

FORM N: DETAILED SPECIFICATIONS

SUPPLY, DELIVERY AND ON-SITE INSPECTIONS OF NEWPCC DIGESTER TANK 9-14 SPIRAL HEAT EXCHANGERS

- 1. INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS**
 - 1.1 All items in these specifications shall be answered indicating compliance or non-compliance.
 - 1.2 **Bidder/Proponents shall fill in specifications and state “yes” where indicated for compliance or state “deviation”,** or give a reply where requested to do so. Deviations and/or equivalents shall be clearly stated and fully detailed. Deviations and/or equivalents will be considered subject to evaluation. In every instance where a brand name or design specifications is used, the City will also consider deviations and/or equivalents.
 - 1.3 Lengthy explanations of deviations may be included in a separate document and must reference the appropriate Detailed Specification.
 - 1.4 Each Bidder/Proponent is required to fill in every blank. Failure to do so may be used as a basis for rejection of bid/proposal.
 - 1.5 It will be the responsibility of the Bidder/Proponent to inform the City of any errors or omissions in these Detailed Specifications, for under this Contract, the Contractor shall be held responsible for ensuring that the manufacturer will be responsible for the design, performance, reliability and satisfactory operational function of the unit.
- 2. DESCRIPTION OF EQUIPMENT**
 - 2.1 The specifications in Part E describe the spiral heat exchanger equipment, and other equipment and features as specified herein.
 - 2.2 The heat exchanger shall be new. Refurbished equipment will not be acceptable.
 - 2.3 The heat exchanger equipment and all other items/components shall be the manufacturer's latest model. The equipment shall be furnished complete and ready for operation. Any parts or accessories not specifically mentioned, but which are required to complete and place the equipment and associated attachments in successful operation shall be furnished as though specifically mentioned in these documents. The equipment and associated attachments, and all parts thereof, shall conform in strength and quality of material and workmanship, to the best standards and engineering practice of the industry.
 - 2.4 The ratings specified herein merely state the minimum values acceptable to the City, not implying that those values are sufficient for the design of the particular equipment being bid/Proposed.
- 3. OTHER SPECIFICATIONS AND STANDARDS**
 - 3.1 All applicable CSA, ASTM A516/A516M pressure vessel plates, carbon steel, for moderate and lower temperature service, and ASME Boiler and Pressure Vessel Code, section VIII, Division 1, latest revision, it's addenda, and all other documents referenced therein form an integral part of the specifications and shall have precedence in any conflict concerning minimum acceptable standards.
 - 3.2 The Spiral Heat Exchangers shall comply with the applicable regulations:
CSA C22.2 – Canadian Electrical Code
National Building Code of Canada
Requirements of the Province of Manitoba in which the heat exchanger will be installed
Manitoba Building Code: https://web2.gov.mb.ca/laws/regs/current/_pdf-regs.php?reg=31/2011
 - 3.3 The completed unit shall include a Canadian Certification label (CSA, cUL) shown on the equipment nameplate.
 - 3.4 The Bidder shall submit Exchanger dimensional drawings that show the installation in sufficient detail for the City to evaluate necessary changes to existing infrastructure to accommodate the proposed equipment

4. REFERENCES

Bidder to provide three (3) references where this equipment is used in an applicable working environment. State the application, model, how long the Heat Exchanger has been in service, customer and contact information (names, phone numbers and email).

4.1 Reference 1:

4.2 Reference 2:

4.3 Reference 3:

5. MAKE & MODEL [Specification Ref Part E]

5.1 Heat Exchanger Manufacturer Being Bid State _____

5.2 Heat Exchanger Model Number Being Bid State _____

6. HEAT EXCHANGER DETAILS [Specification Ref Part E3]

6.1 Complies with 1-0101-MDTL-D001-001-R00 (Bidder to fill in) _____ Yes/No

6.1.1 Conformity to existing piping. Bidder to provide dimensional drawing.
_____ Yes/No

*Deviations to Heat Exchanger pipe inlets and outlets defined in 1-0101-MDTL-D001-001-R00 that result in changes to existing piping or relocation of the Exchanger will deem the proposed equipment non-compliant

6.2 State Any Modifications Required:

6.3 Explosion Proof Enclosure (Bidder to answer Yes/No) _____

6.4 Approval for Canada (Bidder to answer CSA / cUL Yes/No) _____

6.5 Certified Canada Service Shop (Bidder to list City & Province) _____

6.6 Wastewater Operation Compatible (Bidder to answer Yes/No) _____

6.7 Provide Explanation on Any Deviations Required:

7. TOOLS, ACCESSORIES & SPARE PARTS [Specification Ref E4 & E5]

7.1 Special Tools (list) _____ (Bidder to indicate total quantity) _____

7.2 Special Tools (list) _____ (Bidder to indicate total quantity) _____

- 7.3 Cover-gasket (list) _____ (Bidder to indicate total quantity) _____
- 7.4 Cover hook-bolts (list) _____ (Bidder to indicate total quantity) _____
- 7.5 Other Spare Parts (list) _____ (Bidder to indicate total quantity) _____
- 7.6 Other Spare Parts (list) _____ (Bidder to indicate total quantity) _____
- 7.7 Provide Explanation on any Deviations Required:

8. MANUFACTURER PARTS WARRANTY [Specification Ref E6]

- 8.1 The Contractor shall provide all detailed published Warranty information (including all exclusions) at the time of bid of the equipment. State the following [example. Replacement – 24 Months]:
- 8.2 Provide any additional manufacturer parts warranty information:

9. MANUFACTURER WARRANTY [Specification Ref E6]

- 9.1 The Contractor shall provide all detailed published Warranty information (including all exclusions) at the time of bid of the equipment.
- 9.2 Enclosure Exterior Finish State (e.g. 24 months) _____
- 9.3 Provide any additional manufacturer warranty information:
