

RESOLUTION 17-049

RESOLUTION AUTHORIZING AGREEMENT FOR PROFESSIONAL ENGINEER SERVICES FOR CONTRACT 35 REBID II

WHEREAS, pursuant to Resolution 10-063, the Rockaway Valley Regional Sewerage Authority (“RVRSA”) entered into a public contract with Insituform Technologies, Inc. (d/b/a Insituform Technologies, LLC and hereinafter referred to as “Insituform”) entitled Interceptor Sewer Rehabilitation Project 2009, Contract No. 35 - Rebid, State EIT Project No. S340756-02, for the rehabilitation of its trunk line; and

WHEREAS, during the course of the work, certain issues arose regarding the lining of the interceptor under Washington Street in the Town of Boonton, and that work was not performed by Insituform consistent with a Settlement Agreement executed on July 11, 2013, and its attached Contract Modification CM-1; and

WHEREAS, the following scope of work therefore remains to be performed in order to ensure the integrity of the sanitary sewer system crossing under Washington Street in the Town of Boonton, namely, lining of 140.5 feet of 48” diameter RCP pipe from the Siphon Outlet Chamber to Manhole B-10 and associated bypass pumping. Additionally, RVRSA has determined that it is reasonable and prudent to include additional but related repair work within the scope of this aforementioned work, and expanded the scope of work for the Contract No. 35-Rebid II project to include the following: (1) structurally line the pipe under Washington Street between the siphon outlet chamber and Manhole B-10, bypassing through the Monroe Pump Station; (2) structurally repair the siphon inlet chamber interior and replace all equipment (valves, grading, ladder, hatch, etc.), apply protective coating to all unrepaired interior surfaces and provide for odor control; (3) structurally repair the siphon outlet chamber interior and replace all equipment (slide gates, ladder, hatch, etc.), apply protective coating to all unrepaired interior surfaces; (4) incorporate a bypass plan for the work to be performed on the siphon inlet and siphon outlet chambers; and (5) with respect to Manhole B-10, apply protective coating to the interior surfaces; and

WHEREAS, there exists a need to obtain the services of a professional engineer for the preparation of a design and bidding specifications, permitting assistance, NJEIT and Construction Phase Engineering Services; and

WHEREAS, during the course of an evaluation of the work, it was determined that two options exist, namely Scenario 1, rehabilitation with bypass pumping or Scenario 2, construction of new facilities; and

WHEREAS, Peter E. Kocsik, P.E. and Nancy C. Wohleb, P.E., C.M.E., of Mott MacDonald, with offices at 111 Wood Avenue South, Iselin, N.J. have an established reputation in the field of engineering matters and possesses the specialized abilities and resources to provide the services required and has submitted a proposal for each alternative, both dated February 22, 2017, attached hereto and made a part hereof, to provide such professional services; and

WHEREAS, Scenario 1 requires bypass pumping of the Interceptor at the Siphon Inlet chamber as well as the use of the new Monroe Street Pump Station during which time the existing RVRSA Interceptor Siphon Outlet Chamber, Manhole B-10 and approximately 141 LF of 48” gravity sewer under Washington Street in Boonton can be rehabilitated with CIPP lining and concrete rehabilitation techniques. The cost of professional engineering services for Scenario 1 is \$140,000.00; and

WHEREAS, Scenario 2 is to construct a new siphon outlet chamber, construct 141 LF of new 48” diameter sewer pipe and a new manhole B-10 without the need for the completion of the Monroe Street Pump Station. Scenario 2A would entail the construction of these aforementioned facilities parallel to the existing facilities and Scenario 2B contemplates the construction of these aforementioned facilities in the same alignment as the existing facilities. The cost of professional engineering services for Scenario 2 is \$164,000.00; and

WHEREAS, additional information is needed to determine which alternative is most appropriate, namely, confirmation is necessary to determine if the RVRSA Siphon Barrels can be plugged; verification is required of the extent of concrete thrushing and restraint; flow data must be evaluated for Meter BT-1, B and STP; and Green Acres issues must be evaluated, however, the RVRSA desires to expedite the approval of these professional engineering services due to the condition of the Siphon chamber and pipe; and

WHEREAS, the Local Public Contracts Law (N.J.S.A. 40A:11-5(1)(a)(i)) exempts the award of contracts for professional services from the requirements of public advertisement and bidding; and

WHEREAS, funds are available for either Scenario 1 or Scenario 2 at EIT- 043.

NOW, THEREFORE, BE IT RESOLVED by the Rockaway Valley Regional Sewerage Authority as follows:

1. JoAnn Mondini, Executive Director is authorized to execute an agreement with Mott MacDonald, with offices located at 111 Wood Avenue South, Iselin, N.J. in an amount not to exceed \$140,000.00 for professional engineering services associated with Scenario 1, or in an amount not to exceed \$164,000.00 for professional engineering services associated with Scenario 2, as set forth in the attached proposals from Mott MacDonald dated February 22, 2017, upon receipt and approval, by a majority of the members of the Infrastructure Committee, of their determination regarding which Scenario should be advanced.
2. The Executive Director, staff and consultants are authorized to take all appropriate actions to effectuate this Resolution, including, but not limited to, filing an application pursuant to Green Acres requirements.
3. This contract is awarded without competitive bidding as a “Professional Service” in accordance with N.J.S.A. 40A:11-5(1) (a) (i) of the Local Public Contracts Law because the service is of such a nature that it requires knowledge of an advanced type in a field of learning acquired by a prolonged formal course of study in engineering instruction as distinguished from general academic instruction or apprenticeship and training.

4. Notice of Contract Award shall be published in the Daily Record, as required by law within ten (10) days of its execution.

CERTIFICATION

I hereby certify that this Resolution was adopted at a regularly scheduled meeting of the Rockaway Valley Regional Sewerage Authority held on March 9, 2017

On motion of Thomas Andes

Second by Joseph Rossi

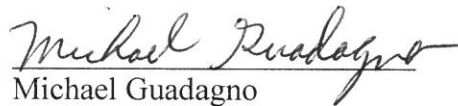
and a Roll Call Vote as Follows:

Yeas: (8) Andes, Cegelka, Corbett, Lowell, Recchia, Rossi, Schorno, Lavery

Nays: (0) None

Abstain: (1) Vincitore

Absent: (1) Guadagno


Michael Guadagno
Board Secretary



October 28, 2016

JoAnn Mondsini, Executive Director
Rockaway Valley RSA
Rd. #1, 99 Greenbank Rd.
Boonton, NJ 07005

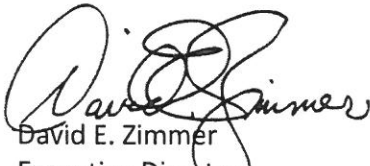
Dear Director Mondsini,

This letter will serve as formal notice that proceeds of the loans previously made by each of the New Jersey Environmental Infrastructure Trust (Trust) and the New Jersey Department of Environmental Protection (DEP) to the Rockaway Valley RSA with respect to project number S340 756-02, and currently held for such project by each of the Trust and DEP, will remain available for additional eligible expenses related to this project, subject to the following:

1. The Trust and the DEP agree that the additional work is required to complete the original contract;
2. The Trust and the DEP agree that the identified work requires an additional contract;
3. The Trust and the DEP agree that the work which RVRSA is proposing for the additional contract is within the scope of the original loan for project number S340 756-02;
4. RVRSA agrees that any costs submitted for reimbursement will be eligible costs and either approved by the DEP pursuant to the original contract or approved by the DEP pursuant to the new contract (as yet to be submitted to DEP).

As a result, the Trust and DEP both support RVRSA's request to maintain the loan proceeds in this Project Account, specifically \$306,934 in the Trust Project Account for this project and \$920,797 of DEP loan proceeds obligated by DEP for this project, in each case for additional work as described herein and subject to the terms described above.

Sincerely,


David E. Zimmer
Executive Director

New Jersey Environmental Infrastructure Trust



Daniel Kennedy
Assistant Commissioner
Water Resource Management
New Jersey Department of Environmental Protection



Contract 35
Rebid 2
Option 1

Ms. Carrie Feuer
Manager of Engineering
Rockaway Valley Regional Sewerage Authority
RD #1
99 Greenbank Road
Boonton, NJ 07005-7118

Your Reference
Contract 35 Rebid-II

Our Reference
MM#377368

<http://pims02/pims/ilsapl.dll/open/85352910>

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**Rockaway Valley Regional Sewerage Authority – Contract 35 Re-Bid II
Proposal for Professional Design, Bid, Permitting, NJEIT and Construction
Phase Engineering Services-(Scenario #1- Rehabilitate Existing Facilities /
Bypass Pump Using Monroe Street Pumping Station)**

February 22, 2017

Dear Ms. Feuer:

In accordance with your request and as a follow-up to our February 14, 2017 meeting, Mott MacDonald is pleased to provide the following proposal for Professional Design, Bid, Permitting, NJEIT and Construction Phase Engineering Services related to the above-referenced project. Based upon our discussion, Contract 35 Rebid-II can proceed based upon one of two main scenarios.

Scenario #1- Rehabilitate Existing Facilities / Bypass Pump Using Monroe Street Pumping Station

Scenario #2-Construct New Facilities/No Bypass Pumping

Scenario #2A-New Parallel Facilities/New Siphon Barrel Connection Short Term Siphon Plug.

Scenario #2B-New In-Alignment Facilities/Wet Tap Siphon Barrel/Temporary Siphon to Manhole B-9.

Scenario #1 requires bypass pumping of the Interceptor at the Siphon Inlet chamber as well as use of the new Monroe Street Pump Station during which time the existing RVRSA Interceptor Siphon Outlet Chamber, Manhole B-10 and approximately 141 LF of 48" gravity sewer that is located between these two structures and under Washington Street in Boonton can attempt to be rehabilitated in place with CIPP lining and concrete rehabilitation techniques. This scenario is only viable if the Monroe Street Pump Station project is completed.

Scenario #2 is to construct a new siphon outlet chamber, construct 141 LF of new 48" diameter sewer and a new Manhole B-10 without the need for completion of the Monroe Street Pump Station. It is believed that this scenario can proceed based upon two further sub-scenarios (**Scenario #2A and Scenario #2B**).

Scenario #2A would construct the aforementioned new facilities parallel to the existing facilities so that use of Monroe Street Pumping Station, Jersey City Trunk Sewer or bypass pumps are not required. In order to make the final connection to the existing siphon barrels downstream of the Siphon Cleanout Chamber No. 4, it will be necessary to control flow by placing a temporary plug in one of the twin siphons at the Siphon Inlet Chamber near Boonton Beach. The plugging would only be in place for the time needed to remove the existing 22.5 degree elbows that are just outside of Siphon Cleanout Chamber No. 4 and install the final connecting

pipng and restraints to connect the new siphon barrels to the old ones. Upon completion, the existing piping, manhole and outlet chamber can be demolished or filled in and abandoned in lieu of rehabilitating deteriorated, existing facilities.

Scenario #2B is based upon construction of the new facilities in the same alignment of the existing facilities. Flow control could be accomplished by also placing a temporary plug in one of the twin siphons at the Siphon Inlet Chamber near Boonton Beach pushing all flow into a single barrel. However, **Scenario #2B** is based upon line stopping and bypassing that same barrel before the Siphon Outlet chamber and discharging into the already-constructed Monroe Street Pump Station Bypass header, piping and fittings. **Scenario #2B** results in only a single chamber in the Tot Lot and only a single pipe crossing Washington Street in lieu of abandoning in place the existing pipes and chambers. It also avoids the need to replace Manhole B-10. However, it does require some coordination with the Contractor for the Monroe Street Pumping Station in that the station 24" bypass pipeline is used to convey flow around the construction site to Manhole B-9.

Scenario #2B is not predicated on the feasibility of removing existing siphon barrel pipe fittings (**Scenario #2A**) that could be encased in concrete. But it does require pre-confirmation that the outer siphon pipe can be accessed and fitted with a linestop/bypass sleeve. It also predicted that all Interceptor flow from meter Chamber BT-1 can be conveyed by a single siphon barrel which is limited to approximately 24 MGD.

Under both **Scenario #2A** and **#2B** the Siphon Inlet Chamber cannot be rehabilitated as it is being used to divert flow into a single siphon barrel. The Siphon Inlet Chamber rehabilitation will have to move to the proposed Contract 43 Interceptor Lining project. Although under **Scenario #1** the Siphon Inlet Chamber can be rehabilitated, as bypass pumping will be used to convey the Interceptor Flow into the Trunk Sewer in a double bypass pump configuration, to keep **Scenario #1** and **Scenario #2** similar we suggest placing the Siphon Inlet Chamber rehabilitation under Contract 43.

To assist you in understanding the **Scenarios #1, #2A and #2B**, we have prepared the attached Figures 1, 2 and 3 depicting the locations, concept sequence and key data that is serving as the basis of these scenarios. Figure 1 illustrates **Scenario #1** using Monroe Street Pumping Station during rehabilitation work. Figure #2 illustrates **Scenario #2A** for constructing new parallel facilities without bypass pumping. Figure #3 illustrates **Scenario #2B** for constructing new facilities within the alignment of the existing facilities via redirecting flow from the RVRSA Interceptor Siphon to the already completed Monroe Street Pumping Station bypass.

Given the foregoing, Mott MacDonald has prepared two separate engineering proposals for your consideration. The following describes the scope of work and improvements under **Scenario #1**.

Proposed Improvements-Scenario #1

Upon temporary bypass pumping being installed, the following is anticipated:

- Structurally line 141 LF of pipe under Washington Avenue from the Outlet Chamber to Manhole B-10 (including the radius bend)
 - Clean and CCTV pipe
 - Clean and inspect Manhole B-10
 - Cured In Place Pipe Lining (CIPP) of 141 LF of 48" sewer
 - Seal Leaks in Manhole B-10 and complete other surface/joint/benching repairs
 - Coat and Line Manhole B-10
 - Replace ladder rungs with new Polypropylene rungs
 - Replace Manhole Frame and Cover
 - Restore Site
- Siphon Outlet Chamber

- Demolish existing reinforced concrete top slab and upper walls, manhole frame and cover, aluminum grating/supports, miscellaneous metals, two (2) slide gates and aluminum ladder. Saw cut concrete around gates if necessary. Excavate to seven feet from existing grade for removal of slab and walls.
 - Clean and remove residuals/debris from the reinforced concrete chamber. Power wash/sandblast as necessary to accommodate rehabilitation coatings/liners.
 - Inspect and confirm level of deterioration in chamber prior to application of rehabilitation method.
 - Structurally repair chamber concrete interior walls. Perform crack repairs, joint repairs and install fully deteriorated repairs.
 - Install new upper chamber precast concrete walls and top slab. Install new precast access riser section to grade with Manhole Cover. Access will continue to be via a manhole cover.
 - Install protective liner/coating on chamber interior surfaces.
 - Install new Fiberglass Reinforced Plastic (FRP) grating with stainless steel 316 supports.
 - Install two (2) slide gates. **Material of construction of gate (aluminum, stainless steel or other composite material) needs to be determined by RVRSA based upon level of corrosion protection desired versus cost. Final construction cost will be affected by the outcome of this decision that has not been determined at this time.**
 - Install new access ladder with slide up safety grab pole. **Material of construction of ladder (aluminum or stainless steel) needs to be determined by RVRSA based upon level of corrosion protection desired versus cost. Final construction cost will be affected by the outcome of this decision that has not been determined at this time.**
 - Restore park, grass, park fencing, benches and restore RVRSA fencing to existing conditions.
 - Reinstall piping and appurtenances for odor control unit installed at Monroe Street.
- Temporary Bypass Pumping

The following bypass scenario is needed to be in place prior to the foregoing improvements being performed:

- At the Monroe Street Pumping Station - rent and install 3- 12" diesel fueled by pass suction lift sewage pumps with suction from the wet well and discharge to the 3 above-ground quick-disconnect connections to the 24" by-pass pipeline.
- Upstream of the Inlet Chamber on the Rockaway Interceptor most likely at MH B-12 or B-12A a by-pass pumping system discharging into MH B-12-A-2 (see Figure 1) on the Jersey City Trunk Sewer (existing 12" interconnection is too small for the conveyance need). Not included are any improvements to MH B-12 or B-12A other than if necessary, temporary removal of their frame and covers to facilitate installation of bypass pumping. When bypass pumping is completed, new frame and covers can be installed to replace the existing ones if these are found to be deteriorated.



- Install a plug in the sewer line at MH B-12 or B-11.
- By-pass pump 100% of all Interceptor Sewage into Jersey City Trunk Sewer. By-pass 100% of all sewage at Monroe Street Pumping Station into the Interceptor at MH B-9
- Commence with aforementioned above rehabilitation work
- Upon completion of all rehabilitation, shut down all by-pass pumping and restore flow to normal pattern.

Engineering Scope of Work-Scenario #1

Given the foregoing, Mott MacDonald proposes the follow professional engineering services related to design and bidding:

Task 1 – Preliminary Design

- Evaluate capacities of existing Jersey City Trunk Sewer, RVRSA Interceptor Siphon, and RVRSA Interceptor between Manhole B-12 to B-9.
- Coordinate with RVRSA staff to develop bypass contractor requirements in contract.
- Review available meter data from Meter BT-1, Meter B and STP.
- Perform topside only inspection of Manhole B-9, B-12 and B-12A. The inspection at Manhole B-12 and B-12A would only be for determining adequacy of bypass pumping and not evaluation of their overall condition.

Task 1 SubTotal Hours = 65

Task 2 – Final Design, Permitting and Bid Services

- Conduct a location survey to develop a new site plan base map (75-foot radius) at the Siphon Outlet Chamber locations as well as at Manhole B-12 or B-12A, depending on the final selection of the upstream bypass location. Along the 141 LF of Interceptor from the Siphon Outlet Chamber and to Manhole B-10, Mott MacDonald will also perform a location survey within the right of way portion of the alignment. The survey will include the location and elevation of the existing building, clarifiers, overhead and buried utilities, manholes, electrical box, landscape and other physical features. It is assumed that an-as-built plan for the Monroe Street Pump Station under Contract 38 will be provided by RVRSA. No survey work will be performed at this site. Property surveys, easement descriptions or other survey services are not included in this proposal but could be provided for a separate fee.
- Preparation of an overall location map based upon current GIS and other system mapping.
- Preparation of demolition and proposed process plan and sections, construction details and process drawings based upon the existing As-Built Drawings from RVRSA Contract 1. Selection of replacement metal fabrications noted above.
- Preparation of a bypass pumping plan with notes for requirements.
- Preparation of structural plans and details for the proposed structural improvements.
- Prepare Cured In Place Liner Design Calculations per ASTM F1216-07b.



- Preparation of a traffic control plan to be reviewed with RVRSA and Town of Boonton officials prior to conducting the work. (We have assumed RVRSA will acquire the approval from Boonton to disturb the Tot Lot Park and have not included any time to assist RVRSA on this matter). It is assumed that no other permits are required for this project.
- The project is assumed to be bid with the following general structure
 - Bid Item 1-Mobilization
 - Bid Item 2-Soil Erosion and Sediment Control
 - Bid Item 3-Site Access and Clearing
 - Bid Item 4-Bypass Pumping
 - Bid Item 5-Cleaning/Inspection/Lining of 48" Interceptor
 - Bid Item 6-Rehabilitation of Manhole B-10
 - Bid Item 7-Rehabilitation of Siphon Outlet Chamber
 - Bid Item 8-Environmental Protection /Site Restoration
 - Bid Item 9-Traffic Control Measures
 - Bid Item 10-Allowance for Off Duty-Police
 - Bid Item 11 – Unforeseen Contingencies Allowance
- Preparation of technical specifications, scope of work and bid proposal section. The front end of the specifications is assumed to be Mott MacDonald's Standard Front-End for funded projects. Printing related to bidding is not included in our design fee and is proposed to be included under our reimbursable NJEIT services which are detailed further in this proposal.
- Preparation of a cost estimate for use in the NJEIT loan application and bid phase.
- This scope of work does not require any Regulatory Permits.
- Attendance at 1 project kickoff meeting, 2 interim design meetings and a final design meeting with RVRSA. We will assume attendance at 1 RVRSA Board meeting is also required.
- Coordinate with the Authority to publically bid the project. Mott MacDonald proposes to use its online bidding process through NAPCO ("Bidset"). Printing of contract documents for release to bidders or for bidding once the Authorization to Advertise is issued by NJDEP at the time of their project approval. Only one bid round is included in this proposal. This also includes assistance with bid opening and review of bids received. Issuance of one addendum is also included, if necessary. A bid recommendation and award letter will also be prepared and is included.

Task #2 SubTotal Hours = 340

Proposed Fee Preliminary, Final Design, Permitting and Bid Phase (Tasks #1 and #2)

Mott MacDonald proposes to complete the above design and bid phases (Tasks #1 and #2) described above for a lump sum fee of \$50,000. Invoicing will be monthly on a percent complete basis.

Tasks #1 and #2 Total Hours = 380

Task #3 NJEIP Assistance Services (During Design, Bid and Construction)

Although the RVRSA is working with existing funding from the loan amount of Contract 35-II (approximately \$1,200,000), additional engineering services as follows are assumed:

- Submission of the final design to NJDEP and NJEIT. Based upon our meeting on February 14, 2017, Mott MacDonald will only be required to submit the final bid documents, construction schedule and cost estimate to



NJEIT. Accordingly, preparation of a new Environmental Planning Document preparation of a letter of intent to NJEIT or new loan application materials is not included. It is assumed that RVRSA will complete the various LP forms, disbursement schedule, SED utilization plan and other supporting documentation. It is assumed that RVRSA will arrange for Mott MacDonald to be provided access to the online NJEIT portal for the purposes of uploading the documents. Upon submission of the loan application by RVRSA, Mott MacDonald will respond to one round of comments from NJDEP related to the design documents. It is also assumed that NJDEP and NJEIT only requires 3 sets of printed documents when they are ready to issue to Authorization to Advertise.

- Upon receipt of Authorization to Advertise, Mott MacDonald will proceed with the bid phase services noted above. Upon RVRSA indicating its intent to award to a successful low-bidder, Mott MacDonald will assist the RVRSA in submission of the supporting bid documentation to obtain the Authorization to Award from NJDEP.
- During construction, Mott MacDonald will perform the labor interviews required under the program with the Contractor. We will also coordinate to invite the various NJDEP officials to the Preconstruction Meeting and also assist when they perform site inspections. It is assumed RVRSA will prepare all paperwork required for requisition of payment from NJDEP.
- Preparation of an asset management plan if required at closeout of the project is not included in this proposal but could be for a separate fee.

Proposed Fee NJEIP Services (Task #3)

We would perform our NJEIT assistance services under a reimbursable method of compensation. For budgetary purposes, our reimbursable fee is estimated at \$13,000. Our budget also assumes the project will not involve a cultural resource survey and that the project will be only assessed as a Level I Environmental Impact. Should additional services be required, Mott MacDonald will advise the authority if additional services and fee amount is needed.

Task #3 Total Hours = 85

Task #4 - Construction Phase Services

Upon Authorization to Award being received by NJDEP, Mott MacDonald proposes the following construction phase engineering services:

- Issuance of the Notification of Award. Coordination and Attendance at a preconstruction conference to be held at the offices of the RVRSA by Mott MacDonald's Project Manager and Inspector. This will be coordinated once it is confirmed from RVRSA that Contract Documents and Bonds have been submitted and approved. Review and comment of one round only of the Contractor's Shop Drawing Submission Schedule, Construction Schedule and Payment Breakdown. Issuance of a Notice to Proceed. Attendance at 2 progress meetings is included. **40 hours budgeted.**
- Review of the Contractor's submitted shop drawings for the proposed improvements, bypass and traffic control. For the purpose of this budget, Mott MacDonald anticipates that the Contractor will perform the work as prescribed in the bid documents and will provide the equipment specified. One round of shop drawings is included. Shop Drawing log to be maintained. **100 hours budgeted.**
- Mott MacDonald anticipates 30 days of full time field inspection and 10 days of part time inspection as the work proceeds. We assume a 120-calendar day total construction contract of which 60 calendar days is anticipated as active construction days. It is assumed the Contractor will work week days only, 8 hour days. Mott MacDonald's inspector will observe field activities and site personnel during key periods of



construction. Mott MacDonald will keep a daily construction log when on site. Mott MacDonald will verify that installation work proceeds with dimensions and elevations required on the Contract Documents. It is noted that we have budgeted **320 hours** of onsite inspection during a 60-calendar day (30, 8-hour work day, 10, four-hour work day) construction period.

- RFI Responses, meeting attendance, RVRSA Coordination and office coordination is also based upon a 60-calendar day construction period and overall contract period of 150 days. **It is noted that we have budgeted 60 hours for this time.**
- As noted in the Contract, the Contractor will also be required to maintain his "red line drawings" to be produced to the Authority at a later date as the source of "as-built" drawings. From these, Mott MacDonald will provide as-built drawings from the Contractor's red-line drawings. **40 hours is budgeted for this task.**
- Mott MacDonald will assist in processing the Contractor's Pay Application. We will review the Contractor's submittal and recommend payment to the Authority. We will prepare a pay application based upon the Contractor's Breakdown for submittal to RVRSA. It is assumed that the Contractor will submit directly to the RVRSA its certified payroll wages report and "Manning" Affirmative Action Reports. We have not included the review or documentation of these documents. Mott MacDonald anticipates the need to process five (5) payment applications for this project. **50 hours is budgeted for this task.**
- Upon completion of the Contract Items and restoration items, we will recommend final payment to the RVRSA. We will work with the RVRSA on closing out the project so that retainage release is made and that the Contractor submits a maintenance bond in accordance with the Contract. Also included is a one-year post lining inspection by the Contractor. **18 hours is budgeted for this task.**
- It is noted that any requests for change orders by the Contractor or other claims have not been anticipated in this scope of work as they are unforeseeable until presented by the Contractor. Change order requests made above and beyond the contingency or overages of the Contract Completion Time on the part of the Contractor are not included in this scope of work. Should such items occur, we would be pleased to review such items and present the Authority with a request for additional authorization should the RVRSA desire Mott MacDonald to address these items.
- Mott MacDonald will not be responsible for certifying conformance of the Contractor's work with the local building codes. The Contractor will be responsible for obtaining and coordinating with the local sub code officials for permits and inspections.

Proposed Fee Construction Phase Services (Task #4)

Based upon the above scope of work, Mott MacDonald proposes to provide our Professional Engineering Services during construction to the Authority as outlined above on a reimbursable basis in accordance with our prevailing fee schedule. For budgetary purposes we recommend that the Authority establish a not-to-exceed budget of \$77,000. Work will be invoiced on a monthly basis and payable in 30 days. Our 2017 fee schedule is included for your records.

Task#4 Total Hours = 628



Fee Summary

Task 1	Preliminary Design Phase (LS)	\$10,000
Task 2	Final Design, Permitting & Bid Phase (LS)	\$40,000
Task 3	NJEIT Services (T&M/Reimbursable)	\$13,000
Task 4	Construction Phase (T&M/Reimbursable)	\$77,000
Total		\$140,000

Additional work beyond that authorized shall not be conducted without additional approval.

We thank you again for the opportunity to serve the Authority and look forward to hearing from you regarding this project. If you have any additional questions or comments, please do not hesitate to contact me.

Very truly yours,

Mott MacDonald

A handwritten signature in black ink, appearing to read 'P. Kocsik'.

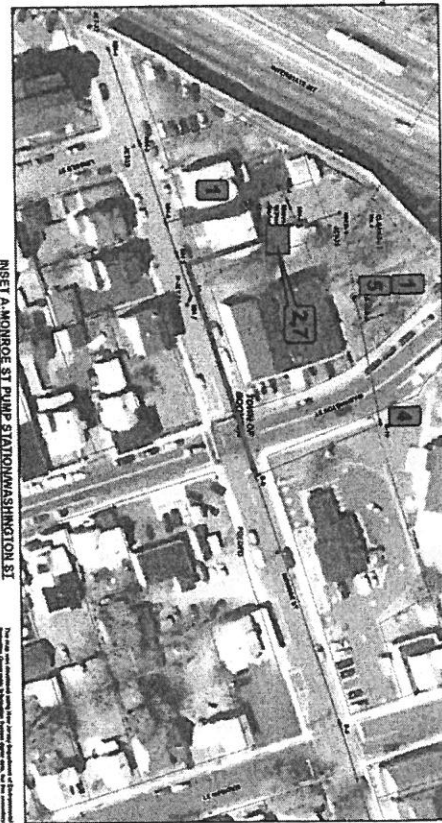
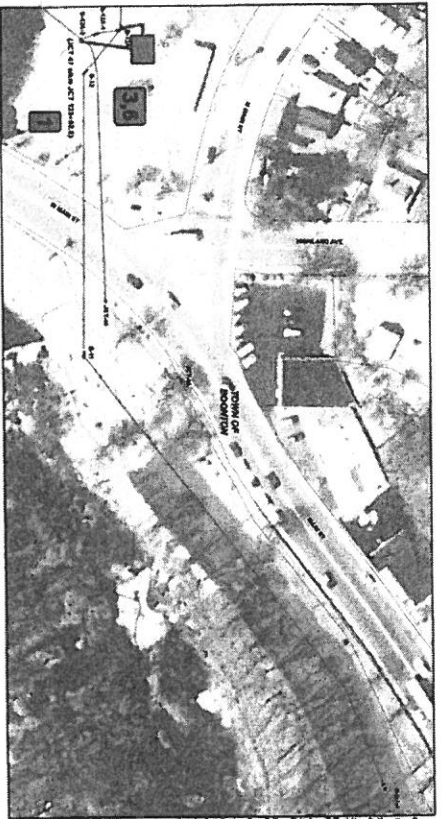
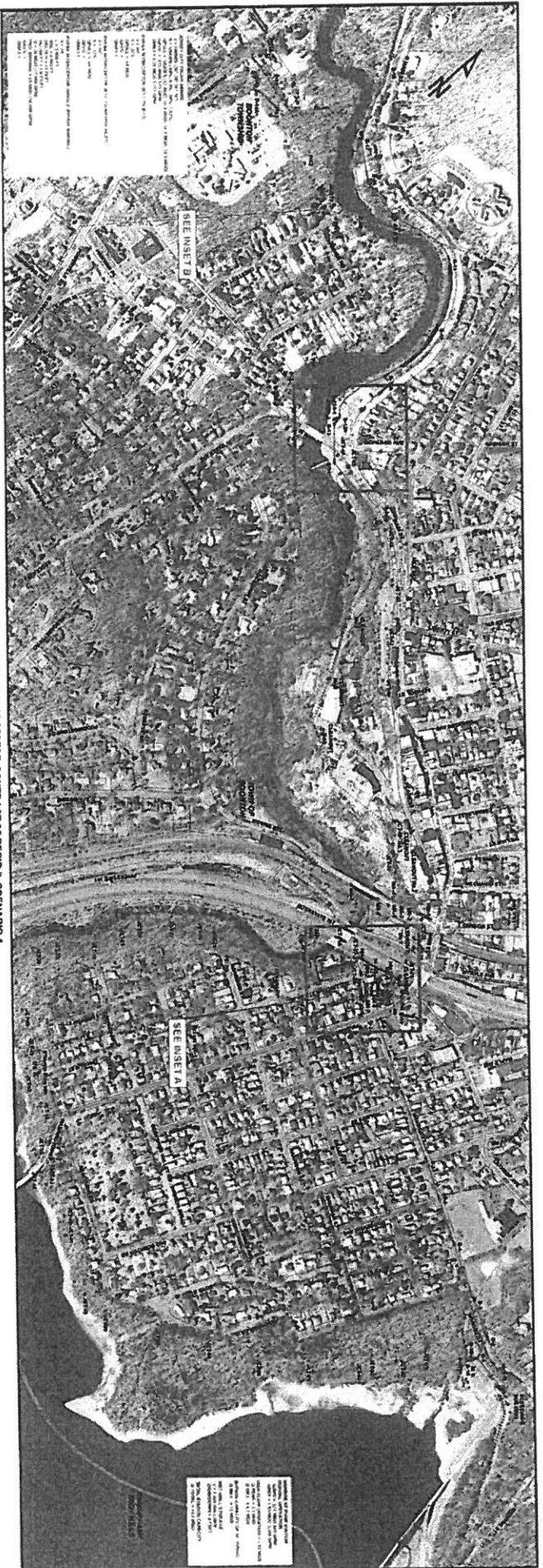
Peter E. Kocsik, P.E.
Senior Vice-President
T + 1 (973) 912-2549
peter.kocsik@mottmac.com

Very truly yours,

Mott MacDonald

A handwritten signature in black ink, appearing to read 'Nancy Wohlleb'.

Nancy C. Wohlleb, P.E., C.M.E.
Principal Project Manager/ Senior Associate
T +1 (973) 912-2616
nancy.wohlleb@mottmac.com



- Manhole
- Clean Out
- Meter Chamber
- Construction Sequence
- Siphon Chamber
- Screening Building
- Siphon
- Sewer Main
- Interceptor
- Parcel Boundary
- Municipal Boundary
- Bypass Pumping Setup
- New Permanent Facility

M M MOTT MACDONALD	111 Wood Avenue South Suite Newberry 28053-4112	Project	Client	Contract	Approval	Date
		AMOROE VALLEY REGIONAL SANITAGE AUTHORITY	WORTH COUNTY, NEW JERSEY	CONTRACT 35 REPORT	CONCEPT ENGINEER: SCHUBERT & SONS	PERM



Cont 35 Rebid 2
Option 2

Ms. Carrie Feuer
Manager of Engineering
Rockaway Valley Regional Sewerage Authority
RD #1
99 Greenbank Road
Boonton, NJ 07005-7118

Your Reference
Contract 35 Rebid-II

Our Reference
MM#377368

<http://pims02/pims/lisapi.dll/open/87541419>

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**Rockaway Valley Regional Sewerage Authority – Contract 35 Re-Bid II
Proposal for Professional Design, Bid, Permitting, NJEIT and Construction
Phase Engineering Services - Scenario 2 (No Bypass Pumping)**

February 22, 2017

Dear Ms. Feuer:

In accordance with your request and as a follow-up to our February 14, 2017 meeting, Mott MacDonald is pleased to provide the following proposal for Professional Design, Bid, Permitting, NJEIT and Construction Phase Engineering Services related to the above-referenced project. Based upon our discussion, Contract 35 Rebid-II can proceed based upon one of two main scenarios.

Scenario #1- Rehabilitate Existing Facilities / Bypass Pump Using Monroe Street Pumping Station

Scenario #2-Construct New Facilities/No Bypass Pumping

Scenario #2A-New Parallel Facilities/New Siphon Barrel Connection Short Term Siphon Plug.

Scenario #2B-New In-Alignment Facilities/Wet Tap Siphon Barrel/Temporary Siphon to Manhole B-9.

Scenario #1 requires bypass pumping of the Interceptor at the Siphon Inlet chamber as well as use of the new Monroe Street Pump Station during which time the existing RVRSA Interceptor Siphon Outlet Chamber, Manhole B-10 and approximately 141 LF of 48" gravity sewer that is located between these two structures and under Washington Street in Boonton can attempt to be rehabilitated in place with CIPP lining and concrete rehabilitation techniques. This scenario is only viable if the Monroe Street Pump Station project is completed.

Scenario #2 is to construct a new siphon outlet chamber, construct 141 LF of new 48" diameter sewer and a new Manhole B-10 without the need for completion of the Monroe Street Pump Station. It is believed that this scenario can proceed based upon two further sub-scenarios (**Scenario #2A** and **Scenario #2B**).

Scenario #2A would construct the aforementioned new facilities parallel to the existing facilities so that use of Monroe Street Pumping Station, Jersey City Trunk Sewer or bypass pumps are not required. In order to make the final connection to the existing siphon barrels downstream of the Siphon Cleanout Chamber No. 4, it will be necessary to control flow by placing a temporary plug in one of the twin siphons at the Siphon Inlet Chamber near Boonton Beach. The plugging would only be in place for the time needed to remove the existing 22.5 degree elbows that are just outside of Siphon Cleanout Chamber No. 4 and install the final connecting piping and restraints to connect the new siphon barrels to the old ones. Upon

completion, the existing piping, manhole and outlet chamber can be demolished or filled in and abandoned in lieu of rehabilitating deteriorated, existing facilities.

Scenario #2B is based upon construction of the new facilities in the same alignment of the existing facilities. Flow control could be accomplished by also placing a temporary plug in one of the twin siphons at the Siphon Inlet Chamber near Boonton Beach pushing all flow into a single barrel. However, **Scenario #2B** is based upon line stopping and bypassing that same barrel before the Siphon Outlet chamber and discharging into the already-constructed Monroe Street Pump Station Bypass header, piping and fittings. **Scenario #2B** results in only a single chamber in the Tot Lot and only a single pipe crossing Washington Street in lieu of abandoning in place the existing pipes and chambers. It also avoids the need to replace Manhole B-10. However, it does require some coordination with the Contractor for the Monroe Street Pumping Station in that the station 24" bypass pipeline is used to convey flow around the construction site to Manhole B-9. **Scenario #2B** is not predicated on the feasibility of removing existing siphon barrel pipe fittings (**Scenario 2A**) that could be encased in concrete. But it does require pre-confirmation that the outer siphon pipe can be accessed and fitted with a linestop/bypass sleeve. It also predicted that all Interceptor flow from meter Chamber BT-1 can be conveyed by a single siphon barrel which is limited to approximately 24 MGD.

Under both **Scenario #2A** and **#2B** the Siphon Inlet Chamber cannot be rehabilitated as it is being used to divert flow into a single siphon barrel. The Siphon Inlet Chamber rehabilitation will have to move to the proposed Contract 43 Interceptor Lining project. Although under **Scenario #1** the Siphon Inlet Chamber can be rehabilitated, as bypass pumping will be used to convey the Interceptor Flow into the Trunk Sewer in a double bypass pump configuration, to keep **Scenario #1** and **Scenario #2** similar we suggest placing the Siphon Inlet Chamber rehabilitation under Contract 43.

To assist you in understanding the **Scenarios #1, #2A and #2B**, we have prepared the attached Figures 1, 2 and 3 depicting the locations, concept sequence and key data that is serving as the basis of these scenarios. Figure 1 illustrates **Scenario #1** using Monroe Street Pumping Station during rehabilitation work. Figure 2 illustrates **Scenario #2A** for constructing new parallel facilities without bypass pumping. Figure 3 illustrates **Scenario #2B** for constructing new facilities within the alignment of the existing facilities via redirecting flow from the RVRSA Interceptor Siphon to the already completed Monroe Street Pumping Station bypass.

Given the foregoing, Mott MacDonald has prepared two separate engineering proposals for your consideration. The following describes the scope of work and improvements under **Scenario #2A and #2B**.

Proposed Improvements-Scenario 2A

While the system remains in its normal operation the following will be installed:

- Test pit, excavate and install new precast concrete doghouse manhole just downstream of Manhole B-10.
- Test pit, trench and install new 48" diameter sewer across Washington Street from the new doghouse manhole to location of a new siphon outlet chamber near existing chamber in Tot Lot. (*This assumes work in the existing park is permitted based upon current RVRSA easement rights and the RVRSA Attorney confirming that there is not a need to make an application to Green Acres to perform this work.*)
- Test pit, excavate and install new precast concrete siphon outlet chamber access riser section to grade. Access will continue to be via a manhole cover. Install protective liner/coating on chamber interior surfaces.
- Install new Fiberglass Reinforced Plastic (FRP) grating with stainless steel 316 supports.

- Install two (2) slide gates. **Material of construction of gate (aluminum, stainless steel or other composite material) needs to be determined by RVRSA based upon level of corrosion protection desired versus cost. Final construction cost will be affected by the outcome of this decision that has not been determined at this time.**
- Test pit, trench and install new twin siphon barrel piping to location near existing Siphon Cleanout Chamber No. 4.
- Excavate and expose existing 22.5 degree bends outside Siphon Cleanout Chamber No. 4. Make final measurements for connecting new siphon barrels to existing ones at this location.
- Temporary Plugging
 - Plug one siphon barrel at siphon inlet chamber, tether and maintain plug.
 - Remove first 22.5 degree elbow and connect new barrel to old barrel. Cut doghouse Manhole benching. Repeat for next barrel. Remove plug.
 - All sewage is now flowing through new chamber and pipe.
- Modify channel of new manhole B-10 to prevent backflow into abandoned pipe.
- Demolition/abandonment of existing piping, old Manhole B-10 and siphon outlet chamber.
- Site Restoration

Proposed Improvements-Scenario 2B

- Test pit, excavate and install new line stop sleeve on one siphon barrel. Install linestop head and bypass port.
- Connect new bypass piping overland to already installed bypass piping and connections at Monroe Street Pumping Station so as to use bypass piping to Manhole 9 as a temporary siphon extension.
- Plug one siphon barrel at siphon inlet chamber. Tether and maintain plug. Allow one siphon barrel to flow all Interceptor flow from Siphon Inlet Chamber to Manhole B-9.
- Test pit, trench and install new 48" diameter sewer across Washington Street from existing Manhole B-10 to the siphon outlet chamber in Tot Lot. (*This assumes work in the existing park is permitted based upon current RVRSA easement rights and the RVRSA Attorney confirming that there is not a need to make an application to Green Acres to perform this work.*)
- Rehabilitate Manhole B-10.
- Test pit, excavate and install new precast concrete siphon outlet chamber access riser section to grade. Access will continue to be via a manhole cover. Install protective liner/coating on chamber interior surfaces. This will be installed in the same location as the existing chamber once it is demolished.
- Install new Fiberglass Reinforced Plastic (FRP) grating with stainless steel 316 supports.
- Install two (2) slide gates. **Material of construction of gate (aluminum, stainless steel or other composite material) needs to be determined by RVRSA based upon level of corrosion protection desired versus cost.**



Final construction cost will be affected by the outcome of this decision that has not been determined at this time.

- Remove bypass system to direct flow into new sewer.
- Complete site and road restoration.

Engineering Scope of Work-Scenario #2A or #2B

Mott MacDonald proposes the follow professional engineering services related to design and bidding. As the scope of work for Scenario 2A and 2B are so similar, Mott MacDonald offers a single engineering fee that would apply to either selected alternative.

Task 1 – Preliminary Design

- Evaluate capacities of existing RVRSA Interceptor Siphon, and verify capacity through RVRSA Bypass between bypass connection to Manhole B9.
- Verify RVRSA can feasibly plug and maintain siphon plug at Siphon Inlet Chamber. Assist as needed, be present at flow test.
- Assist RVRSA in the determination of the 'Green Acres' status of the Tot Lot/Siphon Outlet Chamber site.
- Assist RVRSA to arrange for test pit at Siphon Cleanout Chamber No. 4 to verify the 22.5 degree fittings are not encased in concrete and/or that a LineStop sleeve can be installed on a siphon barrel. Be present at test pit to obtain field/design data.
- Review available meter data from Meter BT-1, B and STP.
- Perform topside only inspection of Manhole B-9 and Monroe St PS Bypass Piping.
- Since there will be a disturbance of more than 200 cubic yards, this project falls under NJDEP linear construction rules. Accordingly, Initial environmental soil sampling is required to be performed under the supervision of a NJ Licensed Site Remediation Professional (LSRP). See Task 4 for further description below of proposed services.

SubTotal Hours = 65 hours (does not include LSRP hours)

Task 2 - Final Design, Permitting and Bid Services

- Mott MacDonald will conduct a location survey to develop a new site plan base map (75-foot radius) at the Siphon Inlet Chamber and Outlet Chamber in the Tot Lot. Mott MacDonald will also perform a location survey along the 141 LF of Interceptor from the Siphon Outlet Chamber to Manhole B-10. The survey will include the location and elevation of the existing improvements, overhead and buried utilities, manholes, electrical box, landscape and other physical features. It is assumed that the design plans the Monroe Street Pump Station under Contract 36 will be utilized as necessary. No survey work will be performed at this site. Property surveys, easement descriptions or other survey services are not anticipated or included in this proposal.
- Preparation of an overall location map based upon current GIS and other system mapping.
- Coordination and contact with utility companies to assist in preparing plans for the new sewer alignment.



- Preparation of demolition plans.
- Preparation of new Siphon Outlet Chamber design drawings based upon and similar to the existing Chamber configuration.
- Preparation of replacement sewer plan and profile and sewer construction details.
- Preparation of Morris County SCD permit.
- Preparation of a traffic control plan to be reviewed with RVRSA and Town of Boonton officials prior to conducting the work.
- The project is assumed to be bid based upon linear pipe unit piping consistent with NJDEP requirements for funded projects.
- Preparation of technical specifications, scope of work and bid proposal section. The front end of the specifications are assumed to be Mott MacDonald's Standard Front-End for funded projects. Printing related to bidding is not included in our design fee and is proposed to be included under our reimbursable NJEIT services which are detailed further in this proposal.
- Preparation of a cost estimate for use in the NJEIT loan application and bid phase.
- Attendance at 1 project kickoff and 2 interim design meetings and a final design meeting with RVRSA.
- Coordinate with the Authority to publically bid the project. Mott MacDonald proposes to use its online bidding process through NAPCO ("Bidset"). Printing of contract documents for release to bidders or for bidding once the Authorization to Advertise is issued by NJDEP at the time of their project approval. Only one bid round is included in this proposal. This also includes assistance with bid opening and review of bids received. Issuance of one addendum is also included, if necessary. A bid recommendation and award letter will also be prepared.

Task 2 SubTotal Hours = 425

Task 1 and Task 2 Total Hours = 490

Proposed Fee for Preliminary (Task 1), and Final Design/Permitting/Bid Phase (Task 2)

Mott MacDonald proposes to complete the Preliminary and Design/Permitting/Bid phases described above for a lump sum fee of \$10,000 and \$51,000 respectively. Invoicing will be monthly on a percent complete basis.

Task 3 - NJEIP Services (During Design, Bid and Construction)

- Submission of the final design to NJDEP and NJEIT. Based upon our meeting on February 14, 2017, Mott MacDonald will only be required to submit the final bid documents, construction schedule and cost estimate to NJEIT. Accordingly, preparation of a new Environmental Planning Document preparation of a letter of intent to NJEIT or new loan application materials is not included. It is assumed that RVRSA will complete the various LP forms, disbursement schedule, SED utilization plan and other supporting documentation. It is assumed that RVRSA will arrange for Mott MacDonald to be provided access to the online NJEIT portal for the purposes of uploading the documents. Upon submission of the loan application by RVRSA, Mott MacDonald will respond to one round of comments from NJDEP related to the design documents. It is also



assumed that NJDEP and NJEIT only requires 3 sets of printed documents when they are ready to issue to Authorization to Advertise.

- Upon receipt of Authorization to Advertise, Mott MacDonald will proceed with the bid phase services noted above. Upon RVRSA indicating its intent to award to a successful low-bidder, Mott MacDonald will assist the RVRSA in submission of the supporting bid documentation to obtain the Authorization to Award from NJDEP.
- During construction, Mott MacDonald will perform the labor interviews required under the program with the Contractor. We will also coordinate to invite the various NJDEP officials to the Preconstruction Meeting and also assist when they perform site inspections. It is assumed RVRSA will prepare all paperwork required for requisition of payment from NJDEP.
- Preparation of an asset management plan if required at closeout of the project is not included in this proposal but could be for a separate fee.

Proposed Fee NJEIFP Services (Task #3)

We would perform our NJEIT assistance services under a reimbursable method of compensation. For budgetary purposes, our reimbursable fee is estimated at \$13,000. Our budget also assumes the project will not involve a cultural resource survey and that the project will be only assessed as a Level I Environmental Impact. Should additional services be required, Mott MacDonald will advise the authority if additional services and fee amount is needed.

Task #3 Total Hours = 85

Task 4 - Linear Construction Environmental Soil Sampling/LSRP Services

It is believed that historic operations and construction activities related to this area may have resulted in fill material being imported to the site from an off-site and potentially contaminated source. Since the proposed sewer construction project will disturb more than 200 cubic yards of soil, a determination needs to be made if the work included in this project is subject to NJDEP's *Linear Construction Technical Guidance* and if contaminated soils exist within the project disturbance. To determine the environmental quality of soil in the proposed area to be disturbed, characterization of the soil located within the proposed sewer alignment will need to be performed by collecting and analyzing soil samples for laboratory analysis. For Linear Construction Projects meeting the criteria, there are various requirements for conducting the project in accordance with the NJDEP's *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E), and the *Administrative Regulations for Remediation of Contaminated Sites* (ARRCS), N.J.A.C. 7:14C et seq. The New Jersey Legislature and the NJDEP have established the Licensed Site Remediation Professional (LSRP) licensing program to enable LSRPs to assist in processing contaminated sites in accordance with the laws and regulations governing the process of site remediation.

If the results of soil sampling indicate that the soil within the proposed alignment follows applicable NJDEP regulatory standards, then NJDEP linear construction rules would not apply and no further work outside of the initial soil sampling and characterization is needed.

If it is determined by the results of analysis, that soil is impacted with contaminants above applicable NJDEP regulatory standards, then the project would be subject to NJDEP's *Linear Construction Technical Guidance*. RVRSA will need to retain the services of an LSRP to oversee the proper management of any potentially contaminated material at the site, in accordance with the linear construction project rules (N.J.A.C. 7:26C-16.1) and the NJDEP's *Linear Construction Technical Guidance* (January 2012). This guidance document is intended to ensure that the handling and disposal of any contaminated material is done so in a manner that is protective of human health safety and the environment. Should the rules apply, preparation of a material management plan (MMP) is needed for inclusion in the bid documents and additional requirements are needed during construction to assist



the RVRSA in completing the necessary requirements in accordance with the regulations and guidance.

At this time, it is recommended that RVRSA proceed with the soil sampling and materials management plan since they directly impact the bid documents and project costs for the sewer construction portion of the project. Services needed by the LSRP during construction phase-if determined to be needed-will be identified in a separate letter as an additional scope of work item to Mott MacDonald's Construction Phase Services Proposal described elsewhere herein.

Assumptions

The linear construction rules (N.J.A.C. 7:26C-16) only apply to entities that have not caused the discharge of hazardous substances or are in any other way responsible. Mott MacDonald has assumed that the public agencies involved in this project did cause any discharges associated with any potential contamination.

Mott MacDonald will choose pre-construction soil sampling locations intended to generally characterize the existing soil. However, if the results of characterization samples indicated that the NJDEP linear construction rules did not apply and subsequently during construction, conditions are observed that result in a reported discharge to NJDEP, the full requirements of the NJDEP Site Remediation Program would apply.

Scope of Services

Pre-Construction Soil Sampling

Mott MacDonald will develop a pre-construction sampling plan and will collect samples to assess for the presence of contamination within the project excavation limits, which will be used to determine if the Linear Construction rules are triggered.

Mott MacDonald will subcontract with a New Jersey licensed driller to advance up to seven soil borings at locations along the proposed sewer alignment. These borings would be completed to approximately 12 feet below grade. A Mott MacDonald environmental scientist or geologist will classify, screen the soil using a photo-ionization detector (PID), and collect soil samples and groundwater samples (if encountered). **The collection and analysis of up to seven soil samples and two groundwater samples are included.** The groundwater samples will be collected by installing a temporary well point, which will consist of a 1-inch diameter PVC well screen. Mott MacDonald will purge groundwater from the well point and will collect a grab groundwater sample using a bailer. After sampling, the temporary well point will be removed from the ground. The excavation will be backfilled and restored to grade. If soil borings are drilled, the approximately 2-inch diameter hole will be backfilled with the soil cuttings, and bentonite hole plug as needed.

The soils samples collected by Mott MacDonald will be submitted to a NJDEP-certified laboratory and analyzed for full target compound list/target analyte list (TCL/TAL), extractable petroleum hydrocarbons (EPH) and hexavalent chromium. The groundwater samples will be analyzed for TCL/TAL and hexavalent chromium. The laboratory will provide an analytical data report, which conforms to the "Reduced Laboratory Deliverables Format" consistent with the requirements of N.J.A.C. 7:26E. A summary letter report of these findings will be prepared and submitted to RVRSA.

Materials Management Plan

Should contaminated soils be determined, Mott MacDonald will develop a materials management plan (MMP) to provide a defined set of procedures to be employed when contaminated soil and water are encountered during construction activities. This document is to be included in the bid documents along with specific contractor requirements built into the scope of work and bid items. Submission to NJDEP of the plan is required with a processing fee of \$450.00 prior to construction. Typical with other NJDEP permits, it is anticipated RVRSA will submit the application fee at the time of construction with guidance from Mott MacDonald.



If groundwater contamination is present, but no soil contamination is detected, the NJDEP's linear construction rules will not be triggered. However, the contractor will need to take precautions to properly handle the contaminated groundwater during construction dewatering. Mott MacDonald will prepare the MMP to provide guidance on handling contaminated groundwater however there would be no reporting requirements to the NJDEP.

The MMP will include a summary of the pre-construction sampling and will set forth the procedures for site-specific soil management, ground water management and health and safety plans.

Key components of the MMP will include:

- A description of the project, including construction methods and schedule;
- Maps showing project alignment and areas of contamination;
- Soil management procedures (including a fill use plan as applicable);
- Dewatering management procedures;
- Incorporating the contractor's health and safety procedures to protect on-site personnel and those who may be exposed to contaminants;
- Compliance with codes, standards, ordinances and permits;
- Emergency response procedures; and
- Reporting procedures

Total LSRP Cost = \$10,000

Task 5 - Construction Phase Services

Upon Authorization to Award being received by NJDEP, Mott MacDonald proposes the following construction phase engineering services:

- Issuance of the Notification of Award. Coordination and Attendance at a preconstruction conference to be held at the offices of the RVRSA by Mott MacDonald's Project Manager and Inspector. This will be coordinated once it is confirmed from RVRSA that Contract Documents and Bonds have been submitted and approved. Review and comment of one round only of the Contractor's Shop Drawing Submission Schedule, Construction Schedule and Payment Breakdown. Issuance of a Notice to Proceed. **40 hours budgeted.**
- Review of the Contractor's submitted shop drawings for the proposed improvements, sewer construction and traffic control. For the purpose of this budget, Mott MacDonald anticipates that the Contractor will perform the work as prescribed in the bid documents and will provide the equipment specified. **120 hours budgeted.**
- Mott MacDonald anticipates mostly full time field inspection as the work proceeds and assumes a 150-calendar day total construction contract of which 60 calendar days is anticipated as active field activities. It is assumed the Contractor will work week days only, 8 hour days. Mott MacDonald's inspector would observe field activities and site personnel during key periods of construction. Mott MacDonald would keep a daily construction log when on site. Mott MacDonald would verify that installation work proceeds with dimensions and elevations required on the Contract Documents. It is noted that we have budgeted **320 hours** of onsite inspection during a 60-calendar day construction period.
- RFI Responses, meeting attendance, RVRSA Coordination and office coordination is also based upon a 60-calendar day construction period and overall contract period of 150 days. **It is noted that we have budgeted 60 hours for this time.**
- As noted in the Contract, the Contractor will also be required to maintain his "red line drawings" to be produced to the Authority at a later date as the source of "as-built" drawings. From these, Mott MacDonald will provide as-



built drawings from the Contractor's red-line drawings. **40 hours is budgeted for this task.**

- Mott MacDonald would assist in processing the Contractor's Pay Application. We will review the Contractor's submittal and recommend payment to the Authority. We will prepare a pay application based upon the Contractor's Breakdown for submittal to RVRSA. It is assumed that the Contractor will submit directly to the RVRSA its certified payroll wages report and "Manning" Affirmative Action Reports. We have not included the review or documentation of these documents. Mott MacDonald anticipates the need to process five (5) payment applications for this project. **50 hours is budgeted for this task.**
- Upon completion of the Contract Items and restoration items, we will recommend final payment to the RVRSA. We will work with the RVRSA on closing out the project so that retainage release is made and that the Contractor submits a maintenance bond in accordance with the Contract. **16 hours is budgeted for this task.**
- It is noted that any requests for change orders by the Contractor or other claims have not been anticipated in this scope of work as they are unforeseeable until presented by the Contractor. Change order requests made above and beyond the contingency or overages of the Contract Completion Time on the part of the Contractor are not included in this scope of work. Should such items occur, we would be pleased to review such items and present the Authority with a request for additional authorization should the RVRSA desire Mott MacDonald to address these items.
- Mott MacDonald will not be responsible for certifying conformance of the Contractor's work with the local building codes. The Contractor will be responsible for obtaining and coordinating with the local sub code officials for permits and inspections.

Proposed Fee for Task 5 Construction Phase

Based upon the above scope of work, Mott MacDonald proposes to provide our Professional Engineering Services during construction to the Authority as outlined above on a reimbursable basis in accordance with our prevailing fee schedule. For budgetary purposes we recommend that the Authority establish a not-to-exceed budget of \$80,000. Work will be invoiced on a monthly basis and payable in 30 days. Our 2017 fee schedule is included for your records.

Task#4 Total Hours = 646

Fee Summary

Task 1 Preliminary Design	\$10,000
Task 2 Final Design, Permit & Bid Phase	\$51,000
Task 3 NJEIT Services	\$13,000
Task 4 Linear Construction /LSRP	\$10,000
Task 5 Construction Phase	\$80,000
Total	\$164,000



Additional work beyond that authorized shall not be conducted without additional approval.

We thank you again for the opportunity to serve the Authority and look forward to hearing from you regarding this project. If you have any additional questions or comments, please do not hesitate to contact me.

Very truly yours,

Mott MacDonald

A handwritten signature in black ink, appearing to read 'PK', written over a horizontal line.

Peter E. Kocsik, P.E.
Senior Vice-President
T + 1 (973) 912-2549
peter.kocsik@mottmac.com

Very truly yours,

Mott MacDonald

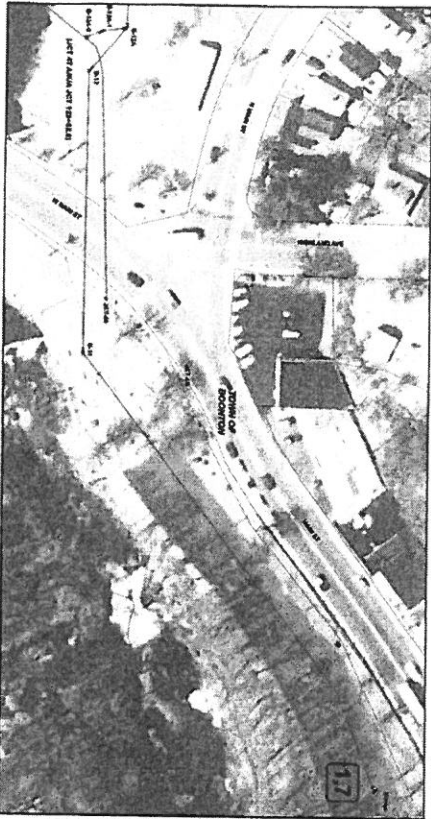
A handwritten signature in black ink, appearing to read 'Nancy Wohlleb', written in a cursive style.

Nancy C. Wohlleb, P.E., C.M.E.
Principal Project Manager / Senior Associate
T +1 (973) 912-2616
nancy.wohlleb@mottmac.com



RIKSA INTERCEPT CONTRACT 35 REBID 1, SCENARIO 2A

1 inch = 300 feet



INSET B: BOONTON BEACH/MAHOLE E-B-2 AREA

1 inch = 50 feet

- Manhole
- Clean Out
- Meter Chamber
- Construction Sequence
- Siphon Chamber
- Screening Building
- Siphon
- Sewer Main
- Interceptor
- Parcel Boundary
- Municipal Boundary
- Bypass Pumping Setup
- New Permanent Facility

CONSTRUCTION SEQUENCE

1. 18" DIAMETER AND 10' DEPTH NEW PRECAST CONCRETE MANHOLE AT LOCATION 177.00+0.00.

2. 18" DIAMETER AND 10' DEPTH NEW PRECAST CONCRETE CLEAN OUT AT LOCATION 177.00+0.00.

3. 18" DIAMETER AND 10' DEPTH NEW PRECAST CONCRETE METER CHAMBER AT LOCATION 177.00+0.00.

4. 18" DIAMETER AND 10' DEPTH NEW PRECAST CONCRETE SYPHON CHAMBER AT LOCATION 177.00+0.00.

5. 18" DIAMETER AND 10' DEPTH NEW PRECAST CONCRETE SCREENING BUILDING AT LOCATION 177.00+0.00.

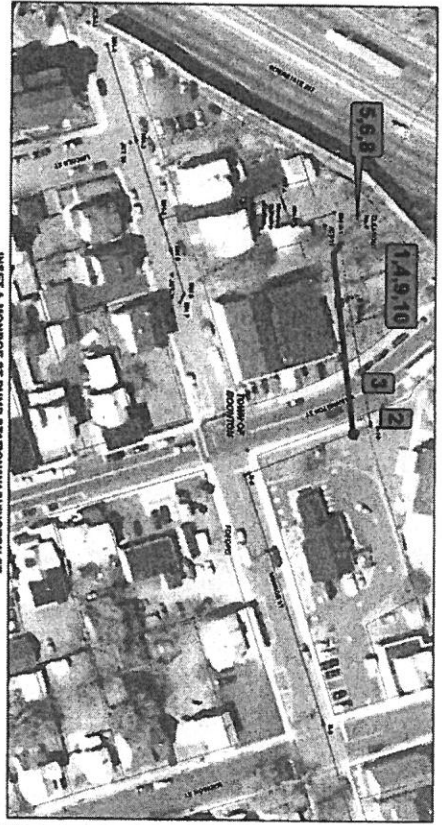
6. 18" DIAMETER AND 10' DEPTH NEW PRECAST CONCRETE SYPHON CHAMBER AT LOCATION 177.00+0.00.

7. 18" DIAMETER AND 10' DEPTH NEW PRECAST CONCRETE SYPHON CHAMBER AT LOCATION 177.00+0.00.

8. 18" DIAMETER AND 10' DEPTH NEW PRECAST CONCRETE SYPHON CHAMBER AT LOCATION 177.00+0.00.

9. 18" DIAMETER AND 10' DEPTH NEW PRECAST CONCRETE SYPHON CHAMBER AT LOCATION 177.00+0.00.

10. 18" DIAMETER AND 10' DEPTH NEW PRECAST CONCRETE SYPHON CHAMBER AT LOCATION 177.00+0.00.



INSET A: MONROE ST/PUMP STATION WASHINGTON ST

1 inch = 50 feet

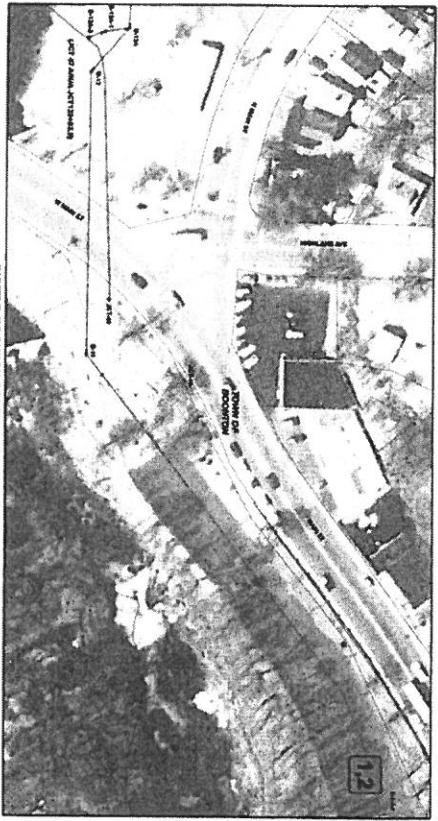
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WVSA INTERCEPTOR CONTRACT 25, SHEEO I, SHEPARD 2B

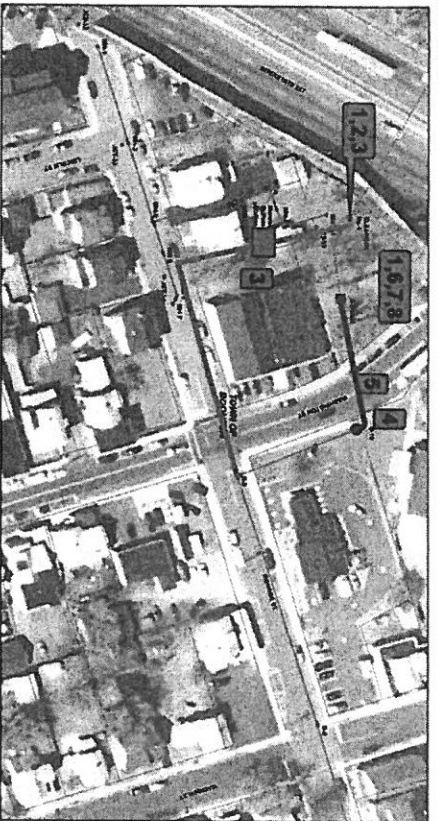
1 inch = 50 feet



INSET B: BROOKTON BEACH/MAHOLE E-C17 AREA

1 inch = 50 feet

- Manhole
- Clean Out
- Meter Chamber
- Construction Sequence
- Siphon Chamber
- Screening Building
- Sewer Main
- Interceptor
- Siphon
- Parcel Boundary
- Municipal Boundary
- Bypass Pumping Setup
- New Permanent Facility



INSET A: MORRIS ST PUMP STATION

1 inch = 50 feet

M MORRIS MORRIS MORRIS	M MORRIS MORRIS MORRIS	RECOVER VALLEY REGIONAL SENIORS CENTER	Design	Client	Contract	Approved	Date
		MORRIS COUNTY NEW ARMY CONTRACT 25 SHEEO II	NEW	COM	REV	PK	02/20/11

111 Third Avenue South
Morris, New Jersey 07960-1112

CONSTRUCTION SEQUENCE

1. 15" P.C. OCCURRING AND BEING REMOVED FROM THE EXISTING MANHOLE AND CLEAN OUT.
2. 15" P.C. OCCURRING AND BEING REMOVED FROM THE EXISTING MANHOLE AND CLEAN OUT.
3. 15" P.C. OCCURRING AND BEING REMOVED FROM THE EXISTING MANHOLE AND CLEAN OUT.
4. 15" P.C. OCCURRING AND BEING REMOVED FROM THE EXISTING MANHOLE AND CLEAN OUT.
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7. 15" P.C. OCCURRING AND BEING REMOVED FROM THE EXISTING MANHOLE AND CLEAN OUT.
8. 15" P.C. OCCURRING AND BEING REMOVED FROM THE EXISTING MANHOLE AND CLEAN OUT.

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Melissa Caruso

From: Wohlleb, Nancy C [nancy.wohlleb@mottmac.com]
Sent: Tuesday, February 21, 2017 6:33 PM
To: Carrie Feuer
Cc: Kocsik, Peter; Scott Allen; Scott Trimmer
Subject: Contract 35 II ReBid: Statement of Assumptions

Carrie:

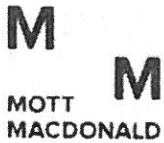
As discussed this afternoon, we are looking for confirmation of key assumptions regarding the above project. Please note the following:

- 1) Mott MacDonald needs to know that the RVRSA Siphon Barrels can be plugged and that a plug can be tethered and maintained.
- 2) Mott MacDonald would like to see a test pit outside of Siphon Cleanout Chamber No. 4 to verify the extent of concrete thrusting and restraint.
- 3) Existing Flow Data is needed for Meter BT-1, B and STP.
- 4) Green Acres status of Pocket/Tot/Washington Street park per Pete Kocsik's email

Regards
Nancy

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