REGIONAL DISTRICT OF NANAIMO

REQUEST FOR PROPOSALS No. 23-014

French Creek Pollution Control Centre – Influent Pipe Lining

Addendum 2
Issued: February 24, 2023

Closing Date & Time: on or before 3:00 PM Pacific Time on March 2, 2023

This addendum shall be read in conjunction with and considered as an integral part of the Request for Proposal. Revisions supersede the information contained in the original Proposal or previously issued Addendum. No consideration will be allowed for any extras due to any Proponent not being familiar with the contents of this Addendum. All other terms and conditions remain the same.

Clarifications:

1. The RDN may, at its discretion, consider proposals for alternate liners that do not necessarily meet all the AWWA Class IV CIPP lining requirements. However, proposals for alternates must be shown to be suitable for the specific application and site conditions, and meet the required design life and all other requirements of the RFP. Proponents shall also list any deviations from the AWWA Class IV CIPP lining requirements and provide an explanation for the deviation along with benefits/risks and/or how the product still meets the intent of the deviated clause.
2. Further to the risk identification requirement in Addendum 1, Proponents may request the RDN undertake further study or investigation as part of the risk mitigation measures and/or provide a separate price to undertake the risk mitigation measures themselves.

Questions:

Q1) Can the existing pipe withstand 7psi installation pressure required to install the CIPP liner?

A1) The RDN has not performed a structural assessment of the host pipe. Proponents must make their own assessment of the structural capacity of the host pipe. Refer further to **Clarification 2** above.

Q2) Is there any CCTV of the existing line that can be provided for review?

A2) There is no CCTV or other internal assessments of the existing host pipe available. Refer further to **Clarification 2** above.

Q3) Is there any protruding connections into the main pipe?

A3) The RDN is not aware of any connections to the host pipe that protrude beyond the inside diameter. Refer further to **Clarification 2** above.

Q4) The influent sampler line that is approx. 25mm diameter requiring removal and abandonment. Is it acceptable to line through this connection and not cut the liner to reinstate the connection as an acceptable means of abandonment? If not, how far back is the connection to be removed and capped?

A4) Abandonment of the sampler line connection by lining through it is acceptable. However, the RDN also requires the sampler line to be removed between the host pipe and building wall and be suitably capped at each end. The sampler line should be cut and capped within 100mm of the host pipe and building wall.

Q5) For the buried portion of liner, are MMCD design parameters to be used in the design?

3.2 Linear Design

.1 Design liners to comply with Appendix XI of ASTM F1216.

.2 Perform liner thickness calculations for *"Fully Deteriorated Gravity Pipe Condition"* with the following minimum design assumptions:

.1 Total external pressure on the pipe shall include an allowance for an AASHTO HS 20 concentrated live load.

.2 Minimum soil density utilized in computation of dead load shall be 1920 kg/m^3.

.3 Height of the water above the pipe shall be a minimum of 1.0 metre below the ground surface over the existing pipe, unless appropriate geotechnical analysis establishes a better estimate.

.4 Use an ovality reduction factor based on a minimum value of 3% unless a greater value is specified or warranted based on the designer's observation of the CCTV inspection, remote measuring method or physical measurement.

.5 Use a modulus of soil reaction (E's) of 6900kPa unless a higher or lower value is specified in these documents.

.6 Use a minimum factor of safety (N) in the fully deteriorated design analysis of 2.

.7 Use long-term value for the flexural strength (E_L) to:

.1 The projected value at 50 years of continuous application of the load based on the specific resin and carrier tube composite proposed for use as established by ASTM D2990.

.2 In the case of having no ASTM D2990 values then 25% of the flexural strength value as established by ASTM D790.

.3 Perform a design check using Manning's formula to confirm that the rehabilitated section will have a hydraulic capacity equal to or greater than the existing pipeline. The assumed value for Manning's "n" for the CIPP section shall be 0.011.

A5) The RDN does not have a preferred design guideline for the buried portion of the liner. The liner design must be sealed by a Qualified Professional Engineer licensed to practice in the Province of British Columbia and therefore meet all applicable national, provincial and local codes and regulations. Proponents shall perform all due diligence necessary to provide a sealed liner design and may request the RDN perform additional study or investigation. Refer further to **Clarification 2** above.

End of Addendum

NON – MANDATORY SITE MEETING ATTENDEE LIST

PROJECT TITLE:	23-014 FCPCC Influent Pipe Lining
MEETING DATE/TIME	February 9, 2023 @ 1:00 p.m.
MEETING PLACE	FCPCC – 957 Lee Road, Parksville, BC

COMPANY NAME
1. Leuco Construction
2. Insituform Technologies