Public Defender)
BUDGET IMPACT: None. 100% State Aid.
- Approving the County's Alternatives to Incarceration (ATI) Performance-Based Service Plan for the period up until June 30, 2021 and authorizing the acceptance of a grant for Alternatives to Incarceration from the New York State Division of Criminal Justice Services in the amount of \$26,224 for the period of July 1, 2020 to June 30, 2021.
(Steven Bayle, Probation Director)
BUDGET IMPACT: None. 100% State Aid
- Authorizing the adoption of Executive Order 203 Group Report by the Saratoga County Board of Supervisors and authorize the Chairman of the Board to submit verification of compliance with Executive Order 203 to the New York State Division of Budget.
(Mike Hartnett, Assistant County Attorney)
BUDGET IMPACT: None.
- Authorizing participation in the 2021 State STOP-DWI program and contracts with local agency participants.
(J. Wes Carr, Stop DWI)
BUDGET IMPACT: None. 100% State Aid.
- Authorizing the re-appropriation of \$141,477.89 of previously authorized grant revenue and expenses from the 2020 budget to the 2021 budget in the Sheriff's Department.
(Michael Zurlo, County Sheriff)
BUDGET IMPACT: None.
- Authorizing an agreement with Black Creek Integrated Systems for the licensing and support of the Black Creek "SallyPort" for the Saratoga County Correctional facility at a cost not to exceed \$43,564.50 for the 2021 calendar year.
(Michael Zurlo, County Sheriff)
BUDGET IMPACT: None. Funding is included in the 2021 budget.

- Proclaiming April 11-17, 2021 as "National Public Safety Telecommunicators Week" in Saratoga County.
(Michael Zurlo, County Sheriff)
BUDGET IMPACT: None.
- Authorizing the acceptance of the Crimes Against Revenue Program (CARP) from the New York State Division of Criminal Justice Services in the amount of \$118,900 for a period of January 1, 2021 to December 31, 2021.
(Karen Heggen, District Attorney)
BUDGET IMPACT: None. 100% State Aid.
- Authorizing the acceptance of the Criminal Justice Discovery Reform grant from the New York State Division of Criminal Justice Services in the amount of \$380,056 for a period of April 1, 2020 to March 31, 2021.
(Karen Heggen, District Attorney)
BUDGET IMPACT: None. 100% State Aid.

TRAILS & OPEN SPACE

- Authorizing Saratoga County to act as Project Manager for the construction for the Champlain Canalway Trail in the Town/Village of Waterford.
(Jason Kemper, Director of Planning)
BUDGET IMPACT: 100% of the funding for this project will be provided through a grant with Hudson River Valley Greenway with no cost to Saratoga County.
- Authorizing a contract with CHA for bid coordination construction oversight services for the Champlain Canalway Trail.
(Jason Kemper, Director of Planning)
BUDGET IMPACT: None. 100% State Aid.

ECONOMIC DEVELOPMENT

- Authorizing the creation of a new reserve account, A-0888.ED for unspent monies related to the Municipal Economic Development Assistance grant program.
(Brian O'Connor, Director of Finance)
BUDGET IMPACT: None. \$111,744.02 in unassigned fund balance will be assigned to the new A-0888.ED reserve account.

PUBLIC WORKS

- Amending the 2021 budget to re-appropriate unspent funds related to the Department of Public Works capital projects in the amount of \$1,363,000.
(Chad Cooke, Public Works Commissioner)
BUDGET IMPACT: None.

LAW & FINANCE

- Authorizing the Chairman to execute a change order with Barton & Loguidice, D.P.C. in the amount of \$1,468,300 for a required project to upgrade the Wastewater Treatment Plant and meet State Pollutant Discharge Elimination System (SPDES) permit effluent limits and amending the 2021 budget in relation thereto.
(Dan Rourke, Executive Director of Sewer District)
BUDGET IMPACT: Currently there is \$500,000 available in the 2021 budget related to this project. An amendment to the 2021 budget in the amount of \$968,300 will fund all remaining costs related to the change order.
- Authorizing a contract amendment for Adirondack Environmental Services, Inc. for work performed in 2020 under their old contract and increasing the not to exceed amount to \$78,058.
(Dan Rourke, Executive Director of Sewer District)
BUDGET IMPACT: None. Funds are included in the 2021 Budget.
- Adopting a Local Law limiting third-party food delivery service fees during a declared emergency.
BUDGET IMPACT: None.
- Authorizing a contract agreement with DiRad Technologies for the outsourcing of an inbound and outbound call center to assist with COVID-19 vaccination response for County residents.
BUDGET IMPACT: Funds for this agreement are covered in the 2021 budget.

CHAIRMAN'S ITEM

- Appointments to the County Fire Advisory Board.
BUDGET IMPACT: None.
- Appointment to the Saratoga County Prosperity Partnership
BUDGET IMPACT: None.

Other Business

- **Setting agenda for Board Meeting Scheduled For March 16, 2021**

Adjourn

Due to public health and safety concerns related to COVID-19, there is limited capacity in the Boardrooms. The public will have an opportunity to hear the meeting live via an audio signal using this call-in number and access code: Dial: 1-978-990-5145 Access Code: 1840389



SARATOGA COUNTY

AGENDA ITEM REQUEST FORM

TO: Steve Bulger, County Administrator
Hugh Burke, Interim County Attorney
Pam Wright, Clerk of the Board

CC: Jason Kemper, Planning Director
Therese Connolly, Deputy Clerk of the Board
Matt Rose, Management Analyst

FROM:

DATE:

RE:

COMMITTEE:

1. Is a Resolution Required: **YES** or **NO**
(If YES, please complete #2- #10) (If NO, skip to #10 and provide reason for bringing the item)
2. Is a Budget Amendment needed:
(If yes, budget lines and impact must be provided)
3. Are there Amendments to the Compensation Schedule:
(If yes, provide details)
4. Specific details on what the resolution will authorize:
5. Does this item require hiring a Vendors/Contractors:
 - a. Were bids/proposals solicited:
 - b. Is the vendor/contractor a sole source:
 - c. Commencement date of contract term:
 - d. Termination of contract date:
 - e. Contract renewal and term:
 - f. Contact information:
 - g. Is the vendor/contractor an LLS, PLLC or partnership:
 - h. State of vendor/contractor organization:
 - i. Is this a renewal agreement: **YES** or **NO**
 - j. Vendor/Contractor comment/remarks:



SARATOGA COUNTY

AGENDA ITEM REQUEST FORM

6. Is this an annual housekeeping resolution:
(If yes, attach the last approved resolution)
 - a. What were the terms of the prior resolution
 - b. Are the terms changing:
 - c. What is the reason for the change in terms:

7. Is a new position being created:
 - a. Effective date
 - b. Salary and grade

8. Is a new employee being hired:
 - a. Effective date of employment
 - b. Salary and grade
 - c. Appointed position:
 - d. Term:

9. Is a grant being accepted:
 - a. Source of grant funding:
 - b. Amount of grant:
 - c. Purpose grant will be used for:
 - d. Equipment and/or services being purchased with the grant:
 - e. Time period grant covers:

10. Remarks/Reasoning (Supporting documentation must be attached to this form):

Barton & Loguidice

February 8, 2021
Rev February 25, 2021

Daniel Rourke, P.E.
Executive Director
Saratoga County Sewer District No. 1
1002 Hudson River Road
Mechanicville, New York 12118

Re: Ammonia Upgrade Project - Final Design Services
File: 702.4147

Dear Dan:

As discussed please find Barton & Loguidice's proposed scope of services and professional fee for the above-referenced project.

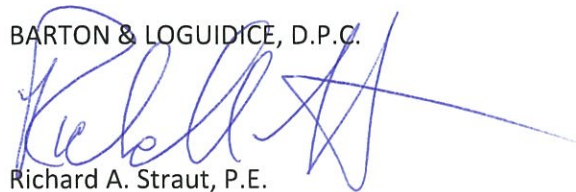
The scope of services outlined herein presents the effort needed to facilitate the final design of the ammonia removal upgrade project. The original proposal from 2017 was developed based on information known at the time and included only a diffusion system upgrade and blower replacement for the North side aeration system, with potentially a small chemical addition system for alkalinity. The project has evolved into a more complex project requiring a more advanced solution. The influent loads from the industrial facility are significantly greater than initially discussed during the RFP stage and in 2019 the NYSDEC decreased the summer effluent limits for ammonia by approximately half from the initial permit limits.

Increased loadings in conjunction with decreased SPDES effluent limits now requires a change in the overall plant process and conversion of both the North and South sides to the Modified Ludzack-Ettinger (MLE) process for nitrification and denitrification. This requires the addition of two (2) additional south aeration tanks, modifications to segment all existing 8 aeration tank, addition of recirculation pumps, a significant increase in blower capacity as well as a significant chemical addition system for both carbon addition and alkalinity.

We look forward to working with you and the SCSD No. 1 Team on this project.

Sincerely,

BARTON & LOGUIDICE, D.P.C.



Richard A. Straut, P.E.
Principal

KWC/tlh
Attachment

Saratoga County Sewer District #1
Ammonia Removal Project
Testing and Design Supplement

ADDITIONAL WASTEWATER TREATABILITY TESTING AND MODELING ASSESSMENT SERVICES

1. AOB Growth Rate Testing

Upon completion of the IFAS pilot testing in August 2020 it was determined that the growth rate for the wastewater biology was not as anticipated during the modeling completed in 2018.

Due to the sensitivity of the AOB growth rate coefficient on the modeling results and ultimately the selection of the final recommended treatment alternative further biological testing was needed.

Two testing methods of AOB growth rate testing were undertaken by the SCSD project design team. B&L partnered with EnviroSim (BioWin treatment process modeling developer), Clarkson University and Brown and Caldwell in completing the testing and analyzing the results.

- Specific Nitrification Rate (SNR) Batch Testing

SNR testing was completed by B&L staff with remote guidance from EnviroSim. The tests were conducted over 4 days and simulated the reaction of SCSD wastewater with the biology of a different typical nitrifying treatment plant with no industrial wastewater influence (host plant).

Several nearby municipal facilities were identified and researched with respect to their current nitrification requirements and performance as well as their industrial contributions. Initially Albany County Water Purification District was contacted to participate as their South plant receives no more than 1,000 gallons per day of industrial waste but due to COVID their wastewater characteristic have changed and were determined to not fit the profile needed for the host plant.

The Village of Voorheesville, which has no industrial contribution to its influent was selected and used as the plant host for the SNR testing. B&L staff collected MLSS and influent from Voorheesville for 4 days and ran simulations in parallel with Voorheesville influent and SCSD influent.

- Washout testing

B&L contracted with Clarkson University to conduct washout testing in accordance with Appendix G of Methods of Wastewater Characterization in Activated Sludge Modeling, WERF 2003.

Wastewater was collected by Clarkson students for 3 testing events on Mondays and transported to Potsdam, NY.

Results were preliminarily discussed with Brown and Caldwell prior to submission of the December PER Addendum. B&C will provide additional input with respect to these results as needed.

B&L's services associated with SNR and Washout testing included:

- Vetting testing procedures and recommending appropriate testing procedures and protocols for implementation.
- Identifying, vetting and coordinating testing team partners and contracting with Clarkson and Brown and Caldwell for subcontracted services. Note that EnviroSim contract was not under B&L, whereas Clarkson University and Brown and Caldwell have subcontracted with B&L for their services.
- Coordinating with stakeholders including teaming partners, SCSD and a Significant Industrial User (SIU).
- Attending meetings with stakeholders including teaming partners, SCSD, SIU and NYSDEC.
- Acquiring all required equipment to conduct the SNR testing and completing the SNR testing at SCSD's wastewater treatment facility.
- Reviewing nitrification inhibition testing completed by University of Arizona on behalf of a SIU.
- Assessing testing results and developing technical reports summarizing the testing procedures, results and conclusions of assessment.

2. Sludge Production Analysis

As requested by SCSD, B&L has conducted a detailed analysis of sludge production for the existing facility as well as future sludge production from the new biological treatment process.

Analysis has included:

- Analysis of sludge dewatering belt filter press (BFP) operations to analyze impact of the treatment process modifications on equipment operation schedules initially and into the future as plant flows and loads increase.
- Analysis of historical sludge hauling records and % solids content from BFP operating data to determine base line solids production and projected future solids production.
- Analysis of the influent TSS solids concentration compared to analytical testing results based on actual sludge haul records. This effort was to refine overall sludge production projections for facilities and cost planning purposes.
- Analysis of other IFAS facilities with respect to sludge generation after completion of their nitrification upgrade project.

The following summaries were presented to the County:

- BFP operations and solids impacts (August 2020)
- Primary Solids Mass Balance Analysis (October 2020)
- Comparison of 2017 – 2020 daily sludge hauling records, BFP operations, WAS production based on plant data and a back calculation of Primary Solids generation

- Technical memorandum analyzing historical data as well as future sludge production projections.

3. Final Modeling, Process Selection and PER Addendum

A final 10-month dynamic model was developed for the existing SCSD Wastewater Treatment Plant as operated in 2020 with both the North and South trains of the facility running. This was developed to incorporate the range of AOB growth rates throughout the testing and develop a statistical analysis to determine the best fit to the data for the purpose of comparing lab testing of AOB growth rate to actual plant performance. Various growth rates were modeled to simulate the variability of the AOB specific growth rate and the impact on design requirements and treatment capabilities as well as the range of process needs for air, chemicals and sludge production.

A PER Addendum was prepared and submitted to the NYSDEC for review and comment. The PER Addendum includes results of the testing conducted, dynamic modeling results, selection of a design AOB coefficient as well as a range of adaptability of the MLE process. A summary of the process modeling and anticipated treatment was developed. The overall process upgrades and the process design basis was defined, a preliminary opinion of capital cost was provided and a project schedule presented.

B&L will respond to NYSDEC's comments on the Final PER once received and incorporated responses as appropriate into the Final Basis of Design Report.

FINAL DESIGN SERVICES

Final design of the improvements will be a retrofit of the existing plant to incorporate the Modified Ludzack-Ettinger (MLE) activated sludge process for biological nutrient removal. Design will be based on the following influent criteria and will meet the 30 year projections for a 22 mgd facility with significant industrial contributions as identified in the PER dated October 2020 and PER Addendum dated December 2020.

Parameter	Design Maximum Month	Design Average Month	Design Peak Day	Peak Hour
Flow, MGD	22.00	19.18	31.27	33.19
BOD, ppd	36,884	32,558	87,962	-
BOD, mg/L	201	203	337	-
TSS, ppd	48,234	38,257	134,148	-
TSS, mg/L	263	239	514	-
VSS, ppd	40,424	33,676	97,547	-
VSS, mg/L	220	210	374	-
TKN, ppd	14,332	11,497	14,332	-
TKN, mg/L	78	72	55	-
NH3-N, ppd	12,247	10,103	12,247	-
NH3-N, mg/L	67	63	47	-

The treatment process upgrade will be designed to meet the existing SPDES permit requirements as well as the anticipated NYSDEC permit modification to amend the ammonia limits to:

- Effluent ammonia of <27 mg/l in the winter (dates to be determined by new SPDES permit)
- Effluent ammonia of <16.2 mg/l in the summer (dates to be determined by new SPDES permit)

The MLE process will be designed to meet the above effluent criteria based on the following assumptions:

- Winter wastewater temperatures are 12 degrees C or higher.
- Summer wastewater temperatures are 24 degrees C.
- An alkalinity adjustment system will be utilized to distribute 3,500 gallons per day of Magnesium Hydroxide. An alternative chemical dry feed distribution system for Magnesium Oxide will be analyzed in the final design to be equivalent to this Magnesium Hydroxide dosage and may be amended in the final BOD.
- A carbon addition system will be utilized to distribute up to 1,100 gallons per day to facilitate denitrification and limit the effluent nitrate to a target of 30 mg/l to enhance clarifier

performance. For the purposes of this supplement MicroC2000 is assumed or a similar nonhazardous carbon source.

- A target MLSS of 3,500 mg/l will be required to meet effluent performance under projected maximum flow and load winter conditions.
- A range in AOB growth coefficients between 0.48 to 0.77, and an average of 0.60. These AOB growth coefficient parameters are based on testing and analysis completed through end of year 2020.

Design Components will include:

- Conversion of the North and South Aeration Tanks to the MLE process by adding baffle walls. The tanks will be constructed with a 15% dedicated anoxic zone, a middle zone of 25% that will swing from anoxic to aerobic based on temperature conditions and an 60% aerobic zone
- The anoxic zones will contain mixers
- The Swing zones will contain mixers and diffusers
- The North Side Aeration Tanks will incorporate ultra-fine bubble diffusers
- The South Side Aeration Tanks will reconfigure existing diffusers into the swing and aerobic zones
- Submersible recycle pumps will be added to convey up to 200% of the forward flow back to the anoxic zone. Current plan is to have dedicated pumps in each aeration tank to recycle the flow.
- Two additional South Side Aeration Tanks (designed for MLE process) including connections into the existing influent and effluent channels
- Modifications to the flow splitter boxes to facilitate flow split to each side, if necessary
- Three new high-speed turbo blowers (Turplex, or equal) will be added on the North Side, one new high-speed turbo blower will be added on the South Side in the current chemical feed area and incorporated into the existing blowers and control system. Analysis of existing piping will be conducted and piping upgrades to the North side piping to mitigate leaks will be included. Other piping determine to be in suitable condition will be reused as appropriate to minimize capital costs
- A chemical feed building for associated chemical storage and feed equipment, including necessary power and controls to support the process equipment and associated HVAC / architectural / site design for the building.
- Electrical and generator upgrades to support the blowers and chemical feed building.

Final Design Tasks:

1. Basis of Design Report

B&L will prepare a Basis of Design Report in accordance with New York State Department of Environmental Conservation requirements including design standards as defined in “Recommended Standards for Wastewater Works” and TR-16, except any variations approved by NYSDEC.

An updated hydraulic profile will be developed for the aeration system. It will analyze average and peak hourly flows. Information from the 2010 design drawings will be used for the basis of analysis.

All selected unit processes will be further developed with equipment manufacturers to project capital costs, operational needs, layout requirements and support systems (e.g. electrical, mechanical, plumbing).

A detailed evaluation of two options for the alkalinity adjustment chemicals will be completed. The comparison will be between the liquid magnesium hydroxide and a dry feed system.

Several (up to three) blower manufacturers/makes/models will be evaluated and review meetings with the manufacturer and SCSO will be held (in person at SCSO preferably, otherwise by Zoom) to determine the design criteria. It is anticipated that the North Side Blower Building will be taken offline to allow for complete reconfiguration of the blower building. At this time no expansion to that building is anticipated.

Evaluation of the inDense system to determine if selective wasting can improve the settleability of the final clarifiers. Should the technology prove to be cost effective an additional design fee is included in this proposal.

The report will present proposed process equipment and will contain figures illustrating the preliminary layout of the unit processes, building locations, WWTP aeration tank hydraulics, tank and equipment configurations, and yard piping.

The anticipated deliverables under this phase will consist of the following items:

- Basis of Design Report including process calculations and equipment cut sheets.
- Preliminary drawings indicating general tank configurations, general equipment layout, and approximate building locations.
- Hydraulic Calculations.
- Process Calculations.
- Information obtained from the Geotechnical analysis (Task 4).
- Preliminary electrical design and equipment selections.
- Drawing indicating the Process Flow Schematic with control narrative describing control logic and integration with existing control systems.
- Updated Capital and Operational & Maintenance Costs; and

- Manufacturer and equipment data will be provided in Appendices,

The layout provided will be analyzed and summarized with respect to phasing of the plant operations and anticipated treatment efficiencies.

A review meeting will be held with the County at the completion of the Draft Report and comments will be incorporated into the Final Basis of Design Report.

B&L will provide the County with three hard copies of the Final Basis of Design Report for County records, as well as a digital copy as a .PDF file. Submittals to the NYSDEC for their approval are anticipated to be electronic .PDF files.

Meetings are included during the Basis of Design phase and will be both in person as well as the existing team conference calls.

2. SPDES Permit Modifications

SCSD will take the lead on developing the Form 2A SPDES Permit Application to initiate the change in permitted flow with the NYSDEC and obtain the final effluent ammonia limits for the facility. B&L will review materials prepared by SCSD and will provide support information with respect to the proposed MLE process, specifically including:

- Process Flow Schematic
- Proposed Site Plan (30% Plan)

All other sampling and data summaries and information pertaining to the outfall will be prepared by SCSD.

3. Topographic Survey

Topographic survey and base mapping services will be required for final design. B&L will retain the services of Control Point Solutions of Colonie NY to prepare base mapping for the project area.

Vertical data will be collected and represented with one-foot contour intervals. Surveys will include evident planimetric and topographic features including tanks/structures, landscaping, trees, overhead utilities, poles, underground utility evidence, pipe inverts etc. Property lines will be shown from tax maps and available infrastructure mapping provided to B&L by SCSD. An easement or boundary survey is not included herein nor is any deed research / boundary survey research included.

Underground utilities will be located and shown based on existing utility mapping and Dig Safely New York mark-outs.

Horizontal datum will be state plane coordinates by static GPS processed by OPUS or NYSNET. A benchmark will be set at the site for use by the contractor. The vertical datum will be consistent with the survey from the most recent plant upgrade.

Total area to be surveyed will encompass the north and south existing aeration tanks, blower buildings, area between South Blower Building and Admin Building, and area with existing storm water retention pond near the aeration tanks. As a full site survey was not requested the remainder of the site will be imported from the existing pdf plans of the site as a background, it will not have any physical survey data associated with that area of the plant.

- a. All buried utilities (electrical, gas, sanitary & storm sewers, telephone, water, etc.): Surveyor to obtain available mapping of existing utilities from SCSD and coordinate with Dig Safely New York for verification of actual field locations as may be necessary.
 - Including pipe, pipe materials, pipe diameter, invert elevations, rim elevations and manhole base elevations and size for sanitary and storm sewer systems.
 - Including pipe, pipe materials, pipe diameter, valves, hydrants, water services, and water service shut off valves (curb boxes) for water system components.
- b. Edges of paved or unpaved surfaces including roadways, driveways, sidewalks and paths. Indicate material type (gravel, dirt, asphalt pavement, concrete, etc.)
- c. All above grade surface features including but not limited to monuments, signs, trees/shrubs, telephone/utility poles and guy wires, overhead wire routes, building and process tanks etc.
- d. Culverts, swales, drainage ditch centerlines, along with low points within the survey area.
- e. Outline of buildings/structures within survey limits.
- f. Contours at 1 ft. elevation intervals.
- g. Select top of tank, pipe, and weir elevations within existing process tanks within the survey area.
- h. NYS Prevailing Wages will apply.

4. Geotechnical Investigation

B&L will retain the services of Aztech Environmental in conjunction with Daniel Loucks of DGL Geotechnical Engineering to complete soil borings and geotechnical analysis at the project site. Boring logs documenting subsurface conditions will be prepared for use in design and bidding phases of the project.

- a. Four (4) total bores shall be completed. Three (3) at 30- feet deep and one (1) at 50 feet deep. Three borings are for the aeration tanks, one boring for the chemical feed building.
- b. If rock is encountered core rock for 5 feet past refusal using NX-size core barrel.
- c. Perform soil sampling and Standard Penetration Testing (SPT), using a 2-inch OD split spoon sampler, in accordance with ASTM D 1586: "Standard Test Method for

Standard Penetration Test (SPT) and Split Barrel Sampling of Soils, "continuously to a minimum depth of 10 feet and at 5-foot intervals thereafter.

- d. Bores shall be completed using 3 1/2 inch hollow stem auger.
- e. Backfill all borings using native material.
- f. NYS Prevailing Wages will apply.
- g. Prepare geotechnical engineering report to document all findings from investigation including Seismic Site Classification and provide foundation requirements for tanks and chemical feed building and associated soil requirements. Assess and develop the requirements for a permanent dewatering system for the installation of the new south aeration tanks as well as long term maintenance for the existing South Side tanks. Dewatering requirements will be covered in the Basis of Design Report.

Data Needs: SCSD to provide any structural reports and investigations for South Side Aeration Tanks and any information related to previous dewatering systems.

5. Pre-Demolition Investigation for North and South Blower Building for lead paint and asbestos.

B&L will physically survey and sample suspect building materials located in accessible areas affected by the project. Survey personnel will access and survey the facilities in coordination with designated representatives. The pre-renovation survey for asbestos containing materials (ACM) will be in accordance with NYSDOL Industrial Code Rule 56 regulations. Our approach is defined below.

- a. Certified building inspectors will review, to the extent feasible, suspect ACM used in the construction of the building facilities in the specific areas of renovation. The survey will include the review of interior and exterior materials, including roofing materials. Invasive survey methods will be used to access and locate potential concealed materials for sampling if affected by the renovations.
- b. Triplicate bulk samples will be collected from each homogeneous material in the building with the exclusion of non-friable organically bound materials (NOBs). Triplicate sampling is recommended by the U.S. EPA as a means of reducing erroneous findings due to random variations in asbestos content or analytical error. Duplicate samples of NOBs will be collected for analysis as required by the applicable regulations.
- c. Serial analysis will be performed on triplicate sets of samples at an appropriately accredited laboratory contracted by B&L. Bulk asbestos samples will be analyzed using the EPA interim method of dispersion staining/polarized light microscopy (PLM). The laboratory will analyze the first sample of each series (set). If this sample tests positive for asbestos, then no additional samples of the series will be analyzed. If the first sample tests negative for asbestos, then additional samples in the series will be analyzed until a sample tests positive. If samples in a series test negative for asbestos, then the material will be considered asbestos-free. The laboratory will review samples in each set for similarity of materials. Where required, the laboratory will supplement the PLM method with the stratified point count technique.

- d. NOBs, which will include floor tiles/mastics, caulks, sealants, and roofing materials, found to be negative for asbestos by PLM, will be verified as negative by transmission electron microscopy (TEM). TEM analysis is the most definitive analysis for determination of asbestos in an NOB. NOB samples will be analyzed by an accredited TEM laboratory subcontracted by B&L.
- e. Sample locations and asbestos containing materials will be recorded on drawings. Scale will be approximate. The drawings will illustrate sample and ACM locations.
- f. Analysis of any Sprayed-on Fire Proofing (SFP) and/or surfacing materials is contemplated by standard PLM analysis only. We will notify SCSD if any SFP or surfacing material contains vermiculite as identified by the laboratory. If the SFP or surfacing material is determined to contain vermiculite, we will need to revisit the site and collect additional samples. The material will then be required to be analyzed by a specific analysis instituted by NYSDOH. The specific sampling protocol and laboratory analysis to determine asbestos content for Sprayed-on Fire Proofing containing vermiculite (SOF-V) is analytical method ELAP 198.8. The prescribed analytical costs for this method are costly. In the absence of sampling, the material determined to contain vermiculite is required to be a presumed asbestos containing material (PACM). However, the cost to abate the SFP as PACM would have significant budget impacts versus the additional laboratory costs to potentially refute the presence of asbestos. Our lump sum fee does not include collection and analysis by this method, should the SFP be observed to contain vermiculite we will notify SCSD immediately to discuss the cost impacts.
- g. A report will be issued to you that will identify all materials sampled and the results of sampling. The pre-demolition survey report will identify survey methodologies. Extent of ACM shall be identified in tabular form and on drawings. Laboratory reports, chain-of-custody forms, and pertinent data generated during the survey will be included in the report.

6. Wetland Delineation

a. Field Wetland Delineation

Based on our understanding of the scope, a B&L wetland biologist will visit the property and field delineate the boundaries of any freshwater wetlands and/or waters identified within the delineation limits depicted on the enclosed figure. The presence or absence of wetland within the noted area will be evaluated, as well as the potential jurisdiction of any resources encountered during the visit. The delineation will be completed using methods outlined in the USACE Wetland Delineation Manual (Environmental Library, 1987) and their Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral/Northeast Region, Version 2.0 (USACE, 2011) as well as the NYSDEC Freshwater Wetlands Delineation Manual (Browne et al., 1995). To support our field findings, paired data plots will be collected in wetland and upland areas. Soil, hydrologic, and vegetative characteristics will be recorded at the data plot locations. The boundaries of wetlands or surface waters that extend outside the noted delineation limits will be terminated at the survey area boundary.

If wetland and/or water resources are identified in the field, data plot locations and wetland/water delineated boundaries will be collected in the field using a handheld Trimble global positioning system (GPS) with sub-meter accuracy. This data collection methodology is recognized as an acceptable process of mapping wetland boundaries by State and Federal regulators, including the NYSDEC and USACE. We will also hang wetland flagging in the field, as requested by the NYSDEC. This will accelerate the boundary review by the regulatory agencies (not included as part of this proposal).

Upon completion of the field wetland delineation, any delineated resource boundaries will be downloaded and edited using a geographic information system (GIS) and associated software. Any delineated boundaries will be provided to you and/or your site surveyor to be depicted on the property survey. This information file will be transmitted as a DXF or DWG file in State Plane 83, NY East, feet, or another coordinate system or unit, as specified. We will also generate a figure in ArcGIS to show any field identified resource boundaries on an aerial imagery background.

b. Task 2 - Wetland Delineation Memorandum

It is understood that NYSDEC has only requested field flagging and a map of the delineated wetland boundary at this time. If needed in the future, B&L can provide a wetland delineation memorandum to document the locations and characteristics of any wetlands and waters identified within the delineation limits, or the absence of such resources. A wetland delineation memorandum would be beneficial if proof of the field delineation and its conclusions are needed to support permitting efforts for the proposed Ball Park expansion project. To complete this task, we will provide you with an electronic copy of a wetland delineation memorandum and support documentation (e.g., field datasheets, site photographs, figures) that comply with the USACE's and NYSDEC's requirements, should the document need to be provided as part of a future permit request. Avoidance of delineated wetland boundaries and waters would not require a permit from the USACE or NYSDEC. It should be noted that NYSDEC-regulated wetlands also have a regulated 100-foot buffer.

c. Task 3 – Permitting

B&L will prepare applications and submit plans and specifications to the NYSDEC and USACE, as appropriate, to secure permits and approvals for project bidding and construction. It is assumed that B&L will complete coordination and payment, with charges being expensed to the project for associated permit fees, as applicable. The need for permits and which ones specifically, will be confirmed upon completion of the Task 6.a fieldwork. One Joint Application for Permit (JAP) will be submitted to the NYSDEC and USACE.

The 90% plans will be submitted with the JAP packages to support the permit requests. Additional support documentation within the JAP packages will include:

- State Environmental Quality Review Act (SEQRA) – Type 2 Action
 - A copy of the final SEQRA resolution and a summary of the completed process will be included in the JAP.

- Cultural and Historic Resources
 - Based on the final location of the chemical feed building an online submissions for each work category will be made using the State Historic Preservation Office's (SHPO) Cultural Resource Information System (CRIS) to reconfirm previous No Effect letter received from SHPO. This scope and fee does not account for supplemental investigations or surveys that SHPO could, though is not expected to, request.
- Threatened and Endangered Species
 - Based on the final selection of the chemical feed building an updated database queries will be made online and submitted to retrieve records of state and federal protected species for the proposed work locations. A site visit will subsequently be completed (when weather allows) to determine the extent of habitat types and characteristics at each project location that may involve work within or adjacent to a regulated surface waterbody. It is assumed that in-water work is minimal or can be avoided and that there will be no requirement for a freshwater mussel survey. If such a survey is requested by the NYSDEC, it will be completed by a subcontractor as an additional scope and fee item.

Each JAP package will be electronically submitted to the USACE and the NYSDEC Region Office. One hard copy of the package will also be produced and mailed to the NYSDEC, as they request in their COVID-19 policy. An electronic package will be provided to the City for documentation. Additional hard copies can be provided at additional cost.

7. Funding Applications

B&L will assist SCSD with the completion of the following grant funding applications:

a. Empire State Development (ESD) Grant Funds

A grant application will be prepared for the Empire State Development Grant Funds Program. Funding through this program will contribute no more than 20% of total eligible project costs as grant funding while the remaining 80% must be provided by the grantee as local contributions or in-kind services match. 10% of total project costs must be accounted for as cash equity. There is no stated limit on grant award amount under this program, but it typically maxes out at \$5 million per award. Please be advised that the submittal of a grant application to this program does not guarantee an award. If awarded funding, ESD grants come with a 30% MWBE participation goal. It is assumed this MWBE goal will be met using the construction contract and not the engineering contract.

b. Water Quality Improvement Program (WQIP)

A grant application will be prepared for the Water Quality Improvement Program (WQIP). Funding through this program will contribute no more than 60% of total eligible project costs as grant funding while the remaining 40% must be provided by the grantee as local contributions or in-kind services match. The maximum award under this program is \$10 million. Please be advised that the submittal of a grant application to this program does not guarantee an award. If awarded funding, WQIP grants come with a 20% MWBE participation goal for any contracts over \$25,000.

Tasks to be completed as part of grant application preparation services include the following:

- Development of the required grant project budgets;
- Identification of co-funding opportunities in a coordinated strategy;
- A meeting with SCSD representatives to develop the scope proposed in the application;
- Develop responses to the required questionnaires;
- Upload of grant narrative responses and required supporting documentation for each program in their respective online portals; and
- Compilation and production of one (1) hard copy and one (1) digital copy of each completed application.

c. Water Infrastructure Improvement Act (WIIA)

Based upon the final determination of the WIIA grant received as part of the Sludge Disposal Project the potential for applying for the 2021 WIIA may exist. B&L will prepare the funding application for construction costs only when the next round of WIIA applications is announced.

d. NYS EFC Loan Application

To support the long term financing of the project B&L will prepare the NYSEFC loan application in conjunction with the SCSD providing the necessary financial information required by EFC. Support documents will be prepared and submitted to supplement the loan application.

8. Final Design Drawings

B&L will prepare Contract Documents and Specifications for the approved project as defined in the Preliminary Engineering Report and Final Basis of Design Report. Contract Documents will include Contract Drawings, Technical Specifications, and contractual/administrative requirements for the project's construction. The specification will use SCSD bidding documents, construction contract, general conditions, and general requirements, modified as required to comply with requirements of funding programs (if any).

Designs will be prepared to meet NYSDEC Design Standards as defined in Recommended Standards for Wastewater Facilities, by Great Lakes- Upper Mississippi River Board of State and

Provincial Public Health and Environmental Managers ("10 States Standards") and TR-16, excepting variations approved by NYSDEC.

Design Plans and Specifications will be prepared in accordance with current local, state, and federal codes, standards and regulations. Contract Documents will be prepared for multiple prime contracts for the WWTP Improvements as required under New York State bidding laws, including General, Electrical, Heating & Ventilating, and Plumbing.

It is proposed to prepare one (1) set of Contract Documents to include four (4) Prime Contracts for construction of the WWTP Improvements as follows:

Saratoga County Sewer District, Ammonia Upgrade Project - Contract No. TBD

- Contract No. #A – General Construction
- Contract No. #B – Electrical Construction
- Contract No. #C – Heating & Ventilating Construction
- Contract No. #D – Plumbing Construction

The contract drawings will generally be comprised of the following:

Contract No. #A– General Construction

General

- Cover Sheet
- Index of Drawings
- Legend and General Notes/Suggested Sequence of Construction
- Process Schematic Diagram and Design Data
- Process Instrumentation Diagram (estimated at 4 sheets)
- Hydraulic Profile (integrated into existing plant hydraulic plant data)

Site

- WWTP Site Plan – Site Demolition Plan
- Yard Piping Plan
- Piping Profiles
- WWTP Site Plan – Grading, Stormwater Management, and Plantings
- Civil Details (estimated at 4 sheets)
- Erosion and Sediment Control Plan and Details
- Erosion and Sediment Control Details and Notes

Process Mechanical

- Splitter Box Modifications – Plan, Section and Details, if needed
- North Side Aeration – Demolition Plan and Sections
- North Side Aeration – Tank Plan, Sections and Details (estimated at 5 sheets)
- North Side Blower Building – Plan, Sections and Details (estimated at 3 sheets)
- South Side Aeration – Demolition Plan and Sections
- South Side Aeration – Tank Plan, Sections and Details (estimated at 5 sheets)

New South Side Aeration - Tank Plan, Sections and Details (estimated at 3 sheets)
South Side Blower Building – Plan, Sections and Details (estimated at 3 sheets)
Chemical Feed Building – Plan, Sections and Details (estimated at 5 sheets)
Detail Sheets that will include schedules for gates, piping and valves
SCADA Control Architecture -in conjunction with the SCSD's SCADA integrator General Controls requirements. It is assumed that General Controls will provide a budget for proposed work to be carried as an allowance for General Controls work under the bid documents
SCADA Instrumentation Schedules
SCADA Instrumentation Details

Architectural

Architectural Notes
North Side Blower Building - Door Schedule, Window Schedule, Room Finish Schedule
South Side Blower Building - Door Schedule, Window Schedule, Room Finish Schedule
Chemical Feed Building – Plans, Elevations, Sections and Details (estimated at 4 sheets)

Structural

Structural Notes (2 sheets)
Statement of Special Inspections
Standard Details (3 sheets)
North Side Aeration Tank Demolition Plan
North Side Aeration Tank Plans, Sections and Details
South Side Aeration Tank Demolition Plan
South Side Aeration Tank Plans, Sections and Details
New South Side Aeration Tanks – Plan, Section and Details (estimated at 6 sheets)
North Side Blower Building Modifications – Plan, Sections, Details
South Side Blower Building Modifications – Plan, Sections, Details
Chemical Feed Building – Plans Sections and Details (estimated at 3 sheets)

Contract No. #B – Electrical Construction

Facility Key Plan, Horizontal and Vertical Control, Site Utilization
Legends, Symbols, General Notes
Electrical Site Plan – Demolition Plan
Electrical Site Plan – Modified Site Power Plan
Demolition Diagrams (estimated at 3 sheets)
One-Line Diagrams (estimated at 4 Sheets)
Three-Line Diagrams (estimated at 3 sheets)
Switchgear Elementaries and Control (estimated at 6 sheets)
SCADA Schematics
North Side Aeration Tanks - Power and Control Plan
South Side Aeration Tanks – Power and Control Plan
North Side Blower Building - Power Plan

South Side Blower Building – Lighting Plan
Chemical Feed Building - Power and Lighting Plan
Electrical Schedules (estimated at 3 sheets)
Electrical Schematics (estimated at 5 sheets)
Electrical Details (estimated at 3 sheets)

Contract No. #C - Heating and Ventilation Construction

Legends, Symbols, and General Notes
Fixture Schedule – Chemical Feed Building
Chemical Feed – Plan and Details
North Blower & Partial South Blower Building – Ventilation Upgrade
Schedules and Details

Contract No. #D – Plumbing

Legends, Symbols, and General Notes
Chemical Feed Building – Plan and Details

It is assumed that the HVAC is adequate for the South Blower Building and no modifications are required.

Technical Specifications will be prepared for each of the four (4) contracts using CSI (Construction Specifications Institute) standard format. Technical Specifications will identify the quality standard for materials to be incorporated into the work, and will outline critical material handling and installation requirements for the project. B&L will identify the building codes and accessibility standards used in the design.

B&L will progress the design to the following milestones, at which time B&L will provide a set of progress plans and conduct a design review meeting with the County for the appropriate stage of completion. The following items shall be completed by each milestone:

- a. 30% Plans (in conjunction with the Basis of Design Report)
 - Preliminary equipment selections completed
 - Plan level preliminary layouts for aeration tank modification and location on new aeration tank
 - Final determination of liquid versus dry chemical feed for the alkalinity adjustment
 - Preliminary plan of chemical feed building
 - Preliminary Plan of modifications to North and South Blower Buildings

- b. 60% Design Completion:
 - Equipment selections completed
 - Contract Drawings developed to 60% completion
 - Draft Technical Specifications outlined
 - 60% engineer's estimate of probable construction cost

c. 95% Design Completion:

- Pre-final technical specifications completed (complete pending final client and regulatory approval).
- Pre-final Bidding and Contract Documents completed (complete pending final client and regulatory approval).
- Final Basis of Design Report completed
- Contract Drawings completed, signed/stamped and ready for regulatory and funding agency approval prior to bidding (with Owner's comments addressed)
- Permit applications submitted
- 95% engineer's estimate of probable construction cost

B&L will respond to comments generated during SCSD review as appropriate, and prepare final (100%) documents for regulatory approval (NYSDEC, NYSEFC if needed). B&L will address regulatory agency comments as appropriate and prepare the final documents prior to bidding (as applicable).

d. B&L will prepare applications and submit plans and specifications to appropriate regulatory and/or funding agencies to secure permits and approvals for project bidding and construction. All fees associated with permits and permit applications are to be paid directly by SCSD and/or contractor, and are therefore not included in this supplement. The following agency submissions are anticipated, including necessary supplemental information:

- NYSDEC Sewer Facilities Contract Document approval, including Final Basis of Design Report with hydraulic and unit process calculations, equipment cut sheets, etc. in support of drawings and specifications.
- NYS Environmental Facilities Corporation (EFC) – Funding Agency Plan Approval, if needed.

A U.S. Army Corps of Engineers/NYSDEC Joint Application Permit for any activity affecting streams, waterways, waterbodies, wetlands, and coastal areas as identified above will be included.

- e. The total disturbance of the project would be less than one (1) acre but the existing stormwater retention pond will need to be relocated. A site specific Stormwater Pollution Prevention Plan (SWPPP) will be prepared as appropriate for the site reconfiguration and site specific soil erosion and sediment control will be incorporated into the Final Drawings and Specifications. There will be no modifications to, or addition of new structures within the 100-year floodplain that will require NYSDEC/U.S. Army Corps permitting.
- f. Attend Design Workshop Meetings with SCSD during the Final Design Phase to review and solicit Owners' input on design options in advance of the 30%, 60% and 95% design submission, and at the 60% and 95% project complete milestones. Remainder of the discussion will be undertaken during conference call progress meetings.
- g. Attend one (1) workshop session with regulatory officials to review regulatory comments on the Final Basis of Design Report, Contract Drawings and Specifications. B&L will modify the documents

as appropriate, and as requested by the NYSDEC, and funding agencies.

- h. Advise Owner of any recommended adjustments to the Opinion of Probable Construction Cost.
- i. After consultation with Owner, include in the Construction Contract Documents any specific protocols for the transmittal of Project-related correspondence, documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website. Any such protocols shall be applicable to transmittals between and among Owner, Engineer, and Contractor during the Construction Phase and Post-Construction Phase, and unless agreed otherwise, shall supersede any conflicting protocols previously established for transmittals between Owner and Engineer.

Deliverables: As noted in each of the plan submissions.

Additional Design Services

If the inDense system is determined to be a variable and cost effective technology the equipment will be added into the overall construction documents. Based upon the concept of adding the inDense system on upper level grating in the GBT room the following is anticipated to be included:

- Structural design for the extension of existing grating platform to house two inDense units.
- Rerouting of existing WAS pump forcemain to the inDense units
- Two inDense units and associated piping and valves
- Small storage tank and associated pumps to take flow from the inDense unit into the GBTs
- Small storage tank located on the lower level and associated pump to take granulated sludge back into the RAS system via a secondary RAS forcemain.
- Associated electrical power and controls for the two new pump systems

No changes to existing building HVAC are anticipated.

This design work will be done in conjunction with the main project and will include technical specification and the following additional drawings are anticipated:

1. Process Drawings – Upper Level Plan, Lower Level Plan, Sections and Details – 4 to 5 drawings
2. Structural Drawings- Platform - Plan, section and Details – 2 drawings
3. Electrical Drawings – Power and Control for new pumps – 1 drawing

Additional services associated with this project that can be provided via supplement if requested by SCSD:

- Specific scope of services adjustments as may be required to meet funding agency requirements.
- Clarifier performance improvements
- Sludge processing improvements

Technical Assumptions

1. SEQRA has been classified as Type 2 due to the Order on Consent and no work associated with SEQRA is required. Copies of the SEQRA documentation completed during the PER will be included in the Basis of Design Report.
2. We do not anticipate that the new Chemical Feed Building will require bathroom facilities. However the location of the building on-site and the building occupancy may necessitate the requirement of a unisex bathroom. Should a bathroom be required we will submit a supplemental proposal to SCSD.
3. B&L will provide limited power system studies including short circuit and protective device coordination in the design of the proposed switchgear and generator system replacement. Full power system studies for the entire facility's electrical distribution system including a full arc-flash study are not included at this time. B&L has the capabilities to provide these under a supplement proposal should SCSD desire those services.
4. During the intimal evaluations, the option of brand new generators for the whole facility vs just providing back-up power will be evaluated.
5. We will be providing the short circuit, coordination, and relay settings as required to complete the design tasks and specify the new equipment. The electronic models used to generate these studies and settings will be retained by B&L.
6. The protection relay setting files will be provided by the installation contractor. We will be providing the settings.
7. Due to the nature of synchronizing and paralleling generators on the existing 4,160V Bus we have included time to coordinate with NYSEG.

PROJECT SCHEUDLE

Project Milestone	Schedule Date
Additional Testing and Modeling Assessment	
SNR Testing	October 2020
Washout Testing	November – December 2020
Sludge Prediction and Assessment	August – December 2020
Dynamic Modeling	December 2020
PER Addendum	December 31, 2020
Start Project Design	February 2021
Survey	March 2021 ⁽¹⁾
Geotechnical Investigation	March 2021 ⁽¹⁾
Pre Demolition Survey	April 2021
Wetland Delineation	April – May 2021
SPDES Permit Application Submission by SCSD (Item 4 Consent Order)	March 31, 2021
Basis of Design /30% Engineering Plans (Item 5 Consent Order)	April 30, 2021
60% Engineering Plans (Item 6 Consent Order)	July 30, 2021
95% Engineering Plans (Item 7 Consent Order)	October 1, 2021
Submit Final Plans & Specs for Approval	November 1, 2021 ⁽²⁾
Anticipated Regulatory Approval	December 1, 2021
1. Weather Dependent	
2. Could be dependent on DEC Review of 95% submission	

FEE FOR SERVICES:

Barton & Loguidice, D.P.C. proposes to provide the scope of services described herein for a total fee of \$1,574,600 as outlined below.

Task	Fee
Nitrification Testing Dynamic Modeling Sludge Analysis PER Addendum (LS)	\$124,500
Survey and Base Mapping and Subsurface Investigation and Geotechnical Report (LS)	\$49,100
SPDES Permit Application Review Basis of Design Report Wetland Delineation Predemolition Survey Funding Applications and Final Design (LS)	\$1,338,900
Final Design Services for the addition of the inDense System	\$62,100
Total	\$1,574,600

B&L previously had \$106,300 allocated for prior design. As such, a supplemental fee authorization of \$1,468,300 is proposed for the additional services described herein.

The scope of services and associated fee for Bidding and Construction Phase services will be evaluated and presented in a separate proposal for authorization prior to completion of final design. It is estimated that the total construction duration would be approximately 2 years due to the phasing the work to keep the plant operational.



SARATOGA COUNTY

AGENDA ITEM REQUEST FORM

TO: Steve Bulger, County Administrator
Hugh Burke, Interim County Attorney
Pam Wright, Clerk of the Board

CC: Jason Kemper, Planning Director
Therese Connolly, Deputy Clerk of the Board
Matt Rose, Management Analyst

FROM:

DATE:

RE:

COMMITTEE:

1. Is a Resolution Required: **YES** or **NO**
(If YES, please complete #2- #10) (If NO, skip to #10 and provide reason for bringing the item)
2. Is a Budget Amendment needed:
(If yes, budget lines and impact must be provided)
3. Are there Amendments to the Compensation Schedule:
(If yes, provide details)
4. Specific details on what the resolution will authorize:
5. Does this item require hiring a Vendors/Contractors:
 - a. Were bids/proposals solicited:
 - b. Is the vendor/contractor a sole source:
 - c. Commencement date of contract term:
 - d. Termination of contract date:
 - e. Contract renewal and term:
 - f. Contact information:
 - g. Is the vendor/contractor an LLS, PLLC or partnership:
 - h. State of vendor/contractor organization:
 - i. Is this a renewal agreement: **YES** or **NO**
 - j. Vendor/Contractor comment/remarks:



SARATOGA COUNTY

AGENDA ITEM REQUEST FORM

6. Is this an annual housekeeping resolution:
(If yes, attach the last approved resolution)
 - a. What were the terms of the prior resolution
 - b. Are the terms changing:
 - c. What is the reason for the change in terms:

7. Is a new position being created:
 - a. Effective date
 - b. Salary and grade

8. Is a new employee being hired:
 - a. Effective date of employment
 - b. Salary and grade
 - c. Appointed position:
 - d. Term:

9. Is a grant being accepted:
 - a. Source of grant funding:
 - b. Amount of grant:
 - c. Purpose grant will be used for:
 - d. Equipment and/or services being purchased with the grant:
 - e. Time period grant covers:

10. Remarks/Reasoning (Supporting documentation must be attached to this form):