

March 23, 2020

Mr. Jeffrey McCormick
Director
Town of Burrillville Department of Public Works
65 Union Avenue
Harrisville, RI 02830

RE: **Professional Engineering Services**
Harrisville Pond Dam Repairs
Burrillville, Rhode Island
(Pare Project No.: 19010.00)

Dear Mr. McCormick:

As requested by the Town of Burrillville Public Works Department (Owner), Pare Corporation (Pare) is pleased to provide you with this proposal to undertake design, permitting, bidding, construction phase, and permit compliance services associated with proposed repairs to the Harrisville Pond Dam in Burrillville, Rhode Island.

This addendum is subject to the terms and conditions of our existing Contract dated January 10, 2019.

PROJECT BACKGROUND

As part of Pare's preliminary/Phase I¹ and Phase II² investigations and evaluations, Pare completed above-water inspections, below-water inspections, subsurface investigations, geophysical studies, file reviews, and research to assess the stability of the embankment to the east/left of the primary spillway where developing gaps are occurring between the crest paver stones, and the area of the abandoned outlet and downstream wall right of the spillway where sinkholes have been developing.

Embankment Left of the Spillway

Conclusions:

It is Pare's opinion that the majority of the upstream slope left of the primary spillway is undergoing a surficial slope failure along the riprap layer.

Recommendations:

Pare recommends removing and replacing the existing rip rap with a new rip rap system designed to better-resist the long-term cyclic wave action and freeze/thaw effects.

¹ Preliminary Investigations and Evaluation Report, Harrisville Pond Dam, by Pare Corporation, dated April 16, 2019.

² Phase II Investigations and Evaluations Report, Harrisville Pond Dam, by Pare Corporation, dated December 23, 2019.



Outlet Right of the Spillway

Conclusions:

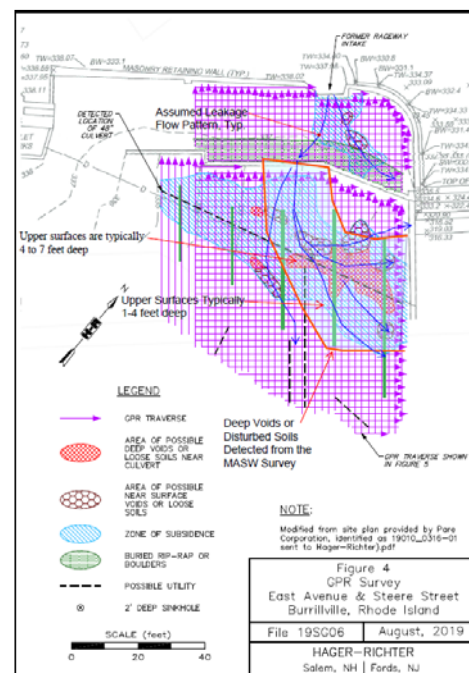
Based on the presence of reoccurring sinkholes forming downstream of a leaking gate, it is likely that the leakage is flowing uncontrollably through the embankment causing the erosion of fines from the embankment and below the downstream wall resulting in cracking of the downstream wall and the formation of sinkholes.

The primary leakage is sourced through the hole in the timber gate of the abandoned outlet. Based on dye testing and the findings of the geophysical survey, Pare has gained a better understanding of the leakage through the dam which is believed to be divided into three general flow paths as described further in the Phase II Evaluation Report.

Based on data collected from the geophysical survey and field observations, areas of soil subsidence, sinkholes, numerous voids, and/or loose zones are present throughout the area of interest as described further in the Phase II Evaluation Report.

Recommendations:

- A. ***Water Control:*** Before work can begin, the installation of a designed cofferdam around the abandoned outlet will be required to remove the hydrostatic pressure and to allow this area to be safely dewatered. Potential cofferdam types include stacked super-sack sandbags, a portable cofferdam, or driven steel sheet piling.
- B. ***Seal the Leak at the Outlet:*** To limit further damage from occurring within the embankment, the leak at the gate must be addressed by either repairing the existing timber gate or installing a temporarily plug such as an anchored polyethylene sheet, as discussed during our meeting on January 16, 2020.
- C. ***Restore the Outlet:*** Restore the abandoned outlet to function as a low-level outlet. Remove and dispose the old outlet components including the gate, frame, and conduit sections. Install a new gate, frame, operating components, and a new conduit through the embankment to discharge into the primary spillway channel. This work will likely include the partial demolition and rebuilding of the downstream wall to allow the installation of the new conduit.
- D. ***Replace the 40-inch CMP:*** Replace the 40-inch corrugated metal pipe (CMP) that serves the outlet at the right abutment. Remove and dispose the existing CMP in its entirety and install a new conduit with a similar capacity.
- E. ***Repair/Replace the Upstream Wall Right of the Primary Spillway:*** Depending on the wall conditions that are encountered after dewatering and excavations, either repair and re-mortar the upstream wall and install a filtered stone buttress on the upstream side of the wall or replace the wall in its entirety.
- F. ***Repoint the Right training wall for the Primary Spillway:*** Repoint/chink joints within the primary spillway right wall between the spillway and the pedestrian bridge.
- G. ***Rebuild the Embankment Right of the Spillway:*** Remove the loose soils within the embankment right of the primary spillway and replace with compacted structural fill. Concurrent with the





above recommended work, the soils of the embankment right of the spillway are recommended to be excavated to firm ground and replaced with engineered fill. This work should be staged with designed shoring utilized to protect existing structures.

SCOPE OF WORK (Basic Services)

The following scope of work presents the anticipated effort to undertake the proposed evaluations.

In developing this proposal, Pare reviewed the data provided within the previously completed Visual Inspection/Evaluation Report. This review of our previous experience at the site and information collected during our meeting has enabled Pare to develop a thorough understanding of the scope of the work and level of effort required to provide the services requested.

The scope of the work will generally include the following:

1. Project Kickoff and Preliminary Design Services
2. Final Design Services
 - a. Left Embankment Upstream Slope Stability
 - b. Water Control
 - c. Seal the Leak at the Outlet
 - d. Restore the Outlet
 - e. Replace the 40-inch CMP
 - f. Verify and Seal the Leak through the Downstream Wall
 - g. Repair/Replace the Upstream Wall Right of the Primary Spillway
 - h. Repoint the Channel Wall Right of the Primary Spillway
 - i. Rebuild the Embankment Right of the Primary Spillway
3. Opinion of Probable Construction Cost
4. Permit Preparation
5. Project Bidding and Award Assistance
6. Construction Phase Office Support Services
7. Construction Observation and Closeout Services

Based upon this information and our experience with dam inspection, evaluation, and design of repairs, the following paragraphs detail Pare's proposed scope.

Throughout the duration of the project, Pare anticipates a high level of coordination with the Burrillville Department of Public Works (Owner) and the Owner's representative, and will include progress updates through email communications, telephone calls, and scheduled meetings as necessary to provide the Owner with a level of information they need to keep informed regarding the project. In addition to correspondence initiated by Pare, Pare's team members will be available to the Owner and Owner's Representative throughout the project duration.

TASK 1: Kickoff Meeting and Preliminary Design

Kickoff Meeting

Pare will schedule a kickoff meeting with the Owner. During the kickoff meeting, Pare intends to identify contacts and responsible individuals at Pare, and discuss our conceptual design approaches and

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schedule. During this meeting, Pare also intends to discuss project components that are considered Owner/Operator preferences that can be designed into the work with limited impacts to the overall project cost. This includes items such as:

- Low-Level Outlet Operation;
- Physical Appearance; and
- Level of maintenance.

While final selections by the Owner are not required during the kickoff meeting, the intent is to inform the Owner of these types of options in order to provide another opportunity to help ensure that the final product meets the goals and needs of the Owner.

Within 1 week of the kickoff meeting, Pare will develop and submit to the Owner a detailed schedule inclusive of all aspects of the project scope including draft submission timeframes, permit application submission dates, and review periods. The intent of the proposed schedule will be to demonstrate the capacity to achieve construction within the timeframe requested by the Owner. An initial draft of the proposed project schedule has been prepared and is included herein.

Supplemental Subsurface Investigations

As part of the phase II investigations, one soil boring was completed on the crest to determine the condition and nature of the earthen embankment and foundation materials, and to confirm the findings of the Geophysical Survey. To gather additional subsurface information for the contractor's use in assessing temporary cofferdam options, up to 2 additional land-based soil borings will be completed on the dam crest right of the primary spillway via a track-mounted drill rig.

Continuous standard split spoon sampling will be completed through the dam embankment followed by minimum 5-foot interval sampling to depths up to 30 feet from the existing ground surface. If rock is encountered, up to two 5-foot rock cores will be completed with an NX core barrel. Borings are expected to take up to 3 workdays to complete.

Deliverables: A copy of the boring logs and a narrative discussing the findings of the investigations will be included in the undermentioned Design Basis Memorandum.

Topographic and Bathymetric Surveys

To facilitate the design, and enable the development of construction plans, the survey completed by the licensed surveying contractor in 2007 and 2009 will be updated to reflect developing erosion and settlement, and supplemented to include the embankment crest, upstream slope, downstream slope the upstream wall right of the primary spillway, and the primary spillway right channel wall upstream of the pedestrian bridge. The existing topographic contours will be adjusted and/or expanded, and structure locations will be added and/or updated. The survey will be completed by a Rhode Island licensed land surveyor under subcontract to Pare.

The surveyor will also conduct a bathymetric survey within the areas upstream and downstream of the dam to the extents necessary for the development of the construction drawings. The bathymetric survey will be completed within 20 feet of the waterline along the embankment east and west of the primary spillway. Probes will also be completed in the area of the abandoned outlet in an attempt to delineate underwater training walls on either side of the submerged approach channel.

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Mr. Jeffrey McCormick

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March 23, 2020

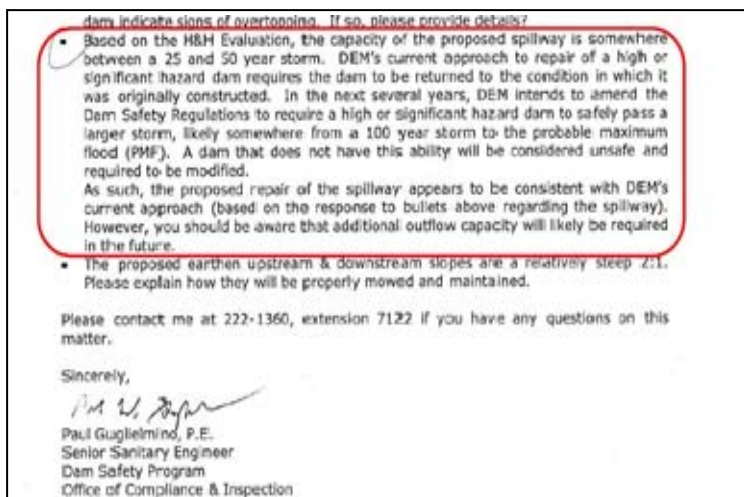
Data will be collected to develop topographic mapping of the dam and existing site features with 1-foot contours. Elevations will reference the datum as identified on available information. The scope of the survey will also include existing utilities and other site features pertinent to the work. Property lines and metes-and-bounds will not be provided as part of this survey. Property lines will be provided based upon information contained in the current tax assessor's maps.

Deliverables: An electronic base map will be provided in AutoCAD Civil 3D format.

Hydrologic/Hydraulic (H&H) Analyses

A detailed hydrologic and hydraulic (H&H) evaluation is proposed, at a minimum, to properly size up the low-level outlet and secondary outlet to provide adequate drawdown capacity. In addition, Pare proposes to complete this detailed H&H analyses to evaluate the capacity of the entire structure to assess future RIDEM Dam Safety Program Spillway Design Flood requirements.

Pare has received comments from the RIDEM Dam Safety Program for another dam improvement project which involves modifications to an existing spillway. One of the comments which was received with regards to the spillway capacity could have a direct impact on the Harrisville Pond Dam project. In general, the comment of concern, states that the Dam Safety Program may implement spillway design flood (SDF) requirements in the future and that if a dam is not in compliance with the *currently unknown* criteria, the structure may be found to be 'unsafe'. A scan of the actual language is attached herein for your review.



Once implemented, the impacts to the Harrisville Pond Dam could be significant.

Given this finding, Pare proposes to complete this detailed H&H analyses to evaluate the capacity of the entire structure to accommodate various storm events, which would be typical for the watershed. The analysis should account for the routed inflow that utilizes the full storage capacity within the impoundment and drainage area. A structure that cannot discharge the inflow associated with normal storm events will be overtopped in an uncontrolled manner that could damage the structure and threaten downstream areas. The H&H analyses will utilize data presented in currently available land use and topographic information. The analysis will be developed utilizing HydroCAD computer program to assess the performance of the dam during the spillway design flood (SDF). Pare will develop models to evaluate the capacity of the systems for a variety of storm events including the 100-year and 500-year recurrent storm events as well as the potential spillway design flood (SDF), which is one half of the probable maximum flood ($\frac{1}{2}$ PMF).

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The ½ PMF inflow will be one half of the flood resulting from the 72-hour Peak Maximum Precipitation (PMP) expected in the vicinity of the dam and watershed. The rainfall hyetograph for the PMP (will be developed utilizing the methodologies presented HMR-51 and HMR-52. Using the 6-hour through 72-hour all season PMP data for drainage areas ranging from 10 square miles to 20,000 square miles, interpolated values will be determined for the watershed contributing to the impoundment.

In developing the inflow for recurrent storm events, Pare will utilize current data available through NOAA within Atlas 14.

Inflow hydrographs to the impoundment will be modelled utilizing HydroCAD v. 10.00 software to approximate runoff rates using the Soil Conservation Service (SCS) TR-20 Curve Number (CN) and runoff methodologies, impacts of storage and routing of flows through the impoundment, discharges through the outlet structures, and maximum water surface elevations.

Inflows will be routed through the impoundment and outlet structures. The models will be developed utilizing HydroCAD storm water modeling software version 10.00 incorporating dynamic tail water conditions to account for impacts of tail water and submergence on the capacity of the outlet structures. Outlet structures will be modeled to assess performance during existing conditions.

If the model suggests that the dam cannot accommodate the SDF, Pare will utilize the model to identify up to three options to provide the required discharge capacity at the dam. Design of repairs or modifications to increase discharge capacity would be negotiated as an additional service based upon the selected approach.

Deliverables: A narrative discussing the findings of the investigations along with supporting data sheets will be included in the undermentioned Design Basis Memorandum.

Design Basis Memorandum

The findings of the supplemental borings and the results of the H&H analyses will be included in a *Design Basis Memorandum* that includes 30% design documents as well as an updated opinion of probable construction cost. The 30% design documents will include plans showing the extent of proposed modifications to the dam, including approximate locations of proposed structures, and potential limits of disturbance.

30% Design Review Meeting

Within 2 weeks of submitting the 30% Design Documents, Pare will convene a meeting to review and discuss the documents with the Owner.

TASK 2: Final Design

Upon completing the 30% design review meeting, Pare will update the documents to reflect comments received during the meeting. Pare will provide copies of the revised documents to the Owner for their approval, along with an updated Opinion of Probable Construction Cost and minutes of the 30% design review meeting as recorded by Pare.





Pare will finalize the design approach shown on the revised and approved 30% design documents. The design will be utilized to develop plans and specifications suitable for soliciting competitive bids. The plans will be developed in AutoCAD 2019 format. The technical specifications will be developed in CSI format with Division 0 developed utilizing EJCDC documents unless otherwise provided by the Owner.

At the 90% and final design stages, two hard copy sets of progress plans and specifications will be provided to the Owner for review and discussion along with a PDF copy on CD. Subsequent to review of the final submission by the Owner and authorization to finalize the contract documents, Pare will complete the design and submit construction plans and specifications. Two hard copies of the final documents will be provided to the Owner.

With each progress submission, Pare will prepare and submit an updated opinion of probable construction cost. The opinion of probable construction cost will be presented in tabular form, based upon the anticipated bid items to be included within the contract documents. In developing our opinion of probable construction cost, Pare will utilize vendor pricing for specialty items, recent bid prices from similar projects, RIDOT Weighted Average Prices, and published cost estimating resources, such as Means Construction Guides.

Subsequent to the 90% design submission, Pare will attend a meeting with the Owner. Comments received during this meeting will be incorporated into the final design.

The following summarizes the design components assumed for the development of this proposal and a list of potential project plan set sheets for the project.

DESIGN COMPONENTS	POTENTIAL PROJECT PLAN SET SHEETS
<ul style="list-style-type: none">• Stabilize the Upstream Slope Left of Primary Spillway• Water Control• Seal the Leak at the Outlet• Outlet Restoration• 40-inch CMP Replacement• Verify & Seal Leak at the Downstream Wall• Repair/Replace U/S Wall Right of the Primary Spillway• Repoint the Channel Wall Right of the Primary Spillway• Rebuild the Embankment Right of the Primary Spillway	<ul style="list-style-type: none">0 – Cover & Title Sheet1 – Notes & Legend2 – Existing Site & Erosion Control Plan3 – Proposed Site Plan4 – Outlet Restoration Plan, Sections, & Details5 – 40-Inch CMP Replacement Plan & Sections6 – Upstream Wall Improvements7 – Embankment Rebuilding Plan & Sections8 – Slope Stability Improvements Plan & Sections9 – Miscellaneous Details – 110 – Miscellaneous Details – 2

TASK 3: Permitting Services

Wetland Resource Area Identification and Mapping

Pare will perform a field wetland delineation to depict the extent of wetland resources in the project area. Pare will locate the wetland flags with a hand-held Global Positioning System (GPS) unit and will include them on the project plans. During the field work, Pare will collect soil, vegetation, and other data necessary to properly document the delineations. Pare will prepare a Wetland Delineation Report suitable for use in permitting documents. The report will include delineation data forms acceptable to the US Army Corps of Engineers as well as RIDEM.



Rhode Island Department of Environmental Management

As the project consists of repairs to a High Hazard Potential Dam, the project falls under the *Rules and Regulations for Dam Safety* and is subject to Rule 10.00 (B). Under this Rule, Pare will prepare and submit an *Application for Repair* which includes the final plans, and a narrative detailing:

- Project need,
- Method of construction inclusive of dewatering/control of water,
- Supporting calculations,
- Design basis,
- Review of alternatives considered, and
- Contact information.

Based upon the Rules and Regulations, additional submissions to the RIDEM Wetlands Program, or the US Army Corps of Engineers is not anticipated. Should such submissions or additional studies be required, Pare can undertake this work as an additional service through a contract addendum.

TASK 4: Bidding, Award, and Pre-Construction Services

Pare will assist the Owner in advertising the project within the local newspaper. As part of Pare's advertising of the project, Pare will contact a minimum of 5 contractors that have satisfactorily completed projects with Pare in the last 10 years and are qualified to undertake this project.

Pare will prepare copies of the approved submission package, including plans and specifications, for distribution to contractors interested in bidding on the project. In order to reduce project costs, reduce use of resources, and increase distribution time, Pare will make the documents available in electronic format to be distributed on compact disc. Each compact disc will be accompanied by a bid booklet which will include the required bid form, half-sized drawings, required forms to be signed by the contractor, or other documents to assist the contractor in assembling a completed bid package. Throughout the bid phase, Pare will maintain a list of vendors holding copies of the bid documents.

Pare will schedule a pre-bid informational meeting to be coordinated with the Owner as required to gain access to the site. Pare will preside over the pre-bid meeting to provide interested contractors with a summary of the proposed work, answer questions that may arise during the site visit, and clarify any comments pertaining to the work or the site. At the discretion of the Owner, Pare will make attendance at the pre-bid mandatory to ensure that any contractor bidding on the project is familiar with the site specifics and limitations.

Pare will address questions that may arise during the bidding process and will prepare addendums as necessary to provide clarifications and/or additional information. Pare will distribute addendums to the list of plan holders by both fax/email and mail.

Upon receipt of the contractors' bids, Pare will develop a bid tabulation of bids from lowest to highest. Pare will review the bids for completeness and fairness (e.g., unbalanced bids), and will contact the references provided and query the standing of the contractor with state agencies provided within the contractor's reference materials. Based upon the review, Pare will prepare a recommendation for award of the contract. The recommendation will initially be provided to the Owner's Representative for review prior to final submission to the Owner.





After review and approval of the recommendation for award by the Owner, Pare will prepare construction contract documents for execution under the supervision of the Owner's counsel. To expedite the preparation of contract documents for execution, Pare anticipates coordination with the Owner's counsel during the development of Division 0 of the contract documents such that the contract included with the bid package is suitable for execution. As part of this task, Pare will request payment bonds, performance bonds, and insurance certificates from the selected contractor. Insurance certificates will list the Owner, the Owner's Representative, and Pare, as an additional insured. Documents allowing the successful bidder's authorized representative to execute the contract forms will be required as part of the contractor's bid package. Four sets of contract documents will be prepared, executed, and distributed.

Pare will prepare a Notice to Proceed for execution by the Owner and issued to the contractor immediately upon notification from the Owner that contract documents have been executed. Within 7 days of the date of the Notice to Proceed, Pare will schedule, coordinate and preside over a pre-construction meeting between the contractor, the Owner, the Owner's Representative, and other parties involved with the work. To comply with anticipated permit conditions, Pare will also coordinate with the RIDEM to notify them of the meeting and request their attendance. Pare will prepare minutes of the pre-construction meeting for distribution to the attendees.

TASK 5: Office Engineering During Construction

During the progression of the construction work, Pare will provide office engineering to support the construction phase services. Office engineering will include providing project management for the project to maintain communications between the Owner's Representative, the Contractor, and Pare. In addition to project administration, Pare's office engineering will also include:

- Receive, review, and process shop drawings and other submittals. Review will incorporate comments by the Owner's Representative received during the review process. Pare will distribute reviewed submittals and maintain a log of submittals and the actions taken.
- Review change orders.
- Pare will review the Contractor's QA/QC testing on behalf of the Owner. Testing will likely include soil materials, concrete, and soil placement testing. Pare will review results of testing provided by the contractor for compliance with the project specifications. All testing is to be completed by the contractor.
- Receive, review, and verify invoices/payment requisitions submitted by the contractor. Review will include a check of quantities/estimate percent complete and conformance with the contract documents.

The duration of our services will be estimated once the final scope of the construction has been determined.

TASK 6: Construction Phase Services

Pare will provide full and part time construction observation during the completion of the work by an experienced engineer. *Please note that in providing these services Pare utilizes engineers experienced in geotechnical issues, not technicians, so that issues can be more readily evaluated and discussed.*





Through experience we have found that this provides better field communication and facilitates the construction process.

Pare will provide project representation by experienced staff on a full-time and part-time basis as approved by the Owner. ***The Scope and duration of our services will be estimated once the final scope of the construction has been determined.***

Pare's construction observation will be coordinated to provide observation during periods of critical work sequencing. Included within the construction observation services, Pare will:

- Schedule and administer construction progress meetings with the contractor and the Owner's Representative. Pare will prepare and distribute minutes for each meeting.
- Complete site visits to assess the current status of the project and observe the quality of the work and its conformance with the contract documents.
- Prepare field reports and maintain records of activities including photographs to document conditions observed while onsite.

Pare will provide interpretations and clarifications of the contract documents, prepare associated correspondence, and provide technical opinions concerning acceptability of the work with respect to the contract documents. Pare will not supervise, direct or have control over the contractor's work nor have any responsibility for the construction means, methods, techniques, sequences or procedures selected by the contractor nor for the contractor's safety precautions or programs in connection with the work. These rights and responsibilities are solely those of the contractor in accordance with the contract documents. Pare will not be responsible for any acts or omissions of the contractor, subcontractor, any entity performing any portions of the work, or any agents or employees of any of them. Pare does not guarantee the performance of the contractor and will not be responsible for the contractor's failure to perform its work in accordance with the contract documents or any applicable laws, codes, rules or regulations

Neither the professional activities of Pare, nor the presence of Pare or its employees and subconsultants at a construction/project site, shall relieve the contractor of its obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending and coordinating the work in accordance with the contract documents and any health or safety precautions required by any regulatory agencies. Pare and its personnel have no authority to exercise any control over any construction contractor or its employees in connection with their work or any health or safety programs or procedures. The contractor shall be solely responsible for jobsite safety. The Owner agrees that, Pare and Pare's subconsultants shall be indemnified by the contractor and shall be made additional insureds under the contractor's policies of general liability insurance.

Pare will complete a site walk with the contractor and a representative of the Owner to review the completed work and develop a punch-list of items to be completed or corrected. The record drawings will be provided within a *Project Closeout Package* that will include the following within a 3-ring binder:

- Record Drawings
- Field summaries of observed construction activities
- Contractor submittals of materials utilized in the completion of the work





- Photographs of the construction process obtained during site visits and construction observation by Pare
- Minutes from construction meetings
- Electronic (PDF) version of the As-Built drawings on CD-ROM.

Two hard copies of the close-out package will be provided to the Owner.

OUTSIDE SERVICES

In undertaking this project, Pare anticipates subcontracting Waterman Engineering Company of East Providence, RI to complete the topographic and bathymetric surveys as defined herein.

Pare also anticipates subcontracting New England Boring of Brockton, MA for the completion of the land- and water-based borings as defined herein.

ADDITIONAL SERVICES

Services that are required but not part of the Scope of Services as described above shall be considered Additional Services. All additional services must be previously authorized. Additional services shall be compensated on an hourly basis at rates and charges per our fees indicated within the attached schedule of fees. Included as Additional Services will be any meetings not included within the Basic Services, including additional meetings with permitting agencies.

ACTIVITIES NOT INCLUDED IN THIS PROPOSAL

The following activities are not included as part of this proposal. Should it be determined that these activities, which may be required due to variables beyond the control of Pare, Pare can undertake these activities as additional services through a contract addendum.

- Preparation of an Environmental Impact Report (EIR)
- Attendance at meetings beyond those indicated in the Scope of Work

SERVICES PROVIDED BY THE OWNER

To assist in our design, Pare anticipates that the Owner will provide the following:

- Access to the structure from both abutments;
- Access to existing files pertaining to the dam structure; and
- Comments to draft submissions.

BASIS OF CHARGES AND CONDITIONS OF ENGAGEMENT

Burillville Department of Public Works (herein also referred to as "Owner") shall pay Pare for Services rendered as described above based upon a lump sum fee per task for Tasks 1 through 4

Rates for personnel categories and for reimbursable expenses are shown on the attached Schedule of Fees.





Invoices for services rendered and expenses incurred will be processed through the last Friday of each month and are due and payable upon receipt. Invoices not paid within thirty (30) days of the invoice date shall be subject to a one and one-half percent (1.5%) per month interest charge. In addition, for contracts more than thirty days in arrears for payment, Pare may, with seven days written notice, suspend services.

Pare reserves the right to renegotiate or adjust the fee accordingly if its Proposal for Service is not accepted within a ninety (90) day period.

PERIOD OF SERVICE

The time period for performance of the services set forth in the Scope of Services, Tasks 1 through 4, shall be 220 days from the receipt of a written authorization to proceed. Additional services may materially add to the time required to complete the work of the Project. Pare Corporation will be entitled to an equitable adjustment in the Period of Service as a result of services added.

ANTICIPATED CHARGES

Based upon the defined scope of work presented above, Pare anticipates completing the Scope of Services described above for the estimated fee indicated on the following table:

Task	Professional Services	Reimbursable Expenses	Total	Basis of Charges
1: Kick off Meeting & Preliminary Design	\$ 51,240.00	\$ 258.75	\$ 51,498.75	Lump Sum
Survey Subcontract		\$ 8,635.00	\$ 8,635.00	Lump Sum
Drilling Subcontract		\$ 5,675.89	\$ 5,675.89	Lump Sum
2: Final Design	\$ 26,390.00	\$ 86.25	\$ 26,476.25	Lump Sum
3: Permitting Services	\$ 4,675.00	\$ 86.25	\$ 4,761.25	Lump Sum
4: Bidding, Award, and Pre-Construction Services	\$ 5,145.00	\$ 215.63	\$ 5,360.63	Lump Sum
5: Office Engineering During Construction	<i>To be negotiated once the final construction scope is determined¹</i>			
6: Construction Observation & Closeout Services	<i>To be negotiated once the final construction scope is determined¹</i>			
Total			\$ 155,557.77	

1. Fees for professional services and reimbursables during construction are pending the results of the final design. At the completion of the Final Design, a Contract Amendment will be submitted to the Owner to provide a Not to Exceed Cost for the estimated services.

This represents our best judgment at this time as to the effort required to achieve the stated objectives. It must be recognized that unforeseen conditions, which become evident during the course of the studies, may alter or increase the effort required. You will be notified of any changes requiring an increase in budget, and we will not exceed the recommended budget without your prior approval.

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ACCEPTANCE

This proposal may be accepted by signing in the appropriate spaces below and returning one copy to us. Issuance of a purchase order implicitly acknowledges acceptance of the Statement of Terms and Conditions from Pare's existing contract with the Client.





Mr. Jeffrey McCormick

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March 23, 2020

Thank you for the opportunity to submit this proposal. If you have any questions, please do not hesitate to call us at 508.543.1755.

Sincerely,

PARE CORPORATION

David M. Matheson, P.E.
Senior Project Engineer

J. Matthew Bellisle, P.E.
Senior Vice President

Enclosures:

Schedule of Fees

This Proposal for Services and Statement of Terms and Conditions are hereby accepted and executed by a duly authorized signatory, who, by execution hereof, warrants that he/she has full authority to act for, in the name of, and on behalf of the Town of Burrillville.

TOWN OF BURRILLVILLE

By: _____

Title: _____

Typed Name

Date

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SCHEDULE OF FEES

For Proposal for Services, dated March 23, 2020
(Pare Project No. 19010.00)

LABOR:

Engineer I	\$ 110.00/Hour
Engineer II	\$ 125.00/Hour
Project Engineer	\$ 150.00/Hour
Senior Project Engineer	\$ 175.00/Hour
Managing Engineer	\$ 190.00/Hour
Principals & Officers	\$ 225.00/Hour
Environmental Scientist	\$ 90.00/Hour
Senior Environmental Scientist	\$ 120.00/Hour
Principal Environmental Scientist	\$ 155.00/Hour
Resident Project Representative	\$ 100.00/Hour
Senior Resident Project Representative	\$ 125.00/Hour
CADD Operator	\$ 100.00/Hour
Senior CADD Operator/Designer	\$ 115.00/Hour
Engineering Technician	\$ 100.00/Hour
Senior Engineering Technician	\$ 115.00/Hour
Clerical/Office Personnel	\$ 75.00/Hour

REIMBURSABLE EXPENSES:

Mileage (at Federal Standard Rate)	\$ 0.575/Mile
Printing/Copying Wide Format (in-house)	\$ 0.15/Square Foot
Photocopying (in-house)	\$ 0.10/Copy
Outside Services and Out-of-Pocket Expenses	Cost plus 10%

The above rates for technical and support personnel will be charged for actual time worked on the project. In addition, there will be charges for time required for travel from company office to job or site, and return.

For expert and material witness services, including preparation, associated with any actual or potential litigation, mediation, arbitration, or similar proceeding, a fifty percent (50%) premium will be added to the above rates.

Overtime worked by non-exempt, non-professional employees will be charged at a rate of one and one-half times the rates shown above for all time worked in excess of 8 hours per day.

