

Sherbrooke Sewage Treatment Plant Request for Proposals Supply of Aeration Equipment



The Municipality Of The District Of St. Mary's
8296 #7 Highway
P.O. Box 296
Sherbrooke, NS
B0J 3C0

May, 2020

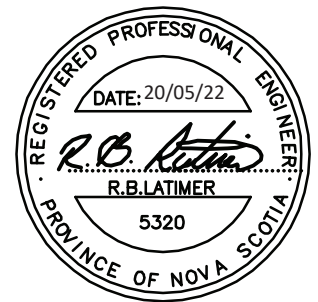


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**COMMUNITY OF SHERBROOKE
SUPPLY OF AERATION EQUIPMENT FOR SEWAGE TREATMENT PLANT
EQUALIZATION TANK**

**MUNICIPALITY OF THE DISTRICT OF ST. MARY'S
NOVA SCOTIA**

REQUEST FOR PROPOSALS

1.0 Request For Proposals:

Proposals are invited from suppliers for the above noted project electronically in PDF format. Electronic proposals are to be titled "Company Name – MODSM-AE-STP" and are to be sent to the email blatimer@straiteng.com, subject line "MODSM-AE-STP-RFP". It will be the Proponent's responsibility to ensure the proposal submission is received electronically on time. Email submissions will receive a reply back email indicating Proposal submission has been received.

Proposals will be received until 4:00 pm , Wednesday, June 10th (Local time)

The scope of the request for proposal would be to supply the aeration header pipe, associated drop pipes and include all fittings, valves, adaptors, couplings, piping and diffusers for a replacement coarse bubble diffusion aeration system. Piping to be PVC Schedule 40 and shall connect to existing 2 ½" steel piping 10 feet from equalization tank. The existing manifold piping is 2 ½" and existing drop pipes and headers are 2".

Pricing must be in effect for 60 days from the closing date and will be made available to the General Contractors for inclusion in their bid.

2.0 Project Information:

Located in the heart of Nova Scotia's Eastern Shore, the Municipality of the District of St. Mary's is a rural municipality consisting of seven electoral districts. Incorporated in 1879 the Municipality has a population of 2,233 and is bounded by the counties of Antigonish and Pictou, the municipalities of Halifax and Guysborough, and the Atlantic Ocean. The Community of Sherbrooke, where the STP is located, is located in Guysborough County, Nova Scotia. A locality map (Figure No. 1) is shown on the following page identifying its location. Figure No. 2, following page shows the site locations within the community. The Community is a business and commerce center for

several nearby communities with school, bank, grocery stores, shops, restaurants, churches, etc.

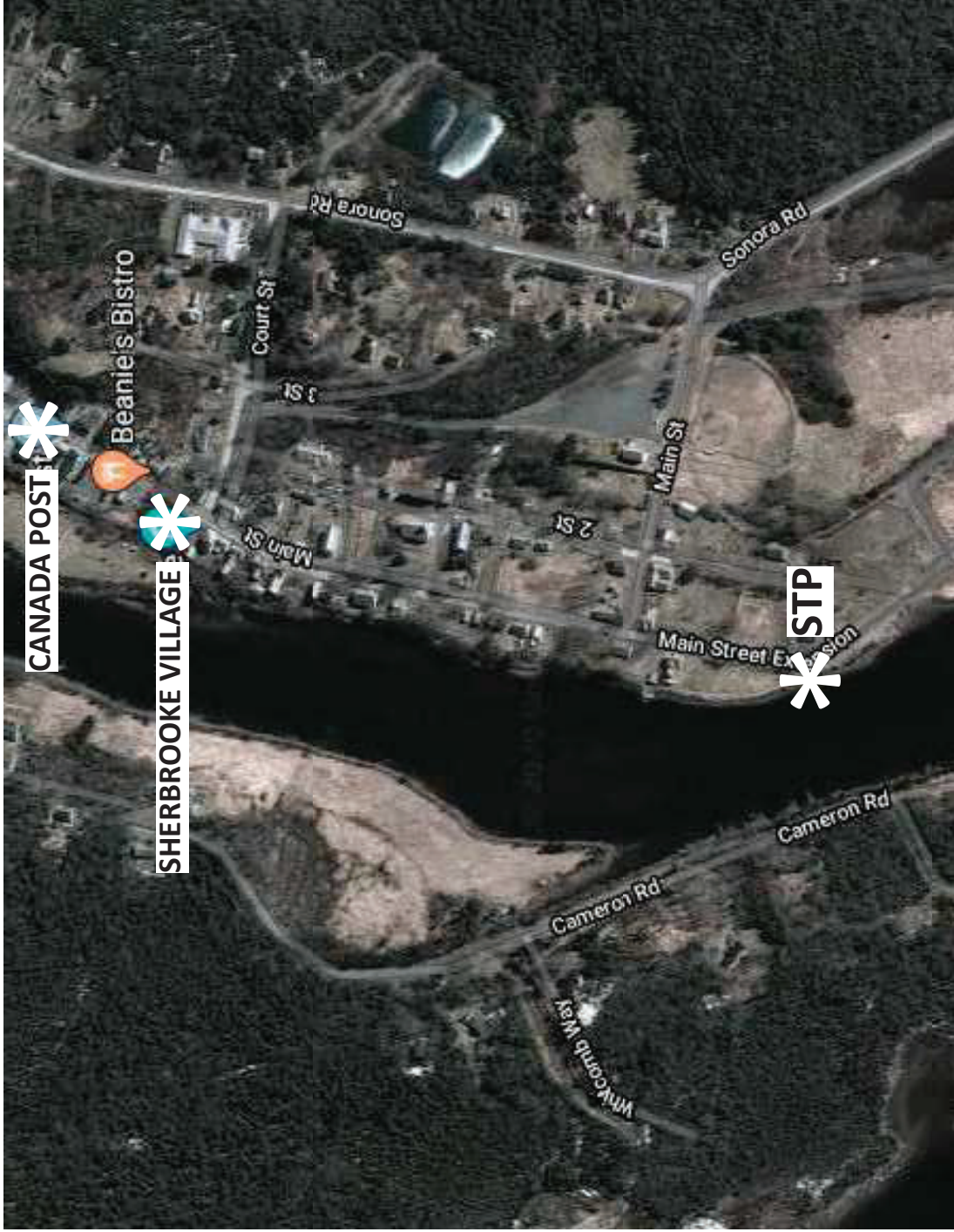
The community is served by one extended air sewage treatment plant (STP) which has an equalization (EQ) tank upstream of the treatment. The purpose of the STP upgrade is the Municipality wish to upgrade aeration equipment in the equalization tank which is in need of replacement.

The STP is an extended aeration plant which uses a single blower to supply aeration to the EQ tank. A 2.5" line feeds the EQ tank. The aeration system is to provide light aeration for the sewage and to agitate and continuously mix the sewage to keep it "Fresh" and minimize solids settling and sludge build up in the EQ tank.

The EQ tank (drawing SK-1 attached) measures 41'-8" x 12'-3" wide with a top water level of 11'. This is the maximum level during high flows with normal operating levels being somewhat less than 11'. A 2.5" steel pipe leaves the blower to one end of the EQ tank and connects to a header which runs along the top of the EQ tank. Four - 2" drop pipes, each with ball valves, are piped to a header which is approximately 9 feet long and has 9 coarse bubble diffusers attached giving approximately 36 coarse bubble diffusers. A detail drawing of the existing arrangements is attached.

The plant is prone to inflow and infiltration (I&I) during rain events and during seasons in which the ground water table is high. Actual flows vary from 40,000-50,000 USgpd in the dry months to close to 125,000 USgpd in the wet months, with average daily flow around 80,000 USgpd.

Please provide with submission relevant technical information on all materials, diffusers, oxygen transfer efficiencies, maintenance and expected life of diffusers.



SEL
STRAIT
ENGINEERING LTD.
CONSULTING ENGINEERS
 PORT HAWKESBURY, NOVA SCOTIA

DATE: **APRIL, 2020**

PROJECT:
SUPPLY OF AERATION EQUIPMENT
MUNICIPALITY OF THE DISTRICT OF ST. MARY'S

TITLE:
LOCATION IN COMMUNITY

PROJECT NO.
19-42

FIGURE NO.
2

3.0 Examination:

Suppliers shall examine all documents provided and prepare their equipment price based on providing all operating equipment and special materials complete with all accessories and appurtenances which would provide for a complete aeration system.

4.0 Pricing Preparation:

The Supplier shall submit pricing in such a manner to clearly indicate what items are included in the price and anything not to be included in the scope of supply.

Suppliers shall cover the execution of the whole work described in the Specifications, and/or directed in any addenda.

One copy of the Supplier's pricing shall be submitted duly signed by an authorized officer of the company.

Prices shall **include** all applicable excise taxes, duty, foreign exchange, royalties and patent or license fees and shall be f.o.b. the job site. (See also requirements of clause 13 – Receiving and Storage).

Prices quoted shall **exclude** Harmonized Sales Tax (HST).

5.0 Discrepancies:

Should, during examination of specifications, any discrepancies, omissions, ambiguities or conflicts to or among the documents, or doubt as to their meaning, bring questions to the attention of the Consultant no later than four (4) days before price closing date. The Consultant will review questions and where information sought is not clearly indicated or specified, will have issued a clarifying Addendum which will become part of the Pricing Document. Neither Owner or Consultant will be responsible for any oral instructions.

6.0 Owner Rights:

The Owner reserves the right to reject any or all Proposals or to accept any individual proposal deemed most satisfactory. The Owner also reserves the right to waive any minor informality in any or all proposals.

7.0 Contract Form:

The Municipality will issue a Purchase Order to the selected supplier.

8.0 Payment Terms:

Payment will be net 30 days upon delivery to the site.

9.0 Delivery Date:

Time of delivery for works is important and will be considered in the evaluation of proposals. A schedule showing submission of shop drawings and/or product literature and delivery to the site based on a one week period for review of submissions must be included at time of proposal submission.

10.0 Compliance To Specifications:

It is expected that all suppliers shall be capable of complying to every requirement of the specifications. The Owner, in exercising their rights under item 6.0 (Owner Rights), shall evaluate the proposals and/or options that may be provided if they are deemed to have benefits to the Owner be it financial, treatment enhancement, operator friendliness, aesthetics, etc.

11.0 Guarantee and Warranty:

The manufacturer/supplier shall guarantee full performance of all equipment supplied and installed under the purchase agreement.

All equipment shall be free from defects in design, manufacture, workmanship or materials. Any part found defective or of unsatisfactory performance shall be fully repaired or replaced at no cost to the Owner for twelve (12) months from start up or a maximum of eighteen (18) months after delivery to the site.

12.0 Patent and License Fees:

Each bidder shall allow in his quotation for the inclusion of all applicable patent or license fees relating to the equipment or process which he is quoting.

It shall be the full responsibility of the supplier to save the Owner and the Engineer harmless from damage or costs which may arise from any patent infringements and resultant litigation.

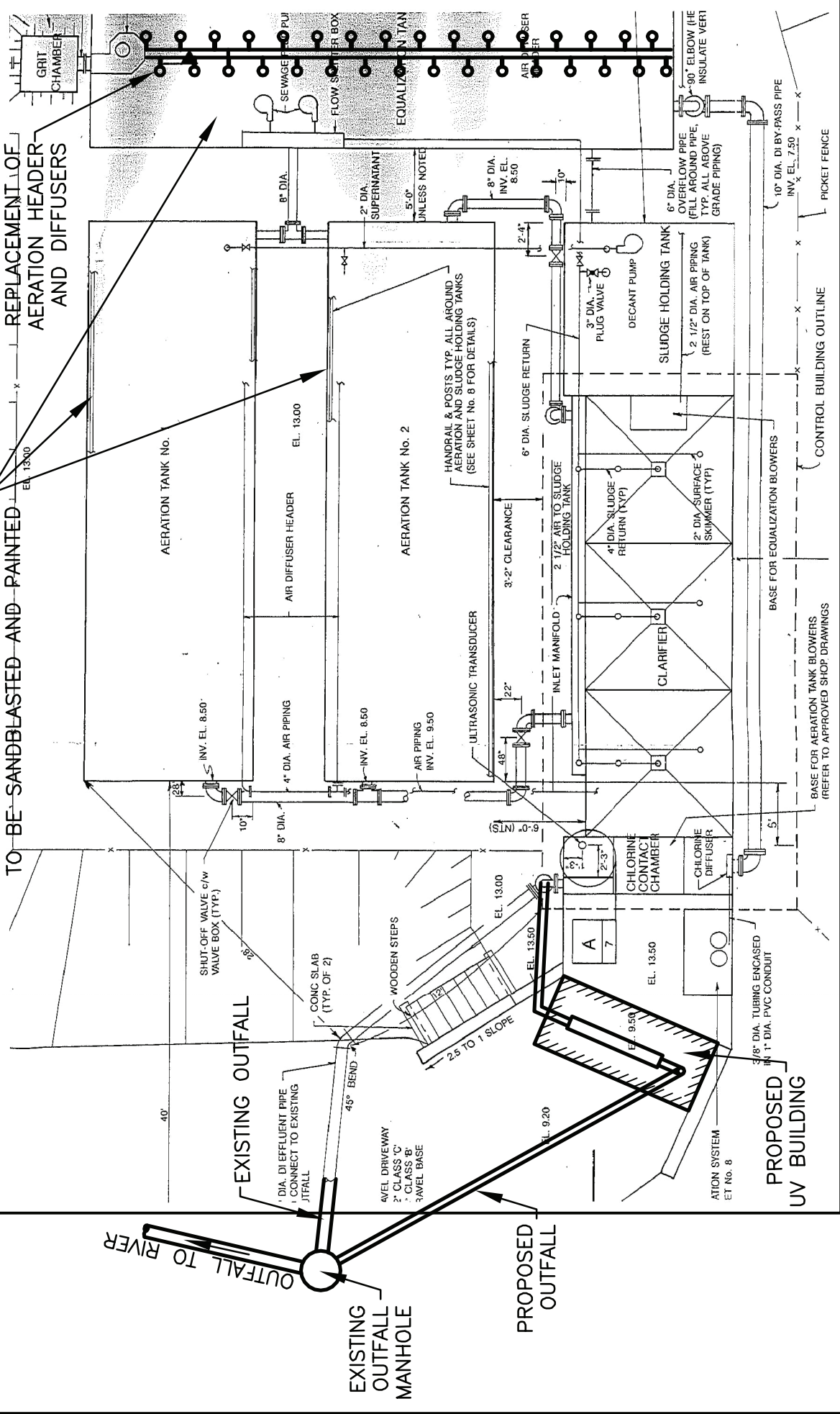
13.0 Receiving and Storage:

The equipment and appurtenances shall be delivered to the site of the work in a condition satisfactory to the Engineer and any omissions, discrepancies or damage evident on delivery shall be made good by the supplier.

The Owner shall sign the carrier's pro bill to indicate receipt of the required number of crates and packages and shall note thereon any apparent shortages of or visible damage to such crates and packages. The supplier shall furnish to the purchaser, lists showing the contents of the said crates and packages. Such lists shall be furnished sufficiently early. Within fourteen (14) days after the date of delivery to the job site, the Owner will notify the supplier in writing of shortages or damage in the equipment delivered.

WALLS OF EQUALIZATION TANK AND EXISTING AERATION TANKS TO BE SANDBLASTED AND PAINTED

REPLACEMENT OF AERATION HEADER AND DIFFUSERS



PROJECT: **MUNICIPALITY OF THE DISTRICT OF ST. MARY'S SEWAGE TREATMENT PLANT UPGRADES**

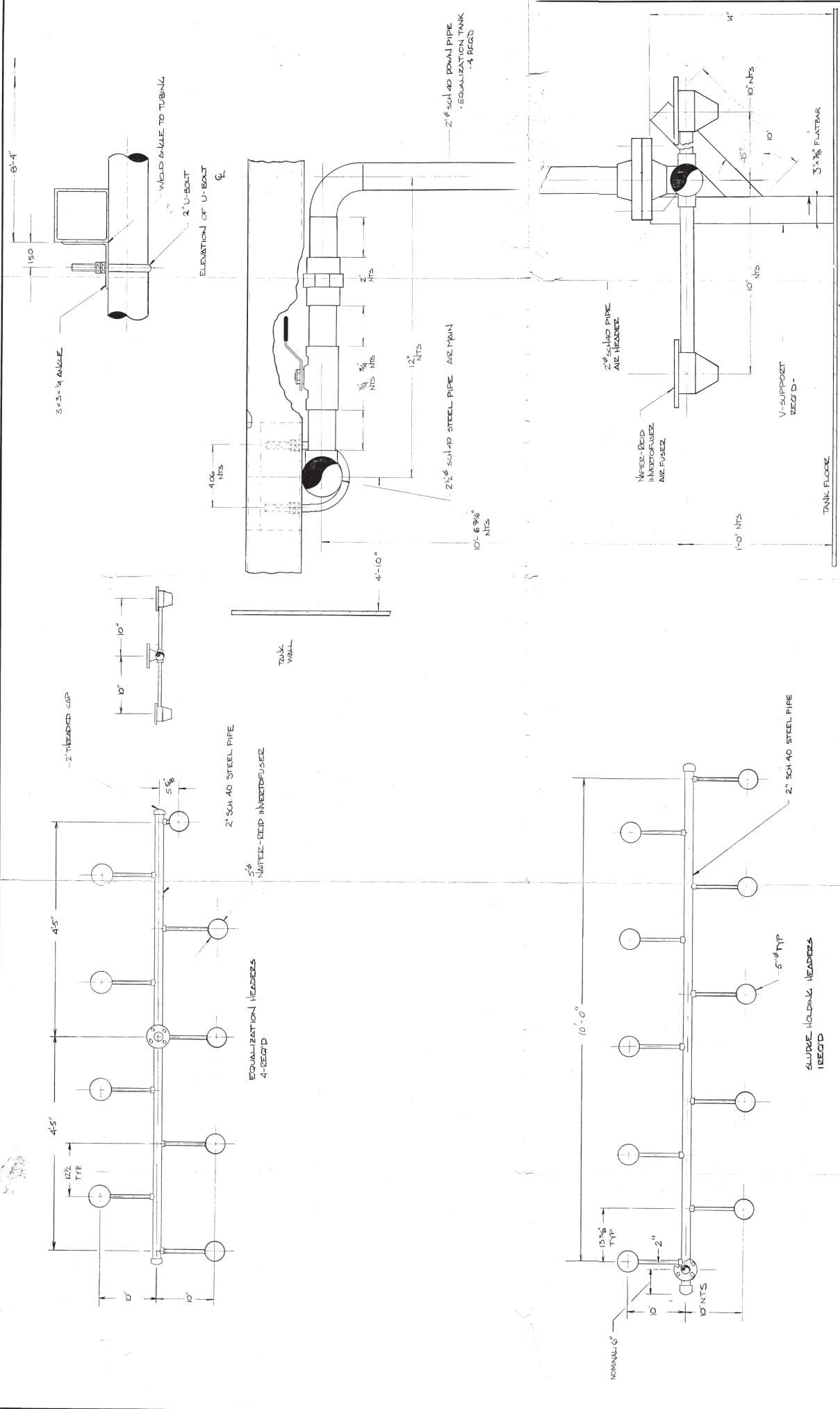
SKETCH: **SK-1**

TITLE: **PROPOSED UPGRADES**

SCALE: **NTS**

SEL STRAIT ENGINEERING LTD. CONSULTING ENGINEERS
 PORT HAWKESBURY, NOVA SCOTIA

DATE: **JANUARY 2019**



TITLE		DATE		REV.	
EQUALIZATION TANK HEADERS		23/07/90		1	
PROJECT: VILLAGE OF SHELBROOKE		23/07/90		1	
CUSTOMER: MUNICIPALITY OF THE DISTRICT OF ST-MARY'S N.S.		23/07/90		1	
DRAWN BY: DHS		23/07/90		1	
SCALE: AS NOTED		23/07/90		1	
DRAWING NO.: 90-2280-11		23/07/90		1	

TITLE: EQUALIZATION TANK HEADERS
 PROJECT: VILLAGE OF SHELBROOKE
 CUSTOMER: MUNICIPALITY OF THE DISTRICT OF ST-MARY'S N.S.
 DRAWN BY: DHS
 SCALE: AS NOTED
 DRAWING NO.: 90-2280-11
 DATE: 23/07/90
 REV: 1