

April 27, 2017

RE: Saint Paul Regional Water Services
Marie Avenue Hydropillar Rehabilitation
SEH No. STPWU 141407 14.00

Mr. Bill Tschida
Engineering Supervisor
Saint Paul Regional Water Services
1900 Rice Street
St. Paul. MN 55113

Dear Bill:

As per your request, Saint Paul Regional Water Services is in need of Full Service design, inspection, and contract administration services for the reconditioning of the Board of Water Commissioners water storage tank located on at 151 Marie Avenue in the City of West Saint Paul during the 2018 construction season. Short Elliott Hendrickson Inc. (SEH®) appreciates the opportunity to submit a proposal to provide these services. This proposal includes our project approach; including scope of work, key personnel and project fees.

Our team's many advantages include extensive water tank construction and coatings inspection experience throughout the Midwest region. In addition, SEH is unique among Minnesota engineering consultants in that we employ in-house Protective Coatings Management personnel including personnel with prior contractor work experience who work within the SEH Water Engineering Practice Center. This expertise has translated into numerous awards from the American Council of Engineering Companies (ACEC), related to tower reconditioning.

### **PROJECT UNDERSTANDING**

SEH has visited with Saint Paul Regional Water and has reviewed the information provided in the inspection report as completed by Tank Industry Consultants in 2013 and previous inspection report by SEH in 2008; the basis of which has been used in part by SEH to determine the scope of work for this project. We believe having reviewed the information and recommendations, and having discussed them with you, we understand your project expectations, the work required for this facility, and your scheduling needs to provide a successful project outcome.

### **PROJECT TEAM**

All proposed services will be completed by SEH. The Project Manager will be Chris Wolfgram who brings more than 10 years of contractor experience specializing in protective coatings application and project management. Chris provides a unique knowledge to rehabilitation projects due to past experience working for rehabilitation contractors. This knowledge assists with contractor scheduling and logistics, foresight of project complications to reduce or eliminate potential change orders prior to the bid phase and contract work, and the level of critical inspection required to successfully complete a project while providing value to the owner in reducing inspector fees. The Project Engineer will be Chad Katzenberger, PE, with more than 12 years of experience in water distribution planning and specification development for water storage reconditioning.

Mr. Bill Tschida April 27, 2017 Page 2

With respect to project inspection, it is our intent to provide the Utility with a NACE Certified inspector working under the direct supervision of a NACE Level III Certificated inspector. This individual shall also have an American Welding Association (AWS) certification, and/or training and be working under the direct supervision of a structural engineer or Certified Welding Inspector (CWI), as applicable to the final project scope.

Additional team members include Dan Zienty, a Principal and Senior Project Design Leader with more than 20 years of experience in protective coatings and telecommunications, and coatings expert Joe Cesarek with more than 40 years of protective coatings experience.

### PROJECT APPROACH

SEH will work directly with Utility staff to implement the recommendations as outlined.

After discussion with the Utility and review of the inspection reports, a subsequent inspection will be completed prior to development of a full project scope. Currently, the anticipated scope of work incorporates complete rehabilitation of the interior immersion (wet) surfaces of the tank; this includes abrasive cleaning to meet an SSPC SP-10 Near White, to be followed by a three-coat application of a zinc primer and two coat epoxy-polyamide coating system in accordance with ANSI/NSF standard 61. The interior dry surfaces of the tank are known to contain lead and are reported as in fair overall condition warranting spot coating repair utilizing spot surface preparation to meet an SSPC SP-6 Commercial Blast with full surface SSPC SP-7 Brush-Off Blast followed by a spot coat to failed areas and a full coat of an epoxy-polyamide coating system. Respective of the tanks exterior, recommendation includes complete rehabilitation of the exterior surfaces of the tank; this includes abrasive cleaning to meet an SSPC SP-6 Commercial Blast, to be followed by a zinc primer, epoxy polyamide intermediate coat, and polyurethane finish coat. Logo application with a fluoropolymer to promote color and gloss retention will be included. To avoid fugitive dust emissions and/or paint drift, a full-containment structure will need to be constructed.

SEH is well aware of the costs in completing a reconditioning project. Today's coating systems are formulated to last 15 to 20 years with periodic maintenance. However, success starts with attention to the initial preparation of the surface and application of the coating system. This is where inspection of the work becomes so important. We believe that with the structural modifications being considered, and time necessary on the back end for coating cure, the projects duration to Substantial Completion is 12 weeks. SEH will further incorporate into the specifications project sequencing to an environment that will allow for a monolithic application of the coating system to promote long-term system service.

Finally, SEH will incorporate provisions into the specification requiring a two-year contractor warranty. SEH has included in this proposal, services for conducting the warranty inspection.

### **PROJECT SCHEDULE**

Upon your authorization, SEH is ready to proceed. Below is our proposed schedule identifying our timeline for Engineering and Construction. The overall project schedule is based on the Utility's ability to remove this facility from service without detriment to its water distribution system or residents. As identified above, a formal timing of the project will be confirmed with Utility staff at the initiation meeting. Aside from scheduling issues specific to demands on water distribution are those specific to the ambient conditions needed for proper coating application and cure. Therefore our schedule will take into consideration timing, sequencing of operations, and product selection, assessing those formulated with success in this region.

Event	<b>Date</b> June 1, 2017	
Consultant Selection		
Submit Draft Plans/Specifications for City Review	August 1, 2017	
Advertise for Bids	Week of October 9, 2017	
Bid Opening	Week of November 13, 2017	

Event	Date	
Project Award	Week of December 11, 2017	
Preconstruction Meeting	Week of April 23, 2018	
Project Commencement (Earliest)	May 7, 2018	
Project Completion (Latest)	September 28, 2018	

### SCOPE OF WORK

### Design Services

The work tasks and deliverables for this section shall include:

- Pre-design
  - Complete on-site tank field evaluation and provide tank evaluation report.
  - Meeting to confirm the Utility's intent to follow/alter the recommendations prescribed.
  - Establish overall project requirements and objectives related to contractor procurement and schedule.
  - Provide revised engineers estimate.
- Specifications and Contract Documents
  - Prepare contract documents, drawings, and specifications, including both general conditions and technical sections as related to facility surface preparation and coating application (Specifying systems in accordance with AWWA D102), and structural modifications
  - Meet (1) with Utility staff to review plans and specifications (Maximum 2 iterations)
  - Submit final contract documents to the Utility for review and approval (Maximum 3 copies)
  - Provide permit application and specification to the Minnesota Department of Health (2)
    - \* Permitting fee(s) reimbursed by Saint Paul Regional Water Services
- Bidding Administration as coordinated with Saint Paul Regional Water Services Utility
  - Assist in preparing advertisement for bid
  - Provide response to bidder questions
  - Assist in issuing addenda, as applicable
  - Coordinate and attend a mandatory Pre-Bid Meeting
  - Review bids and prepare letter of award recommendation to Saint Paul Regional Water Services
     Utility

### II. Cellular/Other Tenants

SEH will complete one 360 closeout video following completion of the final installed Tenant(s).

\* Required services related to the temporary removal and re-installation of telecommunications equipment at this facility by the current carriers will be provided under the existing agreement between SEH and St. Paul Regional Water Services.

### III. Construction Services

- Construction Administration
  - Review submittals and other pertinent documentation associated with the plans/specifications
  - Respond to contractor inquiries
  - Coordinate/facilitate pre-construction meeting
  - Prepare change orders, as required
  - Review monthly pay requests
  - Coordinate and Facilitate weekly on-site progress meetings

Mr. Bill Tschida April 27, 2017 Page 4

- Provide bi-weekly progress meetings and status reports (summary)
- Prepare letter of final review and acceptance in coordination with the on-site inspector
- Complete/facilitate project closeout documentation

#### Construction observation

- Inspection and record keeping will be provided by a NACE Certified Coatings Inspector. SEH proposes to provide full time inspection for this project as outlined below, based on a forty (40) hour\*, five (5) day\*\* work week and project duration of twelve (12) weeks (limited to reconditioning operations).
  - \* Inspections in excess of forty (40) hours that are within the specified working times will be billed at \$100.00 per hour including expenses and equipment.
  - \*\* In circumstances where the Contractor requires additional inspection hours outside of specified working times, SEH specifications place the responsibility of additional inspection fees on the Contractor to reduce costs incurred by the Utility.

During the project, SEH will perform the following tasks:

- Attend pre-construction meeting
- Inspect structural repairs and modifications for conformance to the specifications
- Prepare and file copies of construction activity reports
- Monitor field operations and testing in accordance with the specifications as related to:
  - Surface preparation materials and equipment
  - Surface preparation operations inclusive of coatings removal and approval of samples
  - Coating application materials and equipment
  - Coating operations inclusive of mixing and application
- Work directly with residents and property owners, responding to construction related issues
- Participate in a weekly on-site meeting with Utility staff during active work periods and prepare a written update including applicable updating progress for public notification(s)
- Assist the Utility with coordination of facility disinfection (contractor initiated)
- Prepare punch list at substantial completion
- Prepare final inspection letter to the contractor

### IV. Warranty Inspection

The deliverables and work tasks for a two-year warranty inspection in accordance with this section of the proposed specification shall include:

- Contacting the Utility approximately 6-months prior to the expiration date to verify our proceeding with contracted operations
- Coordinating with the Utility and SEH subcontractor (the R.O.V. method is proposed for interior investigation) the schedule for the inspection
- SEH notifying the contractor of the inspection date

Upon completion, a letter sent to the Utility and the contractor informing each party of the inspection results, recommended repairs, and a request for scheduling with the Utility any follow up work. SEH will rely on the Utility for access and operation of their facility as needed for completing the above operations.

Our fee does not include any necessary inspection of warranty repairs resulting from the above Warranty assessment. The Utility will be billed for the Warranty inspection following submission of the SEH result letter.

### PROPOSED COST OF ENGINEERING SERVICES

SEH proposes to complete the tasks identified under Design Services and Construction Services for a fee of \$91,550. Additional services may be provided as authorized by Saint Paul Regional Water Services.

Task		Amount
I.	Design	\$21,700
	Field Evaluation and Report	\$3,600
	Pre-design	\$3,500
	Specifications and Contract Documents	\$9,500
	Bidding Administration	\$5,100
II.	Construction Services	\$65,200
	Contract Administration	\$14,400
	Inspection*	\$50,800
III.	Telecommunications	\$500
	360	\$500
IV.	Warranty Inspection	\$4,150
TOI	AL COST	\$91,550

<sup>\*</sup> Daily inspection fee based on 8-hour day - \$850.00 (Includes mileage)

SEH proposes to provide Design, Construction Administration, 360, and Warranty Inspection on a Lump Sum basis. Inspection services (including telecommunication inspections) are proposed on an hourly not-to exceed basis without authorization from Saint Paul Regional Water Services.

SEH reserves the right to submit for additional fees for services requested by the Utility. Further, additional change orders, as granted to the contractor, may require additional costs for administration and inspection by SEH.

If you have any questions regarding this proposal or the information contained herein, please contact Chris Wolfgram directly at 651.318.0360. We appreciate your consideration and look forward to continuing our working relationship with Saint Paul Regional Water Services.

Sincerely,

SHORT ELLIOTT HENDRICKSON INC.

Chris Wolfgram

**Project Manager - Protective Coatings** 

Client Service Manager

ah

Enclosures:

Exhibit A-1 – Payments to Consultant for Services and Expenses Using the Hourly Basis Option Exhibit A-2 – Payments to Consultant for Services and Expenses Using the Lump Sum Basis Option

### Exhibit A-1

### to Agreement for Professional Services **Between Saint Paul Regional Water Services (Client)**

and

Short Elliott Hendrickson Inc. (Consultant) **Dated April 19, 2017** 

### Payments to Consultant for Services and Expenses **Using the Hourly Basis Option**

The Agreement for Professional Services is amended and supplemented to include the following agreement of the parties:

### A. Hourly Basis Option

The Client and Consultant select the hourly basis for payment for services provided by Consultant. Consultant shall be compensated monthly. Monthly charges for services shall be based on Consultant's current billing rates for applicable employees plus charges for expenses and equipment.

Consultant will provide an estimate of the costs for services in this Agreement. It is agreed that after 90% of the estimated compensation has been earned and if it appears that completion of the services cannot be accomplished within the remaining 10% of the estimated compensation, Consultant will notify the Client and confer with representatives of the Client to determine the basis for completing the work.

Compensation to Consultant based on the rates is conditioned on completion of the work within the effective period of the rates. Should the time required to complete the work be extended beyond this period, the rates shall be appropriately adjusted.

### B. Expenses

The following items involve expenditures made by Consultant employees or professional consultants on behalf of the Client. Their costs are not included in the hourly charges made for services and shall be paid for as described in this Agreement but instead are reimbursable expenses required in addition to hourly charges for services:

- 1. Transportation and travel expenses.
- 2. Long distance services, dedicated data and communication services, teleconferences, Project Web sites, and extranets.
- Lodging and meal expense connected with the Project.
- Fees paid, in the name of the Client, for securing approval of authorities having jurisdiction over the
- 5. Plots, Reports, plan and specification reproduction expenses.
- 6. Postage, handling and delivery.
- 7. Expense of overtime work requiring higher than regular rates, if authorized in advance by the Client.
- 8 Renderings, models, mock-ups, professional photography, and presentation materials requested by the Client.
- All taxes levied on professional services and on reimbursable expenses.
- 10. Other special expenses required in connection with the Project.
- 11. The cost of special consultants or technical services as required. The cost of subconsultant services shall include actual expenditure plus 10% markup for the cost of administration and insurance.

The Client shall pay Consultant monthly for expenses.

### C. Equipment Utilization

The utilization of specialized equipment, including automation equipment, is recognized as benefiting the Client. The Client, therefore, agrees to pay the cost for the use of such specialized equipment on the project. Consultant invoices to the Client will contain detailed information regarding the use of specialized equipment on the project and charges will be based on the standard rates for the equipment published by Consultant.

The Client shall pay Consultant monthly for equipment utilization.

s:\pt\s\stpwu\common\141407\exhibit a1\_marie wt recond \_docx

### Exhibit A-2

# to Agreement for Professional Services Between Saint Paul Regional Water Services (Client) and

Short Elliott Hendrickson Inc. (Consultant)
Dated April 19, 2017

## Payments to Consultant for Services and Expenses Using the Lump Sum Basis Option

The Agreement for Professional Services is amended and supplemented to include the following agreement of the parties:

### A. Lump Sum Basis Option

The Client and Consultant select the Lump Sum Basis for Payment for services provided by Consultant. During the course of providing its services, Consultant shall be paid monthly based on Consultant's estimate of the percentage of the work completed. Necessary expenses and equipment are provided as a part of Consultant's services and are included in the initial Lump Sum amount for the agreed upon Scope of Work. Total payments to Consultant for work covered by the Lump Sum Agreement shall not exceed the Lump Sum amount without written authorization from the Client.

The Lump Sum amount includes compensation for Consultant's services and the services of Consultant's Consultants, if any for the agreed upon Scope of Work. Appropriate amounts have been incorporated in the initial Lump Sum to account for labor, overhead, profit, expenses and equipment charges. The Client agrees to pay for other additional services, equipment, and expenses that may become necessary by amendment to complete Consultant's services at their normal charge out rates as published by Consultant or as available commercially.

### B. Expenses Not Included in the Lump Sum

The following items involve expenditures made by Consultant employees or professional consultants on behalf of the Client and shall be paid for as described in this Agreement.

- Expense of overtime work requiring higher than regular rates, if authorized in advance by the Client.
- 2. Other special expenses required in connection with the Project.
- 3. The cost of special consultants or technical services as required. The cost of subconsultant services shall include actual expenditure plus 10% markup for the cost of administration and insurance.

The Client shall pay Consultant monthly for expenses not included in the Lump Sum amount.

s:\pt\s\stpwu\common\141407\exhibit a2\_marie wt recond\_docx