



**Ministry of Public Works
Department of Works and Engineering**

**Request for Proposals
For
Fort Victoria Tank Rehabilitation**

Request for Proposals No.: **50/820/75**

Issued: **January 29, 2018**

Submission Deadline: **February 27, 2018, 3:00 PM Atlantic Standard Time (“AST”)**

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PART 1 – INVITATION AND SUBMISSION INSTRUCTIONS

1.1 Invitation to Proponents

This Request for Proposals (the “RFP”) is an invitation by the Government of Bermuda (the “Government”) to prospective proponents to submit proposals for **Fort Victoria Tank Rehabilitation**, as further described in Section A of the RFP Particulars (Appendix D) (the “Deliverables”).

Description of the Work

1. This work involves repair of the interior surface of the Fort Victoria Reservoir and seal the surface with a protective Polyurethane Elastomer Lining System for use with potable water. This Proposal involves:
 - .1 Pressure washing of floor and wall surfaces.
 - .2 Stopping Leaks by repair and sealing of the concrete to include removal of unsound and unbonded materials, chemical grouting, patching compounds, resurfacing compounds, and plugging compounds. Chip and make permanent repairs of all perimeter wall and floor cracks and /or holes.
 - .3 Surface preparation, and installation of the Polyurethane Elastomer Lining System such as Sher-flex, Silkaflex or equivalent, to include protection of surfaces not to be treated, touch-up, clean-up, and appurtenant work all in accordance with the requirements of the Contract Documents and this Specification.
2. The purpose of this work is to seal the tank and protect the underlying concrete.
3. Warranty of Works
 - .1 Upon Completion of this waterproofing test and passing of the water tightness test the Contractor shall guarantee that the tank will not leak, for at least ten (10) years.
 - .2 Should a leak develop in the first year, the Contractor shall make all necessary repairs at absolutely no cost to Works and Engineering. Prior to release of retention the tanks shall successfully pass a water tightness test.
 - .3 The Contractor shall submit details of a ten (10) year warranty together with any additional works necessary to fulfil a ten (10) year warranty.

1.2 RFP Contact

For the purposes of this procurement process, the “RFP Contact” will be: **Mr. J Tarik Christopher** at email: tjchristopher@gov.bm

Proponents and their representatives are not permitted to contact any employees, officers, agents, elected or appointed officials or other representatives of the Government, other than the RFP Contact, concerning matters regarding this RFP. Failure to adhere to this rule may result in the disqualification of the proponent and the rejection of the proponent’s proposal.

Proponents downloading this file and responding are required to register with RFP Contact by emailing their company name and contact information to tjchristopher@gov.bm. Amendment/addenda (if any) will be posted at <https://www.gov.bm/procurement-notice> . Proponents should visit the Government Portal website on a regular basis during the procurement process.

1.3 Type of Contract for Deliverables

The selected proponent will be required to enter into an agreement with the Government for the provision of the Deliverables in the form attached as Appendix A to the RFP (the “Agreement”). It is the Government’s intention to enter into the Agreement with only one (1) legal entity. Joint submissions are acceptable however if a joint submission is made, the submission must clearly indicate which party will act as the prime contractor.

1.4 RFP Timetable

Issue Date of RFP	January 29th, 2018
Site Visit / Pre-Bid Meeting	February 12, 2018, [10:00 AM], Atlantic Standard Time (“AST”)
Registration of Interest	February 20, 2018
Deadline for Questions	February 21, 2018, [4:00 PM] AST
Deadline for Issuing Addenda	February 22, 2018, [4:00 PM] AST
Submission Deadline	February 27, 2018, [3:00 PM] AST
Public Opening	February 27, 2018, [3:00 PM] AST
Irrevocability Period	Ninety (90) Calendar days

The RFP timetable is tentative only, and may be changed by the Government at any time. Proponents are requested to submit a Registration of Interest prior to the deadline noted in the timetable above to the RFP Contact by email no later than **February 20, 2018**.

The Pre-Bid Site Tour Meeting

1. Proponents or their official representative(s) on their own cost and responsibility are advised to attend the Pre-Bid meeting and Site tour to examine the site of the proposed work, so as to be fully acquainted with existing conditions and limitations. While attendance is not mandatory Proponents are strongly advised to attend and attendance will be part of the bid assessment.
2. A site visit for all Proponents will be conducted at 10:00 AM, AST 12th February 2018. The initial meeting point will be the unfinished church and at 10:00 AM and then the tour will move to the Fort Victoria Reservoir location.
3. The Ministry reserves the right to refuse any request for individual conducted site tours, at any other time than that identified in this RFP.
4. The Proponent may schedule additional site visits for further investigations by contacting the RFP Contact.
5. The Proponents or their official representative must register their presence with the RFP Contact at the start of the meeting stating the name of the company they represent their email address, and phone number.

6. The purpose of the meeting will be to visually review the site conditions, clarify issues and to answer questions on any matter that may be raised at that stage.
7. Minutes of the meeting, including copies of the questions raised and responses given, will be furnished expeditiously to Proponents. Any modification of the RFP documents that may become necessary as a result of the site tour meeting will be made and furnished to all Proponents.
8. The Proponent shall be deemed to have satisfied themselves as to the form and nature of the site, the quantities and nature of the Work and materials necessary for the completion of the Works, and in general to have obtained all necessary information as to the risks, contingencies and other circumstances which may influence or affect his Proposal.
9. Proponents shall make their own assessment of existing facilities, conditions and difficulties which will attend the execution of the Works called for by the proposed works contract; including local conditions, constraints due to working in an occupied area with restricted hours, labour conditions, uncertainty of weather, difficulties with access, and all other reasonable contingencies. Proponents shall satisfy themselves by personal examination of the site of the proposed Works and by such other means as they choose as to actual conditions and requirements, and as to the quantities required.
10. No after claim will be allowed or considered for any work that may be required for the proper execution and completion of the work, due to failure by the Proponent to examine the site and make proper allowances for the conditions to be encountered.

Public Opening of Proposals

The Ministry will examine Proposals to determine whether they are complete, whether the requisite Proposal Securities have been furnished, whether the documents have been properly signed and whether the Proposals are generally in order. Proposals shall be opened after 3:00 PM AST, on the 27th February 2018.

At Proposal opening, a member of the Purchasing and Tendering Committee will announce the Proponents' names and the Proposal Prices. The Ministry shall prepare, for their own records, minutes of the Proposal opening, including the information disclosed to those present.

1.5 Submission of Proposals

1.5.1 Proposals to be submitted at Prescribed Location

Proposals must be submitted to

Ministry of Public Works
General Post Office Building
Tender Box
3rd Floor, 56 Church Street
Hamilton HM CX Bermuda
Attention Mr. J. Tarik Christopher

Proposal submissions must bear the following identification:

Proposal Submission for “Fort Victoria Tank Rehabilitation”
“DO NOT OPEN BEFORE 3:00 PM AST on 27th February 2018

The proposals shall be deposited in the Tender Box located at the office indicated or can be sent by mail or Courier. If the envelope is not sealed and marked as instructed above, the Government will assume no responsibility for the misplacement or premature opening of the proposal submitted. An envelope opened prematurely for this cause will be rejected by the Government and Proponent notified.

1.5.2 Proposals to be Submitted on Time

Proposals must be submitted at the location set out above on or before the Submission Deadline. Proposals submitted after the Submission Deadline will be rejected. Onus and responsibility rest solely with the proponent to deliver its proposal to the exact location (including floor, if applicable) indicated in the RFP on or before the Submission Deadline. The Government does not accept any responsibility for submissions delivered to any other location by the proponent or its delivery agents. Proponents are advised to make submissions well before the deadline. Proponents making submissions near the deadline do so at their own risk.

1.5.3 Proposals to be Submitted in Prescribed Format

Proponents shall submit one (1) original signed hard copies of their proposal in a sealed package or one (1) electronic copy, in Microsoft Word or Adobe PDF format. If both a hard copy and electronic copy of the proposal are submitted and there is a conflict or inconsistency between the hard copy and the electronic copy of the proposal, the hard copy of the proposal will prevail. Proposals should be prominently marked with the RFP title and number (see RFP cover), with the full legal name and return address of the proponent as noted in 1.5.1.

1.5.4 Amendment of Proposals

Proponents may amend their proposals prior to the Submission Deadline by submitting the amendment in a sealed package prominently marked with the RFP title and number and the full legal name and return address of the proponent to the location set out above. Any amendment should clearly indicate which part of the proposal the amendment is intended to amend or replace.

1.5.5 Withdrawal of Proposals

Proponents may withdraw their proposals prior to the Submission Deadline. To withdraw a proposal, a notice of withdrawal must be sent to the RFP Contact prior to the Submission Deadline and must be signed by an authorized representative of the proponent. The Government is under no obligation to return withdrawn proposals.

1.5.6 Proposals Irrevocable after Submission Deadline

Proposals shall be irrevocable for a period of **ninety (90) calendar** days running from the moment that the Submission Deadline passes.

[End of Part 1]

PART 2 – EVALUATION AND AWARD

2.1 Stages of Evaluation

The Government will conduct the evaluation of proposals in the following stages:

2.2 Stage I – Mandatory Submission Requirements

Stage I will consist of a review to determine which proposals comply with all of the mandatory submission requirements. Proposals that do not comply with all of the mandatory submission requirements as of the Submission Deadline will, subject to the express and implied rights of the Government, be rejected. The mandatory submission requirements are listed in Section C of the RFP Particulars (Appendix D).

2.2.1 No Amendment to Forms

Other than inserting the information requested on the mandatory submission forms set out in the RFP, a proponent may not make any changes to any of the forms. Any proposal containing any such changes, whether on the face of the form or elsewhere in the proposal, may be disqualified.

2.3 Stage II – Evaluation

Stage II will consist of the following two sub-stages:

2.3.1 Mandatory Technical Requirements

The Government will review the proposals to determine whether the mandatory technical requirements as set out in Section D of the RFP Particulars (Appendix D) have been met. Proposals that do not comply with all of the mandatory technical requirements will, subject to the express and implied rights of the Government, be disqualified and not evaluated further.

2.3.2 Rated Criteria

The Government will evaluate each qualified proposal on the basis of the non-price rated criteria as set out in Section F of the RFP Particulars (Appendix D).

2.4 Stage III – Pricing

Stage III will consist of a scoring of the submitted pricing of each qualified proposal in accordance with the price evaluation method set out in Pricing (Appendix C). The evaluation of price will be undertaken after the evaluation of mandatory requirements and rated criteria has been completed.

2.5 Selection of Top-Ranked Proponent

After the completion of Stage III, all scores from Stage II and Stage III will be added together and proponents will be ranked based on their total scores. Subject to the reserved rights of the Government, the top-ranked proponent will be selected to enter into the Agreement in accordance with the following section. In the event of a tie, the selected proponent will be the proponent selected by way of lowest price.

2.6 Notice to Proponent and Execution of Agreement

Notice of selection by the Government to the selected proponent shall be given in writing. The selected proponent shall execute the Agreement in the form attached as Appendix A to this RFP and satisfy any other applicable conditions of this RFP, including the pre-conditions of award listed in Section E of the RFP Particulars (Appendix D), within fifteen (15) days of notice of selection. This provision is solely for the benefit of the Government and may be waived by the Government.

2.7 Failure to Enter into Agreement

In addition to all of the Government's other remedies, if a selected proponent fails to execute the Agreement or satisfy any applicable conditions within fifteen (15) days of notice of selection, the Government may, without incurring any liability, withdraw the selection of that proponent and proceed with the selection of another proponent.

[End of Part 2]

PART 3 – TERMS AND CONDITIONS OF THE RFP PROCESS

3.1 General Information and Instructions

3.1.1 Proponents to Follow Instructions

Proponents should structure their proposals in accordance with the instructions in this RFP. Where information is requested in this RFP, any response made in a proposal should reference the applicable section numbers of this RFP.

3.1.2 Proposals in English

All proposals must be written in the English language only.

3.1.3 No Incorporation by Reference

The entire content of the proponent's proposal should be submitted in a fixed form, and the content of websites or other external documents referred to in the proponent's proposal but not attached will not be considered to form part of its proposal.

3.1.4 References and Past Performance

In the evaluation process, The Government may include information provided by the proponent's references and may also consider the proponent's past performance or conduct on previous contracts with the Government or other institutions.

3.1.5 Information in RFP Only an Estimate

The Government and its advisers make no representation, warranty or guarantee as to the accuracy of the information and empirical data contained in this RFP or issued by way of addenda. Any quantities shown or data contained in this RFP or provided by way of addenda are estimates only, and are for the sole purpose of indicating to proponents the general scale and scope of the Deliverables. It is the proponent's responsibility to obtain all the information necessary to prepare a proposal in response to this RFP.

3.1.6 Proponents to Bear Their Own Costs

The proponent will bear all costs associated with or incurred in the preparation and presentation of its proposal, including, if applicable, costs incurred for interviews, travel or demonstrations.

3.1.7 Proposal to be Retained by The Government

The Government will not return the proposal or any accompanying documentation submitted by a proponent.

3.1.8 No Guarantee of Volume of Work or Exclusivity of Contract

The Government makes no guarantee of the value or volume of work to be assigned to the successful proponent. The Agreement will not be an exclusive contract for the provision of the described Deliverables. The Government may contract with others for goods and services the same as or similar to the Deliverables or may obtain such goods and services internally.

3.1.9 Equivalency

When proprietary names, brands, catalogues or reference numbers are specified in the Deliverables, they are intended to set a minimum standard, and preference for any particular material or equipment is not intended. The proponent may offer material or equipment of similar characteristics, type, quality, appearance, finish, method of construction and performance and if doing so must disclose any difference in the characteristics, type, quality, appearance, finish, method of construction or performance of the material or equipment.

3.2 Communication after Issuance of RFP

3.2.1 Proponents to Review RFP

Proponents shall promptly examine all of the documents comprising this RFP, and

- (a) shall report any errors, omissions or ambiguities; and
- (b) may direct questions or seek additional information

in writing by email to the RFP Contact on or before the Deadline for Questions. All questions or comments submitted by proponents by email to the RFP Contact shall be deemed to be received once the email has entered into the RFP Contact's email inbox. No such communications are to be directed to anyone other than the RFP Contact. The Government is under no obligation to provide additional information, and the Government shall not be responsible for any information provided by or obtained from any source other than the RFP Contact. It is the responsibility of the proponent to seek clarification from the RFP Contact on any matter it considers to be unclear. The Government shall not be responsible for any misunderstanding on the part of the proponent concerning this RFP or its process.

3.2.2 All New Information to Proponents by Way of Addenda

This RFP may be amended only by addendum in accordance with this section. If the Government, for any reason, determines that it is necessary to provide additional information relating to this RFP, such information will be communicated to all proponents by addendum. All addenda will be published online at <https://www.gov.bm/procurement-notice>. Each addendum forms an integral part of this RFP and may contain important information, including significant changes to this RFP. Proponents are responsible for obtaining all addenda issued by the Government. In the Submission Form (Appendix B), proponents should confirm their receipt of all addenda by setting out the number of each addendum in the space provided.

3.2.3 Post-Deadline Addenda and Extension of Submission Deadline

If the Government determines that it is necessary to issue an addendum after the Deadline for Issuing Addenda, the Government may extend the Submission Deadline.

3.2.4 Verify and Clarify

When evaluating proposals, the Government may request further information from the proponent or third parties in order to verify or clarify the information provided in the proponent's proposal. The information may include, without limitation, clarification with respect to whether a response meets the mandatory technical requirements set out in Section D of the RFP Particulars

(Appendix D). The response received by the Government shall, if accepted by the Government, form an integral part of the proponent's proposal.

3.3 Notification and Debriefing

3.3.1 Notification to Other Proponents

Once the Agreement is executed by the Government and a proponent, the other proponents may be notified directly in writing of the outcome of the procurement process.

3.3.2 Debriefing

Proponents may request a debriefing after receipt of a notification of the outcome of the procurement process. All requests must be in writing to the RFP Contact and must be made within sixty (60) days of such notification.

3.3.3 Procurement Protest Procedure

If a proponent wishes to challenge the RFP process, it should provide written notice to the RFP Contact in accordance with the Government's Procurement Protest procedures. The notice must provide detailed explanation of the proponent's concern with the procurement process or its outcome.

3.4 Conflict of Interest and Prohibited Conduct

3.4.1 Conflict of Interest

For the purposes of this RFP, the term "Conflict of Interest" includes, but is not limited to, any situation or circumstance where:

- (a) in relation to the RFP process, the proponent has an unfair advantage or engages in conduct, directly or indirectly, that may give it an unfair advantage, including but not limited to (i) having, or having access to, confidential information of the Government in the preparation of its proposal that is not available to other proponents, (ii) communicating with any person with a view to influencing preferred treatment in the RFP process (including but not limited to the lobbying of decision makers involved in the RFP process), or (iii) engaging in conduct that compromises, or could be seen to compromise, the integrity of the open and competitive RFP process or render that process non-competitive or unfair; or
- (b) in relation to the performance of its contractual obligations contemplated under a contract for the Deliverables, the proponent's other commitments, relationships or financial interests (i) could, or could be seen to, exercise an improper influence over the objective, unbiased and impartial exercise of its independent judgement, or (ii) could, or could be seen to, compromise, impair or be incompatible with the effective performance of its contractual obligations.

3.4.2 Disqualification for Conflict of Interest

The Government may disqualify a proponent for any conduct, situation or circumstances, determined by the Government, in its sole and absolute discretion, to constitute a Conflict of Interest as defined above.

3.4.3 Disqualification for Prohibited Conduct

The Government may disqualify a proponent, rescind a notice of selection or terminate a contract subsequently entered into if the Government determines that the proponent has engaged in any conduct prohibited by this RFP.

3.4.4 Prohibited Proponent Communications

Proponents must not engage in any communications that could constitute a Conflict of Interest and should take note of the Conflict of Interest declaration set out in the Submission Form (Appendix B).

3.4.5 Proponent Not to Communicate with Media

Proponents must not at any time directly or indirectly communicate with the media in relation to this RFP or any agreement entered into pursuant to this RFP without first obtaining the written permission of the RFP Contact.

3.4.6 No Lobbying

Proponents shall not in relation to this RFP or the evaluation and selection process, engage directly or indirectly in any form of political action or other activity whatsoever to influence or attempt to influence Parliament, the Government, or to influence or attempt to influence any legislative or regulatory action, in the selection or evaluation of any proponent.

3.4.7 Illegal or Unethical Conduct

Proponents must not engage in any illegal business practices, including activities such as bid-rigging, price-fixing, bribery, fraud, coercion or collusion. Proponents must not engage in any unethical conduct, including lobbying, as described above, or other inappropriate communications; offering gifts to any employees, officers, agents, elected or appointed officials or other representatives of the Government; deceitfulness; submitting proposals containing misrepresentations or other misleading or inaccurate information; or any other conduct that compromises or may be seen to compromise the competitive process provided for in this RFP.

3.4.8 Past Performance or Past Conduct

The Government may prohibit a supplier from participating in a procurement process based on past performance or based on inappropriate conduct in a prior procurement process, including but not limited to the following:

- (a) illegal or unethical conduct as described above;
- (b) the refusal of the supplier to honour its submitted pricing or other commitments; or

- (c) any conduct, situation or circumstance determined by the Government, in its sole and absolute discretion, to have constituted an undisclosed Conflict of Interest.

3.4.9 No Collusion

Proponents must not engage in any collusion and must sign the certificate as set out in the Certificate of Confirmation of Non-Collusion (Appendix E).

3.5 Confidential Information

3.5.1 Confidential Information of The Government

All information provided by or obtained from the Government in any form in connection with this RFP either before or after the issuance of this RFP

- (a) is the sole property of the Government and must be treated as confidential;
- (b) is not to be used for any purpose other than replying to this RFP and the performance of any subsequent contract for the Deliverables;
- (c) must not be disclosed without prior written authorization from the Government; and
- (d) must be returned by the proponent to the Government immediately upon the request of the Government.

3.5.2 Confidential Information of Proponent

A proponent should identify any information in its proposal or any accompanying documentation supplied in confidence for which confidentiality is to be maintained by the Government. The confidentiality of such information will be maintained by the Government, except as otherwise required by the Public Access to Information Act 2010 or by order of a court or tribunal. Proponents are advised that their proposals will, as necessary, be disclosed on a confidential basis to advisers retained by the Government to advise or assist with the RFP process, including the evaluation of proposals. If a proponent has any questions about the collection and use of personal information pursuant to this RFP, questions are to be submitted to the RFP Contact.

3.6 Reserved Rights and Limitation of Liability

3.6.1 Reserved Rights of The Government

The Government reserves the right to

- (a) make public the names of any or all proponents;
- (b) make changes, including substantial changes, to this RFP provided that those changes are issued by way of addendum in the manner set out in this RFP;
- (c) request written clarification or the submission of supplementary written information in relation to the clarification request from any proponent and incorporate a proponent's response to that request for clarification into the proponent's proposal;

- (d) assess a proponent's proposal on the basis of: (i) a financial analysis determining the actual cost of the proposal when considering factors including quality, service, price and transition costs arising from the replacement of existing goods, services, practices, methodologies and infrastructure (howsoever originally established); and (ii) in addition to any other evaluation criteria or considerations set out in this RFP, consider any other relevant information that arises during this RFP process;
- (e) waive formalities and accept proposals that substantially comply with the requirements of this RFP;
- (f) verify with any proponent or with a third party any information set out in a proposal;
- (g) check references other than those provided by any proponent;
- (h) disqualify a proponent, rescind a notice of selection or terminate a contract subsequently entered into if the proponent has engaged in any conduct that breaches the process rules or otherwise compromises or may be seen to compromise the competitive process;
- (i) select a proponent other than the proponent whose proposal reflects the lowest cost to the Government;
- (j) cancel this RFP process at any stage;
- (k) cancel this RFP process at any stage and issue a new RFP for the same or similar deliverables;
- (l) accept any proposal in whole or in part; or
- (m) reject any or all proposals;

and these reserved rights are in addition to any other express rights or any other rights that may be implied in the circumstances.

3.6.2 Limitation of Liability

By submitting a proposal, each proponent agrees that

- (a) neither the Government nor any of its employees, officers, agents, elected or appointed officials, advisors or representatives will be liable, under any circumstances, for any claim arising out of this proposal process including but not limited to costs of preparation of the proposal, loss of profits, loss of opportunity or for any other claim; and
- (b) the proponent waives any claim for any compensation of any kind whatsoever, including claims for costs of preparation of the proposal, loss of profit or loss of opportunity by reason of the Government's decision to not accept the proposal submitted by the proponent, to enter into an agreement with any other proponent or to cancel this proposal process, and the proponent shall be deemed to have agreed to waive such right or claim.

3.7 Governing Law and Interpretation

These Terms and Conditions of the RFP Process (Part 3)

- (a) are intended to be interpreted broadly and independently (with no particular provision intended to limit the scope of any other provision);
- (b) are non-exhaustive and shall not be construed as intending to limit the pre-existing rights of the Government; and
- (c) are to be governed by and construed in accordance with the laws of Bermuda applicable therein.

[End of Part 3]

APPENDIX A – FORM OF AGREEMENT

AGREEMENT

The Employer is Government of Bermuda, Ministry of Public Works
PO Box HM 525, Hamilton, HM CX, Bermuda

The Contractor is _____

The Employer desires the execution of certain Works known as _____

OFFER

The Contractor has examined the documents listed in the Appendix which forms part of this Agreement and offers to execute the Works in conformity with the Contract for the sum of

(in words) _____
(in figures) \$ _____

This offer, of which the Contractor has submitted two signed originals, may be accepted by the Employer by signing and returning one original of this document to the Contractor before

(insert date) _____

The Contractor understands that the Employer is not bound to accept the lowest or any offer received for the Works.

Signature: _____ Authorised to sign on behalf of the Contractor

Name: _____ Date: _____

Capacity: _____

ACCEPTANCE

The Employer has by signing below, accepted the Contractor's offer and agrees that in consideration for the execution of the Works by the Contractor, the Employer shall pay the Contractor in accordance with the Contract. This Agreement comes into effect on the date when the Contractor receives one original of this document signed by the Employer.

Signature: _____ Authorised to sign on behalf of the Ministry of Public Works

Name: _____ Date: _____

Capacity: _____

The General provisions below are modification and clarifications of the FIDIC Short Form Contract. All other clauses remain the same.

Sub- Clause	Item	Data
1	General Provisions	
1.1.1	Documents forming the Contract listed in order of priority(delete if not applicable)	Document Identification
	(a) The Agreement	Sample included in Tender Documents
	(b) Letter of Acceptance	Issued after Tender
	(c) Addenda	Identify in Appendix B Submission Form
	(d) Particular Conditions	Included in Tender Documents
	(e) General Conditions	Included in Tender Documents
	(f) Drawings and Specifications	Included in Tender Documents
1.1.9	Time for Completion	----- days
1.4	Law of the Contract	Laws of Bermuda
1.5	Language	English
2	The Employer	Ministry of Public Works (the <i>Ministry</i>)
2.1	Provision of Site	During normal facility operating hours, starting on the Commencement Date. Extended hours allowed; must be arranged with Employer.

Sub-Clause	Item	Data
2.3	Employer's Instructions	The Contractor shall not affect existing public water supply systems without prior authorization
3	Employer's Representatives	
3.1	The Engineer	Chief Engineer
4	The Contractor	
4.4	Performance Security:	
4.4	Amount	\$nil
4.4	Form	Not required
5	Design by Contractor	
5.1	Requirements for Contractor's design	Nil
7	Time for Completion	
7.2	Time for submission	Within 14 days of the Commencement Date
7.3	Form of programme	Electronic format (e.g. Microsoft Project)
7.4	Amount payable due to failure to	\$150 per day
		up to a maximum of 10% of sum stated in the Agreement
9	Remedying Defects	
9.1	Period for notifying defects	365 days calculated from the date stated in the notice under Sub-Clause 7.1
10	Variations and Adjustments	

Sub-Clause	Item	Data
10.2	Day work rates	Attach hourly rates for labour with Tender. See Appendix C Pricing.
11	Contract Price and Payment	
11.1	Lump sum price	As per Appendix C Pricing
11.2	Percentage of value of Materials and Plant	Materials 80% Plant 90%
11.3	Percentage of retention	10%
11.4	Payment of first half of retention	Payment within 28days after notice issued under Sub-Clause 8.2
11.5	Payment of second half of retention	On completion of defects as provided in the notice under Sub-Clause 9.1
11.7	Currency of payment	Bermuda Dollars
11.8	Rate of interest	0.5 % per annum
14	Insurance	
14.1	The Works, Materials, Plant and fees	The sum stated in the Agreement plus 15%
14.1	Contractor's Equipment	Full replacement cost
14.1	Third party injury to persons and	\$ 1,000,000.00
14.1	Workers	\$ 1,000,000.00
	Other Cover	_____

Sub- Clause	Item	Data
	Exclusions	_____
15	Claims Disputes and Arbitration	
15.1	Rules	Bermuda Arbitration Act 1986
15.3	Appointing authority	In accordance with the Bermuda Arbitration Act 1986
15.3	Place of Arbitration	Bermuda

CONDITIONS OF CONTRACT

GENERAL CONDITIONS

The conditions of contract are the Conditions of Contract for the Short Form of Contract, First Edition 1999, published by the Federation Internationale des Ingenieurs-Conseils (FIDIC).

The General Conditions of Contract are amended by the particular conditions of Contract.

PARTICULAR CONDITIONS

PREAMBLE

These Particular Conditions supplement the General Conditions, and shall modify, delete and/or add to the General Conditions. Where any clause, paragraph, or sub-paragraph in the General Conditions is supplemented by one of the following paragraphs, the provisions of such clause, paragraph, or sub-paragraph shall remain in effect and the supplemental provisions shall be considered as added thereto. Where any clause, paragraph, or sub-paragraph in the General Conditions is amended, deleted or superseded by any of the following paragraphs, the provisions of such clause, paragraph, or sub-paragraph, not so amended, deleted or superseded shall remain in effect.

Clause numbers herein refer to the same clause numbers as in the General Conditions.

A. REFERENCES FROM CLAUSES IN THE GENERAL CONDITIONS

THE CONTRACTOR

Facilities

4. 5

Add the following Sub-Clauses:

The Contractor shall make his own arrangements for all local accommodation he may require for offices, yards, stores, labour, etc., all buildings and all services in connection therewith which are required for the efficient execution of the Works. The Contractor shall pay proper regard to the prevention of obstruction of public roads and walkways and the avoidance of nuisance to the public and to residents.

Electricity, Water and Gas

4. 6

	4. 6	1	The Contractor shall be responsible for the provision of all, power water and other services that he may require for the Works and shall pay and bear all costs associated therewith.
	4. 6	2	The Contractor shall carry out the Works so that there is the minimum of interruption to the supply of water, telephone, electricity and other services through existing mains and services. Work involving interference with existing works of any kind shall only be carried out with the permission of and during such times and in such a manner as are agreed in writing by the Engineer or competent Authority.
Reporting of` Errors	4. 7		The Contractor shall examine and compare the Contract Documents and shall report any errors, inconsistencies, or omissions he may find to the Engineer immediately.
Damage to Persons and Property	4. 8		The Contractor shall, immediately on occurrence of any incident involving loss or injury at or about the Site, or in connection with the execution of the Works, report such incident to the Engineer or the Engineer's Representative. The Contractor shall also report such incident to the appropriate Authority whenever such report is required by Law.
Rates, Wages, Hours and Conditions of Labour	4. 9		The Contractor shall pay to all Foremen, Craftsmen, and Labourers not less than the rates of wages for the various Foremen, Craftsmen, and Labourers that prevail in Bermuda, and comply with such requirements relating to hours of work and conditions of labour as are or may be laid down from time to time by the Laws of Bermuda.
Facilities for Staff and Labour	4. 10		<p>The Contractor shall provide such accommodation and amenities as he may consider necessary for all his expatriate staff and labour, employed for the purposes of or in connection with the Contract.</p> <p>The Contractor shall comply with all local statutes and regulations and any amendments thereto with regard to the health and safety of his employees and others, and shall provide adequate latrines for his workers on the Site to conform with the requirements of the Department of Health.</p>

Display of Notices	4. 11	The Contractor shall post notices to inform the workers of their conditions of work in conspicuous places at the establishments and work places concerned.
Alcoholic Liquor and Drugs	4. 12	The Contractor shall not, otherwise than in accordance with the Statutes, Ordinance and Government Regulations or Orders for the time being in force, import, sell, give, barter, or otherwise dispose of any alcoholic liquor, or drugs, or permit, or suffer any such importation, sale, gift, barter, or disposal by his sub-contractors, agents, or employees.
Arms and Ammunition	4. 13	The Contractor shall not give, barter, or otherwise dispose of to any person or persons, any arms or ammunition of any kind or permit or suffer the same aforesaid.
Festivals and Religious Festivals	4. 14	The Contractor shall in all dealings with labour in his employment have due regard to all recognised festivals, public holidays, days of rest, and religious or other customs.
Epidemics	4. 15	In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders, and requirements as may be made by the Government, or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.
Supply of Drinking Water	4. 16	The Contractor shall so far as is reasonably practicable having regard to local conditions provide on the site, to the satisfaction of the Engineer's Representative, an adequate supply of drinking water and other water for the use of the Contractor's staff and work people.

RESOLUTION OF DISPUTES

- 15. 1** Delete Clause 15.1 in its entirety.
- 15. 2** This clause is deleted in its entirety and replaced by:

If a dispute (of any kind whatsoever) arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Engineer, a notice of dissatisfaction shall be issued by either Party to the other Party. Where such notice is given both Parties shall attempt to settle the dispute amicably before the

commencement of arbitration. However, unless both Parties agree otherwise, arbitration may be commenced on or after the fifty-sixth day after the day on which notice of dissatisfaction was given, even if no attempt at an amicable settlement has been made.

15. 3

This clause is deleted in its entirety and replaced by:

Unless settled amicably, any dispute shall be finally settled by arbitration, unless otherwise agreed by both Parties:

- (a) the dispute shall be finally settled in accordance with the Bermuda Arbitration Act 1986
- (b) the dispute shall be settled by arbitrators appointed in accordance with the said Act, and

- (c) the arbitration shall be conducted in the English language.

The arbitrator(s) shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Engineer, relevant to the dispute. Nothing shall disqualify the Engineer from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute.

Neither Party shall be limited in the proceedings before the arbitrator(s) to the evidence or arguments previously put before the Engineer to obtain his decision, or to the reasons for dissatisfaction given in its notice of dissatisfaction. Any decision of the Engineer shall be admissible in evidence in the arbitration.

Arbitration may be commenced prior to or after completion of the Works, by mutual agreement. The obligations of the Parties and the Engineer shall not be altered by reason of any arbitration being conducted during the progress of the Works.

**ADDITIONAL
CLAUSES**

Taxation	16. 1	The Contractor shall be required to pay Bermudian Taxes on all Contractor's Equipment (except as described in the Fifth Schedule, Section 2 of the Customs Tariff Act 1970) materials and other things of whatsoever nature brought into Bermuda for the purpose of Contract.
Bribery	17. 1	Any commission, advantage, gift, gratuity, reward, or bribe given, promised, or offered by or on behalf of the Contractor or his agent or servant or any person on his or their behalf to any officer, servant, representative, or agent of the Employer or of the Engineer or to any person on their behalf or on behalf of any of them in relation to the obtaining or to the execution of this or of any other Contract with the Employer shall in addition to any criminal liability which may be thereby incurred subject the Contractor to the cancellation of this and of all other contracts which he may have entered into with the Employer and also to the payment of any loss or damage resulting from such cancellation.
	17. 2	The Employer shall be entitled upon a certificate in writing of the Engineer to deduct the amounts so certified from any monies or otherwise due to the Contractor under this or any other contract or to recover the said amounts as a debt due or partly the one and partly the other as the Employer shall deem advisable.
Strikes and Lock-Outs	18. 1	The Contractor shall forthwith notify the Engineer of the commencing of any strike or lock-out and the Engineer on account of any delay caused thereby may, after consultation with the Employer, grant such extension of time as he considers reasonable without prejudice to the right of the Employer to exercise after the expiration of such reasonable extension of time the rights and powers under these Conditions in case of default by the Contractor.
Laws, Regulations and Orders	19. 1	The Contractor shall make himself fully acquainted with the Laws, Regulations and Orders of Bermuda and of any competent/statutory Authority and shall conform in all respects therewith during the continuance of the

Contract. He shall conform similarly with any such Laws, Regulations and Orders which may come in to force after the date of this Agreement.

Construction of Contract

20. 1

The Contract shall in all respects be constructed and operated in conformity with the Laws of Bermuda and the respective rights and liabilities of the Parties shall be in accordance with the Laws for the time being in force.

Members and Staff of Employer and Engineer not Personally Liable

21. 1

Neither the members nor the staff of the Employer or the Engineer shall be in any way personally bound or liable for the acts or obligations of the Contractor under the Contract or answerable for any default or omission in the observance or performance of any of the acts, matters or things which are herein contained.

Details to be Confidential

22. 1

The Contractor shall treat the details of the Contract as private and confidential, save in so far as may be necessary for the purposes thereof, and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere without the previous consent in writing of the Employer or the Engineer. If any dispute arises as to the necessity or disclosure for the purpose of the Contract the same shall be referred to the decision of the Employer whose award shall be final.

RIGHTS AND REMEDIES NOT WAIVED

23. 1

In no event shall the making by the Employer of any payment to the Contractor constitute or be construed as a waiver by the Employer of any breach of Contract, or any default which may then exist, on the part of the Contractor, and the making of any such payment by the Employer while any such breach or default exists shall in no way impair or prejudice any right or remedy available to the Employer in respect of such breach or default.

Agreement Acknowledgement of Appendix A

(Note: all sheets form part of the Proponent Proposal)

FIDIC Standard Short Form of Agreement

Acknowledgement Letter

This is to certify that I, _____ (name), in the position of _____ hereby acknowledge that I am aware of the terms and conditions of the attached FIDIC Conditions of Contract for the Short Form of Contract, First Edition 1999, published by the Federation Internationale des Ingenieurs-Conseils (FIDIC).

I acknowledge that the following documents have been provided in the Request for Tender package and at the date of this submission I have no issue with the terms and conditions of this agreement.

- FIDIC Short Form Contract including General Conditions and Particular Conditions
- Specifications and Drawings

Signed: _____

Print Name: _____

Title: _____

Company: _____

Date: _____

APPENDIX B – SUBMISSION FORM

1. Proponent Information

Please fill out the following form, naming one person to be the proponent's contact for the RFP process and for any clarifications or communication that might be necessary.	
Full Legal Name of Proponent or Personal/Given Name:	
Representative Name (Person with Signing Authority) / Title:	
Full Legal Name of Proponent:	
Any Other Relevant Name under which Proponent Carries on Business:	
Street Address:	
City, Province/State:	
Country:	
Postal Code:	
Phone Number:	
Proponent's Social Insurance Number issued by the Government of Bermuda:	
Proponent's Payroll Tax Number issued by the Government of Bermuda:	
Company Website (if any):	
Proponent Contact Name and Title:	
Proponent Contact Phone:	
Proponent Contact Fax:	
Proponent Contact Email:	

2. Offer

The proponent has carefully examined the RFP documents and has a clear and comprehensive knowledge of the Deliverables required under the RFP. By submitting a proposal, the proponent agrees and consents to the terms, conditions and provisions of the RFP, including the Form of Agreement, and offers to provide the Deliverables in accordance therewith at the rates set out in its proposal.

3. Rates

The proponent has submitted its rates in accordance with the instructions in the RFP and in Pricing (Appendix C) in particular. The proponent confirms that it has factored all of the provisions of Appendix A, including insurance and indemnity requirements, into its pricing assumptions and calculations.

4. Addenda

The proponent is requested to confirm that it has received all addenda by listing the addenda numbers, _____ to _____ (if applicable) issued by the Government, or if no addenda were issued by the Government write the word "None". The onus is on proponents to make any necessary amendments to their proposals based on the addenda. The proponent confirms it has read, received and complied with these addenda. Proponents who fail to complete this section will be deemed to have received all posted addenda.

5. No Prohibited Conduct

The proponent declares that it has not engaged in any conduct prohibited by this RFP.

6. Conflict of Interest

Proponents must declare all potential Conflicts of Interest, as defined in section 3.4.1 of the RFP. This includes disclosing the names and all pertinent details of all individuals (employees, advisers, or individuals acting in any other capacity) who (a) participated in the preparation of the proposal; **AND** (b) were employees of the Government within twelve (12) months prior to the Submission Deadline.

If the box below is left blank, the proponent will be deemed to declare that (a) there was no Conflict of Interest in preparing its proposal; and (b) there is no foreseeable Conflict of Interest in performing the contractual obligations contemplated in the RFP.

Otherwise, if the statement below applies, check the box.

- The proponent declares that there is an actual or potential Conflict of Interest relating to the preparation of its proposal, and/or the proponent foresees an actual or potential Conflict of Interest in performing the contractual obligations contemplated in the RFP.

If the proponent declares an actual or potential Conflict of Interest by marking the box above, the proponent must set out below details of the actual or potential Conflict of Interest:

7. Proposal Irrevocable

The proponent agrees that its proposal shall be irrevocable for a period of **Ninety (90) Calendar** days following the Submission Deadline.

8. Disclosure of Information

Any information collected or used by or on behalf of the Government under this solicitation document is subject to the Public Access to Information Act 2010 (“Act”). The information belongs to a class of information that might be made available to the general public unless it is contained in a record that is exempt from disclosure under the Act. Any questions regarding the collection, use, or disclosure of the information should be directed to the public authority that issued this solicitation document.

9. Execution of Agreement

The proponent agrees that in the event its proposal is selected by the Government, in whole or in part, it will finalize and execute the Agreement in the form set out in Appendix A to this RFP in accordance with the terms of this RFP.

Signature of Witness

Signature of Proponent Representative

Name of Witness

Name of Proponent Representative

Title of Proponent Representative

Date

I have the authority to bind the proponent.

APPENDIX C – PRICING

1. Instructions on How to Provide Pricing

- (a) Proponents should provide the information requested under section 3 below (“Required Pricing Information”) by reproducing and completing the table below in their proposals, or, if there is no table below, by completing the attached form and including it in their proposals.
- (b) Unless stated otherwise in the RFP documents, the Agreement shall be for the whole Works as detailed in these documents and shown on the drawings and based on the completed pricing information, as submitted by the proponent.
- (c) The proponent shall fill in separate prices for all items of works described in the Price Breakdown. Items against which no price is entered by the Proponent will not be paid for by the Ministry when executed and shall be deemed covered by the other lump sum prices in the Price Breakdown.
- (d) Pricing must be provided in Bermuda funds, inclusive of all applicable duties and taxes.
- (e) Pricing quoted by the proponent must be all-inclusive and must include all labour and material costs, all travel and carriage costs, all insurance costs, all costs of delivery, all costs of installation and set-up, including any pre-delivery inspection charges, and all other overhead, including any fees or other charges required by law.
- (f) Submit individual rates for labour, materials, and mark-ups as indicated in the Labour, Materials, and Mark-Up Rates Form.

2. Evaluation of Pricing

Pricing is worth Sixty (60) points of the total score.

Components to be evaluated include:

- i. The lowest price shall be awarded 10 points (all prices within 5% will receive the same price points). The next lowest price (beyond 5%) will receive 7.5 points. Points for other submissions will be assigned with 2.5 fewer points for each successively higher priced price proposal. But again, each time the same score will be awarded if successive prices are within 5% of the last highest price.
- ii. Notwithstanding the technical / managerial and price scores, the Government reserves the right to reject any proposal where prices are deemed to be unreasonable relative to other prices proposed, typically a 25% variance from the average qualified proposal (excluding the proposal in question).
- iii. The Government reserves the right to negotiate any or all conditions of the Contractor’s proposed work plan and reject all submitted proposals.
- iv. The Government reserves the right to award a contract to the Proponent whose services are judged most likely to produce a project, which results in best overall value to the Government. The lowest priced tender or highest qualified bid, or any bid, will not necessarily be accepted.

In addition to any rights to verify, clarify and supplement,

- (a) The Government will examine the responses to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed, and whether the bids are generally in order.
- (b) Arithmetical errors will be rectified on the following basis:
 - (i) Where there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the Proponent does not accept the correction of errors, its Bid will be rejected. If there is a discrepancy between words and figures the amount in words will prevail;
 - (ii) Where there is a discrepancy between the amounts in figures and in words, the amounts in words will govern; and
 - (iii) Where there is a discrepancy between the individual lump sums and the total amounts derived for the sum of the individual lump sum, the individual lump sum as quoted will govern, and the total amount will be corrected.

3. Required Pricing Information

**Tank Rehabilitation Works
Price Breakdown – Appendix C**
(Note: all sheets form part of the proposal)

ITEM	DESCRIPTION	QUANTITY	SUM in Works and Figures
1.	Clean out Existing Tanks	Lump Sum	
2.	Repair holes and cracks	Lump Sum	
3.	Surface Preparation works	Lump Sum	
4.	Apply Liner	Lump Sum	
5.	Final Clean/disinfection	Lump Sum	
6.	Watertightness Testing	Lump Sum	
7.	10 year Warranty	Lump Sum	
8.	Proponent specified items: Any elements of work or expenditure not covered elsewhere in the Tender Price Analysis and are necessary in the execution of this work. Proponent to itemise:	Lump Sum	
TOTAL SUM FOR Tank Rehabilitation WORKS			
Number of sheets, appended by the Proponent to this Form..... (If nil, enter NIL). SIGNED ON BEHALF OF PROPONENT:			

Labour and Mark-Up Rates – Appendix C continues

(Note: all sheets form part of the tender)

Labour & Equipment Rates for Tank Rehabilitation Works

ITEM	DESCRIPTION	QUANTITY	RATE
1.	Foreman/Site Supervisor	Hourly Rate	
2.	Pipe Fitter	Hourly Rate	
3.	Labour	Hourly Rate	
4.	Contractor specified items: Additional Day Work Rates for Labour, Materials or Equipment necessary for the execution of this work.		

Mark-Up Rates for Tank Rehabilitation Works

ITEM	DESCRIPTION	RATE (%)
1.	Overhead and Mark-Up (own work)	
2.	Mark-Up (Sub-Contracted labour and materials)	

Contract Duration

Contract Period: calendar weeks
Proposed Start Date: 2018
Proposed Completion Date: 2018

Dated this ____ day of ____ 2018.

SIGNED:

(Signature) _____ in the capacity of _____

(Block letters) _____

Duly authorized to sign proposals for and on behalf of:

(Firm) _____ (Address) _____

APPENDIX D – RFP PARTICULARS

A. THE DELIVERABLES

Description of the Work in accordance with Specifications (Exhibit A) and the following:

This work involves repair of the interior surface of the Fort Victoria Reservoir and seal the surface with a protective Polyurethane Elastomer Lining System for use with potable water. This tender involves:

- .1 Pressure washing of floor and wall surfaces.
- .2 Stopping Leaks by repair and sealing of the concrete to include removal of unsound and unbonded materials, chemical grouting, patching compounds, resurfacing compounds, and plugging compounds. Chip and make permanent repairs of all perimeter wall and floor cracks and /or holes.
- .3 Surface preparation, and installation of the Polyurethane Elastomer Lining System such as Sher-flex, Silkaflex or equivalent, to include protection of surfaces not to be treated, touch-up, clean-up, and appurtenant work all in accordance with the requirements of the Contract Documents and this Specification.

The purpose of this work is to seal the tank and protect the underlying concrete.

Warranty of Works

- .1 Upon Completion of this waterproofing test and passing of the watertightness test the Contractor shall guarantee that the tank will not leak, for at least 10 years.
- .2 Should a leak develop in the first year, the Contractor shall make all necessary repairs at absolutely no cost to Works and Engineering. Prior to release of retention the tanks shall successfully pass a watertightness test.
- .3 The Contractor shall submit details of a 10 year warranty together with any additional works necessary to fulfil a 10 year warranty.

B. MATERIAL DISCLOSURES

N/A

C. MANDATORY SUBMISSION REQUIREMENTS

1. Submission Form (Appendix B)

Each proposal must include a Submission Form (Appendix B) completed and signed by an authorized representative of the proponent.

2. Pricing (Appendix C)

Each proposal must include pricing information that complies with the instructions contained in Pricing (Appendix C).

3. Other Mandatory Submission Requirements

a) Acknowledgement Agreement of Appendix A - FIDIC Standard Short Form of Agreement

Each bid must include a signed copy of the FIDIC Standard Short Form of Agreement.

b) Certificate of Confirmation of Non-Collusion (Appendix E)

Each bid must include a signed copy of the Certificate of Confirmation of Non-Collusion (Appendix E).

c) Local Benefits (Social, Economic and Environmental) (Appendix F)

Each proposal must include a local benefits (Social, Economic and Environmental) (Appendix F) completed and signed by an authorized representative of the proponent.

d) Attach a copy of the Company`s Certificate of Incorporation.

Proponent, who are incorporated, must include a copy of their Company`s Certificate of Incorporation.

e) Joint Venture Agreement Proponent is to provide a copy of the agreement entered into by the joint venture partners shall be submitted with the proposal.

f) Personnel Qualifications and References– (Appendix G)

Each proposal must include a signed copy of the Personnel Qualifications and Reference form. The Proponent must have a minimum of 5 years' experience in the provision of contracting services to provide concrete coating works. Assigned Proponent Project Manager: 5 years of experience in waterproofing sealant works. The Proponent shall submit with his completed proposal all appropriate documentation in order to demonstrate the necessary experience and expertise. This shall include descriptions of relevant and similar past projects, details of their Project Team with resumes of key personnel to be assigned to the project and the names and full details of experience of any sub-contractors .List of Subcontractor (if applicable)

g) Letter from principal bank confirming credit status of the proponent

h) Safety and Health Plan for the Project;

i) Method Statement on how the work is to be completed;

j) Proponent`s Schedule

Proponents are advised that in order to comply with the bidding procedure for this Contract, Proponents shall include with their completed proposal a statement of the length of time required to complete the Works. The Ministry may request a complete detailed schedule for completion of the works after the submission of tenders in order to fully evaluate the proposals.

The schedule shall be in the form of a bar chart in electronic format (e.g. Microsoft Project) and will be fully detailed to include all construction activities from commencement to completion of the project. All critical path construction activities will be identified. The key milestones in the construction process will also be identified.

Proponents are to specify their most cost effective completion date.

The Proponent shall make every effort to complete the Works by the stipulated completion date, and shall adjust his schedule of activities accordingly.

The Proponent shall pay extra costs to complete the work on schedule, which may be incurred because of: increasing the labour force; increasing working hours either by overtime or by using shifts; using more equipment and machinery; or any other procedure which must be used.

Include in proposal for any overtime or abnormal shift required to complete the project. Allow for extra care to minimize disruptions in an operational facility.

D. MANDATORY TECHNICAL REQUIREMENTS

N/A

E. PRE-CONDITIONS OF AWARD

Safety and Health

- .1 All work must be carried out in strict accordance with the Bermuda Occupational Safety and Health Act 1982 and the Occupational Safety and Health regulations of 2009, and any subsequent revision
- .2 Alcohol, Smoke and Drug-Free Policy: All Government buildings and work sites are designated as alcohol, smoke and drug-free.
- .3 Please note: the Department of Works and Engineering policy includes the provision that no alcohol or prohibited drugs shall be consumed on the site or in any vehicle related to the work or service provided. Also, no employ of the contractor or sub-contractor shall be under the influence of alcohol or drugs whilst at work.

F. RATED CRITERIA

The following sets out the categories, weightings and descriptions of the rated criteria of the RFP. Proponents who do not meet a minimum threshold score for a category will not proceed to the next stage of the evaluation process.

Rated Criteria Category	Weighting (Points)	Minimum Threshold
i. Technical Competence of Contractor's Team / Organisation	30 points	N/A
ii. Local Benefits (Appendix F)	10 points	N/A
iii. Pricing (See Appendix C for details)	60 points	N/A
Total Points	100 points	N/A

Evaluation Matrix

Technical Competence of Contractor's Team / Organisation	Score / 10	Weighting	Weighted Score
Rank the availability of competent and qualified personnel and other resources available to perform Services in the required timeframe, including the qualifications and past performance of assigned staff on similar assignments	/10	1.0	/10
Rank contractor's Corporate Background and performance on similar projects	/10	1.0	/10
Contractor's attendance of pre bid site meeting	/10	1.0	/10
Technical / Managerial Score:			/30

B LOCAL BENEFITS

SOCIAL, ECONOMIC AND ENVIRONMENTAL	Score / 10	Weighting	Weighted Score
Percentage of Workforce that are Bermudian	/10	.5	/5
Does the Proponent offer evidence of training positions or be willing to offer them	/10	.5	/5
Prices and Rates Score:			/10

C. FINANCIAL - PRICES AND RATES:

FINANCIAL EVALUATION	Score / 10	Weighting	Weighted Score
price (include all costs)	/10	4.0	/40
The Proponent is in a stable Financial Position	/10	1.0	/10
The Proponent has no outstanding Government debt	/10	1.0	/10
Prices and Rates Score:			/60

TOTAL EVALUATION SCORE: _____/100

Evaluation Criteria

A. Technical/Managerial Competence Evaluation Criteria

Components to be evaluated include:

- i. Availability of competent and qualified personnel and other resources to perform the Services;
- ii. qualifications and past performance of assigned staff for similar assignments;
- iii. the Contractor's Corporate Background and performance on similar projects;
- iv. proposed quality management plan for the project;
- v. Business integrity management system;

B. Local Benefits (Appendix F)

The proposal shall be evaluated on their:

- (a) Engagement of Bermudian Workforce during the project
- (b) Use of Local Businesses in the proponent's supply chain
- (c) Use of Local Sub-contractors (if applicable)
- (d) Submit Safety and Health record for three years of reporting
- (e) Environmental Considerations and Policy (Proponent to provide copy)

APPENDIX E – CERTIFICATE OF CONFIRMATION OF NON-COLLUSION

Notes for the Proponent

The essence of Open Tendering is that the Government of Bermuda shall receive bona fide competitive proposals from all persons tendering. In recognition of this principle, each company that submits a tender will be required, by way of the signature of a duly authorized representative of the company, to confirm that the tender has been submitted without any form of collusion.

All Proponents must complete and sign a Certificate of Confirmation of Non-Collusion. Any proposals submitted which do not include a signed copy of the Certificate will be wholly rejected and will not be included in the evaluation process.

If it is later found that the undertakings made below have been breached at any stage of the procurement process, then the Proponent will be expelled from the process immediately. In the event that this is discovered after a contract award, legal action may be taken against the Proponent and/or any party involved in the matter.

Any Proponent that submits false information in response to a proposal, and any other person or company involved in collusion, may be excluded from tendering for future contracts tendered by the Government of Bermuda.

Confirmation of non-collusion

I/We certify that this is a bona fide proposal, intended to be competitive and that I/We have not fixed or adjusted the amount of the proposal or the rates and prices quoted by or under or in accordance with any agreement or arrangement with any other person.

I/We confirm that we have not received any information, other than that contained within the tender pack, or supplementary information provided to all Proponents.

I/We also certify that I/We have not done and undertake that I/We will not do at any time any of the following acts:

- (a) communicating to a person other than the RFP Contact the amount or approximate amount of my/our proposed Tender (other than in confidence in order to obtain quotations necessary for the preparation of the Tender for insurance) or
- (b) entering into any agreement or arrangement with any other person that he shall refrain from tendering or as to the amount of any proposal to be submitted; or
- (c) offering or agreeing to pay or give or paying any sum of money, inducement, gift /hospitality or valuable consideration directly or indirectly to any person in relation to this tender.

Signed

(1) _____ Title _____ Date _____

(2) _____ Title _____ Date _____

for and on behalf of _____

**APPENDIX F - LOCAL BENEFITS
(SOCIAL, ECONOMIC AND ENVIRONMENTAL)**

Do you provide apprenticeships/training positions? _____

Apprenticeships/training positions

Please indicate whether the company has previously or is willing to provide apprenticeships or training positions. If no apprenticeship or training positions exist, indicate. (Add more lines as needed)

NUMBER	NAME	NON	BERMUDIAN	APPRENTICESHIP OR TRAINING PROVIDED BY YOUR COMPANY (month/year)

Number of employees

Please indicate the total number of employees working at the company and the number and percentage of Bermudian employees.

NUMBER NON BERMUDIANS:	
NUMBER BERMUDIANS:	
NUMBER STAFF:	
Percentage of Bermudians	

Proponent will use of Local Businesses in the Proponent's supply chain

Yes _____ No. _____

If no, please provide explanation _____

Proponent will use of Local Sub-contractors (if applicable)

Yes _____ No. _____

If no, please provide explanation _____

Safety and Health and Environmental

Please indicate whether the company has a Safety and Health, sustainable goods and/or services environmental policy and, if so, please provide a copy.

Copy attached Yes _____ No _____

Attach a copy of the Company's Certificate of Incorporation. _____

APPENDIX G – PROJECT PERSONNEL QUALIFICATIONS AND REFERENCES

(Note: all sheets form part of the proponent proposal)

Provide a two page CVs for key personnel (Team Leader, Managerial and general staff) that will be provided to support the implementation of this project. CVs should demonstrate qualifications in areas relevant to the deliverables.

Company Name: _____

Employee Name	Title	Employed Since and Total Years' Experience	Certifications and Dates Received
Relevant Experience (From most recent):			
Period: From – To	Name of activity/ Project/ funding organisation, if applicable:	Job Title and Activities undertaken/Description of actual role performed:	
e.g. June 2012-January 2015			
Etc.			

<p>References no.1 <i>(minimum of 3):</i></p>	<p>Name and Title: [insert here]</p> <p>Project: [insert here]</p> <p>Organization: [insert here]</p> <p>Contact Information – Address; Phone; Email; etc.: [insert here]</p>
<p>Reference no.2</p>	<p>Name and Title [insert here]</p> <p>Project: [insert here]</p> <p>Organization: [insert here]</p> <p>Contact Information – Address; Phone; Email; etc.: [insert here]</p>
<p>Reference no.3</p>	<p>Name and Title [insert here]</p> <p>Project: [insert here]</p> <p>Organization: [insert here]</p> <p>Contact Information – Address; Phone; Email; etc.: [insert here]</p>

EXHIBIT 'A': SPECIFICATIONS

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SECTION 01010: SUMMARY OF WORK

PART 1 – GENERAL

1.1 Scope Of Work Covered By Contract Documents

- A** The Works at the Fort Victoria Reservoir, St Georges Bermuda, will comprise of, but is not limited to the following:
- Pressure washing of floor and wall surfaces.
 - Stopping Leaks by repair and sealing of the concrete to include removal of unsound and unbonded materials, chemical grouting, patching compounds, resurfacing compounds, and plugging compounds. Chip and make permanent repairs of all perimeter wall and floor cracks and /or holes.
 - Surface preparation, and installation of the Polyurethane Elastomer Lining System such as Sher-flex, Silkaflex or equivalent, to include protection of surfaces not to be treated, touch-up, clean-up, and appurtenant work all in accordance with the requirements of the Contract Documents and this Specification.
- B** The Works consist of work necessary to furnish and install a 100% solids polyurethane elastomer such as Sher-flex, Silkaflex, etc or equivalent concrete potable water tank rehabilitation and lining system, as shown on the drawings and as specified herein.
- C** Without limiting the generality of other requirements of these specifications, all work hereunder shall conform to the applicable requirements of the referenced portions of the following documents, to the extent that the requirements therein are not in conflict with the provisions of this Section.
- D** The contractor will be responsible for the transport of all materials to storage on site or off site.
- E** The Project shall be constructed under the FIDIC Conditions of Short Form of Contract.
- #### **1.2 Security of the Site**
- A** The contractor is responsible for maintaining the security of the site area.
- B** The contractor shall ensure that there is no access to the active work site by members of the public during the contract period.
- C** The contractor is responsible for all traffic regulation to ensure a safe working

1.3 Contract Method Of Measurement

A The measure shall be the actual cost of works done excluding any disallowed costs. The actual cost shall be assessed by the Employer’s Representative from the supporting information submitted by the Contractor.

B All work to install the Flexible Coating and Lining System for a Concrete Potable Water Tank Rehabilitation as detailed on the drawings and in these Technical Specifications shall be covered within the prices in the Form of Tender. All prices shall be all-inclusive and include all preliminary set up costs, labour, equipment and materials to complete each task. If a specific task is not identified separately in the Form of Tender, the Contractor shall assume that it is included as part of another related listed item or items.

1.4 Project Programme of Works

A Contractor shall programme the works coordinating all tasks and activities.

B Work sequence shall take into account the operating hours of the Government waste disposal sites.

1.5 Use Of Premises

A Not Applicable

1.6 Work Under Other Contracts

A Not Applicable

***** END OF SECTION 01010 *****

SECTION 01310 PROJECT MANAGEMENT AND COORDINATION

PART 1 – GENERAL

1.1 Submittals

- A** Schedule of Work.
- B** Method Statement for the whole of the works.
- C** Health and Safety plan including a traffic management plan for the whole of the works.
- D** Insurances.

1.2 General

- A** Provide to Employer's Representative for review the submittals specified. Submit with reasonable promptness and in an orderly sequence so as to not cause delay in the Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed.
- B** Prepare and submit a Project Programme fixing the dates for submission and return of test samples.
- C** Do not proceed with Work affected by any submittal until review is complete.
- D** Review submittals prior to submission to the Employer's Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and coordinated with the requirements of the Work and Contract Documents. Submittals not stamped, signed, dated and identified as to the specific project will be returned without being examined and will be considered rejected.
- E** Verify that field measurements and affected adjacent Work are coordinated.
- F** Contractor's responsibility for errors and omission in submission is not relieved by Employer's Representative review of submittals
- G** Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Employer's Representative review.
- H** Keep one review copy of each submission on Site.

1.3 Programme Of Work

- A** Prepare schedule in the form of a linked bar chart. All events, activities and constraints shall be numbered and shall be given a title. Details to be given for each event, activity or constraint should include:
- its title
 - its earliest and latest start and finish dates
 - its scheduled start and finish dates
 - its duration
 - any relevant “must” start or finish dates
 - resources (equipment and labour) required.
- B** PART 1 - Provide a separate bar for each event, activity, operation or constraint. Show proposed progress of all activities for main work items. All construction activities must be identified. Where applicable, indicate labour, construction crews, plant and equipment to be employed.
- C** The project Programme of Works shall provide at least the level of detail listed below:
- Preparation works to clean and clear debris from the tanks
 - Surface treatments and crack repairs as necessary
 - Surface Preparation and installation of Surface lining system
 - Transportation of construction debris to approved site
 - Making good the site area
- D** PART 2 - The key milestones in the construction process shall also be identified. Schedule milestones will include but not be limited to the following:
- Start date on site.
 - Delivery dates for equipment and materials.
 - Completion of preparation works.
 - Completion of liner works
 - Final handover (final completion).
- E** Revise and resubmit programme every two weeks to reflect actual progress on the Works.
- F** With schedule updates, provide written explanations to Employer’s Representative as to why previously reviewed programme is not being met (if

applicable).

G Show changes in operations proposed (if required), to complete construction works within Contract Time.

H No progress payments will be approved until receipt of programme updates acceptable to the Employer's Representative.

1.4 Work Hours

A The Work shall be carried out during normal working hours (7.00 am until 6.00pm Monday to Saturday) unless the Works are unavoidable or necessary for saving life or property or for the safety of the Works, or as per any instruction from an applicable governmental authority. In such cases the Contractor shall advise the Employer's Representative of the need to perform such extraordinary Works.

B The Employer will not accept claims for overtime unless the Works are as a result of an unforeseen condition.

C The Contractor is aware that the Works are to be carried out on public roads which may cause interruption to the Works during peak traffic times.

1.5 Method Statements

A Provide Method Statement for each key activity, as requested by Employer's Representative, to show construction methods, equipment and general methodology for carrying out the Work. Relate Method Statement to activities shown on Construction Programme.

B Method Statement shall identify, among other things:

- Sequencing of works.
- Methods of Preparation.
- Methods of surface treatments.
- Methods to ensure appropriate environmental protection.
- Risk assessment of the hazards involved in the works.
- Other key tasks as specified in the Contract Documents, and/or as requested by the Employer's Representative.

1.6 Certificates

A Within 5 working days after award of Contract, submit certificates of insurances.

1.7 Daily Records

A The Contractor shall maintain accurate daily records of all works undertaken, all resources present on site, and of the progress.

B Records shall be submitted to the Employer at least weekly and the Contractor may inform the Employer's Representative at any time that it is recording pertinent information.

C Records of any Works that have or have not been carried out that may affect the Schedule shall be used to update the Schedule.

1.8 Inspections

A At all times the Employer's Representative shall be allowed to visit the Site to inspect the Works.

B Prior to closing in any part of the Works, the Contractor shall notify the Employer's Representative with at least 48 hours notice and afford him full opportunity to examine the Works before it becomes inaccessible.

C Any trench works closed before the pipe work has been hydro-tested shall be at a minimum, uncovered at the joints to allow the Employer's Representative to inspect the joints during the test. Such Works shall be to the account of the Contractor.

D The Employer's Representative shall reasonably make himself available at the request of the Contractor.

1.9 Safety and Health

A All Works shall be conducted in accordance with the Health and Safety at Work Act 1982. The Contractor shall erect appropriate warning signs and safety barriers.

B All workers under the employ of the Contractor, including any sub contractors

it may employ shall comply with the Health and Safety at Work Act 1982 and at a minimum wear at all times.

1. A hard hat
2. Metal toe safety boots
3. Reflective vests.

Any workers not wearing appropriate safety gear may be requested by the Employer's Representative to leave the Site, at which time they shall inform the Contractor that they have been requested to leave, and not return until they comply with the Applicable Law or regulations.

C All staff and sub-contractors, under the employ of the Contractor, shall be supplied with written health and safety instructions which they shall read, date and sign prior to commencing work. The signed instructions shall be held by the Contractor and copies shall be provided to the Employer.

D In completing the Works, the Contractor shall comply with all Health and Safety requirements of Applicable Law including all licenses issued by the Bermuda Government to permit the Works including, without limitation, the trenching license obtained by the Contractor to complete the Works (the "Trenching License")

***** END OF SECTION 01300 *****

SECTION 01500: TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 Summary

- A** This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection facilities.

1.2 Use Charges

- A** The Contractor will be responsible for all temporary works required and shall be required to test, repair/replace or enhance the utility services as necessary to facilitate the Works.
- B** The Contractor shall allow other entities to use temporary services and facilities without cost, including, but not limited to, Employer's Representative, testing and inspecting agencies and personnel of authorities having jurisdiction.

1.3 Temporary Utility Installation

- A** Electrical Service:

Where necessary, engage appropriate local utility company to install temporary service or connect to existing service. Where utility company provides only part of the service, provide the remainder with matching, compatible materials and equipment. Comply with utility company recommendations.

1. Arrange with utility company, Employer, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
2. Provide adequate capacity at each stage of construction. Before temporary utility is available, provide alternate services.

C

Sanitary Facilities:

Provide temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.

Disposable Supplies: Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Maintain adequate supply. Provide covered waste containers for disposal of used material.

Toilets: Install self-contained toilet units. Shield toilets to ensure privacy.

Wash Facilities: Supply cleaning compounds appropriate for each type of material handled.

Drinking-Water Facilities: Provide bottled-water, drinking-water units. Where power is accessible, provide electric water coolers to maintain dispensed water temperature at 45 to 55 deg F (7.2 to 12.7 deg C).

SECTION 01561: ENVIRONMENTAL PROTECTION

PART 1 - GENERAL

1.1 Environmental Measures

- A** Meet or exceed the requirements of all Bermuda environmental legislation and regulations, including all amendments up to project date provided that in any case of conflict or discrepancy, the more stringent requirements shall apply.
- B** At all times during the Works the Contractor shall maintain the Site and surrounding areas in a clean and orderly manner.

PART 2 – PRODUCTS

- A** Not Applicable.

PART 3 - EXECUTION

3.1 Fires

- A** Fires and burning of rubbish on site will not be permitted.

3.2 Disposal Of Wastes

- A** Burying of rubbish and waste materials on site will not be permitted.
- B** Collect all rubbish and waste material and dispose of in accordance with the latest editions of the Ministry of Works and Engineering, Waste Management Plan.
- C** Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.
- D** When cleaning with needle scabblers, provide enclosures, screens and traps to confine and contain all material and paint debris and other extraneous material.
- E** Do not allow any paint debris or other foreign material to enter the water.
- F** Hazardous waste such as lead paint debris should be double-bagged (as asbestos would be) and sent to proper waste stations. Manifest will be required by the Employer's Representative.

3.4 Drainage

- A** Provide temporary drainage and pumping as necessary to keep site free from water.
- B** Do not pump water containing suspended materials into waterways, sewer or drainage systems.
- C** Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with Bermuda authority requirements.

3.5 Plant Protection

- A** When, in opinion of Employer's Representative, negligence of Contractor results in damage or destruction of vegetation, or other environmental or aesthetic features beyond work areas as shown on contract drawings, the Contractor shall be responsible, at his expense, for complete restoration including replacement of trees, shrubs, grass, etc. to satisfaction of Employer's Representative.

3.6 Pollution Control

- A** Maintain temporary erosion and pollution control features installed under contract.
- B** Control emissions from equipment and plant to Bermuda authorities' emission requirements.
- C** Prevent extraneous materials from contaminating air, land or water, by vacuum, temporary enclosures, screens, traps or other devices.
- D** Spills of deleterious substances should be immediately contained and cleaned up in accordance with provincial regulatory requirements. Spills should be reported forthwith to the Employer's Representative.
- E** Noise levels emitted from construction activities are subject to Bermuda Government requirements.

3.7 Storage And Handling Of Fuels And Dangerous Fluids

- A** Locate fuel storage facility a minimum of 100 m from any waterbody in an area approved by the Employer's Representative and construct impermeable dykes

so that any spillage is contained

- B** Prevent spillage of gasoline, diesel fuel and other oil products into the water and on land. Clean up spills promptly at own cost in accordance with Bermuda regulatory requirements. Report any fuel spills immediately to Employer's Representative
- C** Proper use of primers, grouts, bonding adhesives and other hazardous substances will be undertaken to prevent their entry into the water. Substances are to be stored and mixed on protected surfaces away from site to prevent their entry into waterways and contamination of soils.
- D** Collect and dispose of used oil filter cartridges and other products of equipment maintenance at industrial waste facility to satisfaction of Employer's Representative.

***** END OF SECTION 01561 *****

SECTION 01700: PROJECT CLOSEOUT

PART 1 - GENERAL

1.1 Cleaning

- A** Use cleaning materials as recommended by product manufacturers and appropriate specification sections. Employ experienced workmen or professional cleaners.
- B** Before inspection for substantial completion, do all necessary cleaning, including the following:
1. Remove dust, dirt and debris from all surfaces
 2. Remove, clean all surfaces of oils, stains, weld splatters, etc as required.
 3. Refer to specification sections for additional requirements for particular surfaces.

1.2 Substantial Completion And Final Inspection

- A** Submit written certification that project, or designated portion of project, is substantially complete, and request, in writing, an inspection. The Employer's Representative will make an inspection within 10 days of receipt of request.
- B** Should the Employer's Representative determine that the work is substantially complete, he will prepare a punch list of deficiencies that need to be corrected before final inspection and issue a notice of substantial completion with the deficiencies noted.
- C** Should the Employer's Representative determine that the work is not substantially complete, he will immediately notify Contractor, in writing, stating reasons. After Contractor completes work, he shall re-submit certification and request for final inspection.

1.3 Close-Out Submittals

- A** The project shall be closed out when all items have been completed and accepted by the Employer's Representative.
- B** Refer to **EXECUTION** portion of each specification section for closeout requirements, including submission of certifications, test reports, etc.; provision of spare parts and maintenance materials, all of which shall be neatly wrapped or packaged in standard sizes and clearly labeled.

- C** Certificate of insurance for products and completed operations.
- D** Typed list of all major subcontractors and suppliers with addresses and telephone numbers.

1.4 Acceptance Of The Work

- A** After all deficiencies have been corrected and the work has undergone a final inspection with no deficiencies, a Taking-Over Certificate will be issued. If only designated portions of the project have been inspected and accepted, a Taking Over-Certificate will be issued for that portion of the Work.
- B** Until receipt of Taking-Over Certificate, Contractor shall be responsible for the work of this Contract.

PART 2 PRODUCTS

- A** Not Applicable

PART 3 EXECUTION

- A** Not Applicable

***** END OF SECTION 01700 *****

SECTION 09980 – COATINGS FOR CONCRETE & MASONRY

PART 1 - GENERAL

1.1 Summary

A This Section includes the following:

Coatings & Waterproof Sealant to Reinforced concrete structures.

1.2 Scope

A This specification covers the work necessary to furnish and install a 100% solids polyurethane elastomer such as Sher-flex, Silkaflex, etc or equivalent concrete potable water tank rehabilitation and lining system.

Work includes, but is not limited to, the following:

B Stopping Leaks by repair and sealing of the concrete to include removal of unsound and unbonded materials, chemical grouting, patching compounds, resurfacing compounds, and plugging compounds.

C Surface preparation, and installation of the Polyurethane Elastomer Lining System such as Sher-flex, Silkaflex or equivalent, to include protection of surfaces not to be treated, touch-up, clean-up, and appurtenant work all in accordance with the requirements of the Contract Documents and this Specification

PART 2 - PRODUCTS

2.1 Referenced Specifications Codes and Standards

A Without limiting the generality of other requirements of these specifications, all work and materials hereunder shall conform to the applicable requirements of the referenced portions of the following documents, to the extent that the requirements therein are not in conflict with the provisions of this Section. All references and standards listed shall be the latest revisions. Joint and individual documents are referenced.

ACI – American Concrete Institute Box 19150, Redford Station Detroit, Michigan 48219 (248) 848-3700

a. ACI 350R-01 Requirements for Environmental Engineering Concrete Structures

b. ACI 350.1 “Testing of Reinforced Concrete Structures for Water Tightness”

- c. ACI 350.2 “Concrete Structures for Containment of Hazardous Material”
- d. ACI 503 “Use of Epoxy Compounds with Concrete”
- e. ACI 504 “Guide to Sealing Joints in Concrete Structures”

AWWA – American Water Works Association 6666 West Quincy Avenue
Denver, Colorado 80235 (303) 794-7711

- a. ANSI/AWWA C652 “Disinfection of Water Storage Facilities”

ANSI – American National Standards Institute 1899 L Street, NW, 11th Floor
Washington, DC 20036 (202) 293-8020

- a. ANSI/NSF Standard 61 “Drinking Water System Components”

2.2 Submittals

- A** Submit product data for each component specified including data substantiating that the proposed materials comply with specified requirements and recommendations by the manufacturer covering all materials.

2.3 Quality Assurance

- A** Acceptable Manufacturers: The manufacturer of the specified products shall have in existence, for a minimum of five (5) years, a program of training, certifying and technically supporting a nationally organized Approved Contractor Program with annual recertification of its participants. Manufacturer must provide five (5) project histories with names, dates, addresses, and phone numbers of contact persons for projects of similar scope, two of which have been completed at least three (3) or more years ago.
- B** Single Source Responsibility: Provide primers and undercoat materials produced by the same manufacturer, or recommended by manufacturer, for each type of Special Coating / Lining specified to ensure compatibility, and proper chemical and mechanical bond.

2.4 Acceptable Products

- A** Stopping Leaks - Infiltration leakage of all concrete shall be stopped by chemical grouting with polyurethane grouts. Products shall be manufactured by Avanti Grouts or equivalent and shall be classified as “Hydrophobic Foam”, “Hydrophilic Gel” or “Hydrophilic Foam” grouting compounds or a combination of these materials and methods as recommended by the manufacturer.

- B** Hydrophobic Polyurethane Grouts are hydrophobic polyurethanes that when mixed and makes contact with the water, is designed to fill large voids in rock fissures, gravel layers, and cracks in concrete structures and for the cut-off of gushing water.
- C** Hydrophobic Polyurethane Grouts that are designed to form flexible gasket or plugs in very tight joints and hairline cracks. When they come into contact with water the grout expands and depending on temperature and the amount of accelerator used quickly cures to a tough, flexible closed cell polyurethane foam that is essentially unaffected by corrosive environments.

Avanti Grouts AV-248 Flexseal LV with AV-249 Catalyst LV

Properties - Uncured

Appearance: Milky white to clear

Viscosity: 550-830 cP @ 72°F Flash Point: >200°F

Specific Gravity: 1.056

Weight: 8.8 lbs/gal +/- 3%

Properties – Cured Appearance:

Milky white flexible foam

Toxicity: Non-Toxic

- D** Resurfacing Materials – Designated structures shall receive an application of resurfacing compounds/repair mortar. The resurfacing compounds/repair mortars are classified as Hydraulic Cements or Microsilica Repair Mortars. Microsilica Repair Mortars shall be designated for areas of substrate depth loss of 1/4”-2” in a single lift and to be top coated with the polyurethane elastomer such as Sherflex, Silkaflex or equivalent lining system as shown on the drawings. Thickness shall be sufficient to replace lost cross section and fill voids
- E** Hydraulic Cements shall be cement based, quick setting, hydraulic cement compound which instantly stops weeping water through concrete or masonry walls and floors. They will become harder and more resistant when subjected to constant water pressure. (Used primarily for filling large voids and stopping minor weeping water leaks)

2.5 Performance Criteria

- A** The concrete potable water tank lining system shall be ANSI/NSF Standard 61 approved material for Drinking Water Components.
- B** The concrete tank lining system shall be resistant to cracking from concrete shrinkage and atmospheric thermal movement at construction joints and contraction joints up to 1/8” at temperatures down to 0 F.

PART 3 – EXECUTION

3.1 Installer Qualifications

- A** Engage only factory trained and qualified applicator that have successfully completed applications using specified materials on projects of similar size and scope. Provide references with name, address, and telephone number.
- B** Contractor shall have completed an approval program in the use of heated plural component equipment and the specified polyurethane elastomer material such as, Silkaflex or equivalent. Provide written certification from the material manufacturer that the contractor is an approved contractor of the system specified.

3.2 Substitutions

- A** Manufacturers seeking approval of products other than the materials used as the basis of design must supply cured samples, full product information, project histories and references, technical data with specifications, SDS, and certifications regarding conformity of performance properties from an independent testing laboratory.
- B** The product being submitted for approval must meet all requirements of the performance properties specified within this specification. Compliance with the above quality assurances must be provided in written form at least fourteen (14) days before bids are received. Omission or nonconformance of any item will result in rejection of the request

3.3 Equipment Requirements

- A** Correct material processing equipment is critical in achieving correct mix for the plural component system specified.
- B** Equipment must be heated plural component unit capable of consistently producing 4000 psi, at 140o F to 160o F.
- C** Acceptable pumps and spray gun: Graco Hydra-Cat, Graco XP50/XP70, WIWA Duo-Mix. Equivalent application equipment may be substituted and must be approved in writing by the manufacturers Technical Service Group.

3.4 Pre-Installation Conference

- A** The contractor, and the concrete tank lining system manufacturer’s representative shall meet on site with the owner’s representative. Particular emphasis shall be placed on these specifications, safety, weather conditions, surface preparation, material application, and inspection.

- B** The contractor shall submit to the owner’s representative any revisions or changes agreed upon, reasons thereof, and parties agreeing or disagreeing with them.

3.5 Substrate Conditions

- A** Do not proceed with work until substrate preparation and tolerances have been approved by the owner’s representative, concrete tank lining system manufacturer’s representative, the approved installation subcontractor, and the contractor.

3.6 Surface Preparation

- A** The NACE/SSPC Joint Surface Preparation Standards for concrete surface preparation are incorporated in and made part of this specification. All references to SSPC-SP-13/NACE No.6, designate the definitions and other requirements in these documents. The International Concrete Repair Institute (ICRI) Technical Guideline No. 0310.2R, Guide to Surface Preparation of Concrete to Receive Sealers, Coatings and Polymer Overlays shall be used to visually evaluate the concrete surface profile.

- B** Inspect concrete surface for soundness, flatness, levelness and overall condition. Report any discrepancies to the owner’s representative

- C** After installation of the concrete repair and resurfacing materials create a minimum surface profile for the lining system specified in accordance with the methods described in ICRI No. 0310.2R to achieve profile numbers CSP-3 to CSP-5.

3.7 Delivery, Storage, and Handling

- A** Deliver products to the job site in manufacturer’s original, unopened containers bearing manufacturer’s name and label and the following information

1. Product name
2. Product description (generic product classification)
3. Manufacturer’s lot number
4. Color

- B** Store materials in sealed original manufacturer’s containers. Store materials in a protected area out of direct sunlight. Keep containers clean and undamaged. Adhere to manufacturer’s published storage temperature and shelf life recommendations. Protect all materials from excessive temperatures.

3.8 Completion and Watertightness

- A** On completion of the works, the lined surface of the potable water storage tank shall be disinfected per the requirements of AWWA C652 prior to the storage of water. After disinfection there shall be no one permitted to make entry in to the tank. Entry in to the tank after disinfection shall require this process to be repeated.

- B** The Contractor will confirm in writing of the completion of the works and the Engineer will then satisfy himself that all works are visually complete by doing an onsite inspection. At this point the tank will be filled with potable water and both parties will adhere to AWWA Standard D110-95 Sec.5.13, which grants guidelines of testing a concrete tank for watertightness.

- C** Paragraph 5.13.2 states, “The net liquid loss for a period of 24 hours shall not exceed 0.05 of 1 percent of the tank’s capacity.” It goes on to say that, “If this rate is exceeded, the leakage test shall be extended to (5) five days. If at the end of (5) five days the average daily leakage does not exceed the maximum allowable, the test shall be considered satisfactory. If the net liquid loss exceeds the maximum allowable, leakage shall be considered excessive and the tank shall be repaired, redisinfecting, and retested until leakage falls within the appropriate limit.”

END OF SECTION 9980

EXHIBIT 'B': DRAWINGS

(See REHAB01, REHAB02, REHAB03)