
ANNEX A - REQUIREMENT

INSTITUT MAURICE LAMONTAGNE
PURCHASE OF A PRE-FILTER
Project: R.089262.002

GENERALITIES

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1.1 GENERAL DESCRIPTION

- .1 This request concerns the purchase of a new high density polyethylene pre-filter as described in the specifications and shown in the accompanying drawing.
- A lifting structure must also be included to allow transport and placement.
- Installation in the river, modifications to the existing piping at the bottom of the sea and filter sand are excluded from the purchasing process.

2.1 REMOVABLE LIDS

- .1 The removable lids on top of the pre-filter originally provided are excluded from the present request.

3.1 LATERAL STRUCTURE

- .1 The lateral structure of the new pre-filter must be manufactured as shown in the accompanying sketch including the added reinforcements.

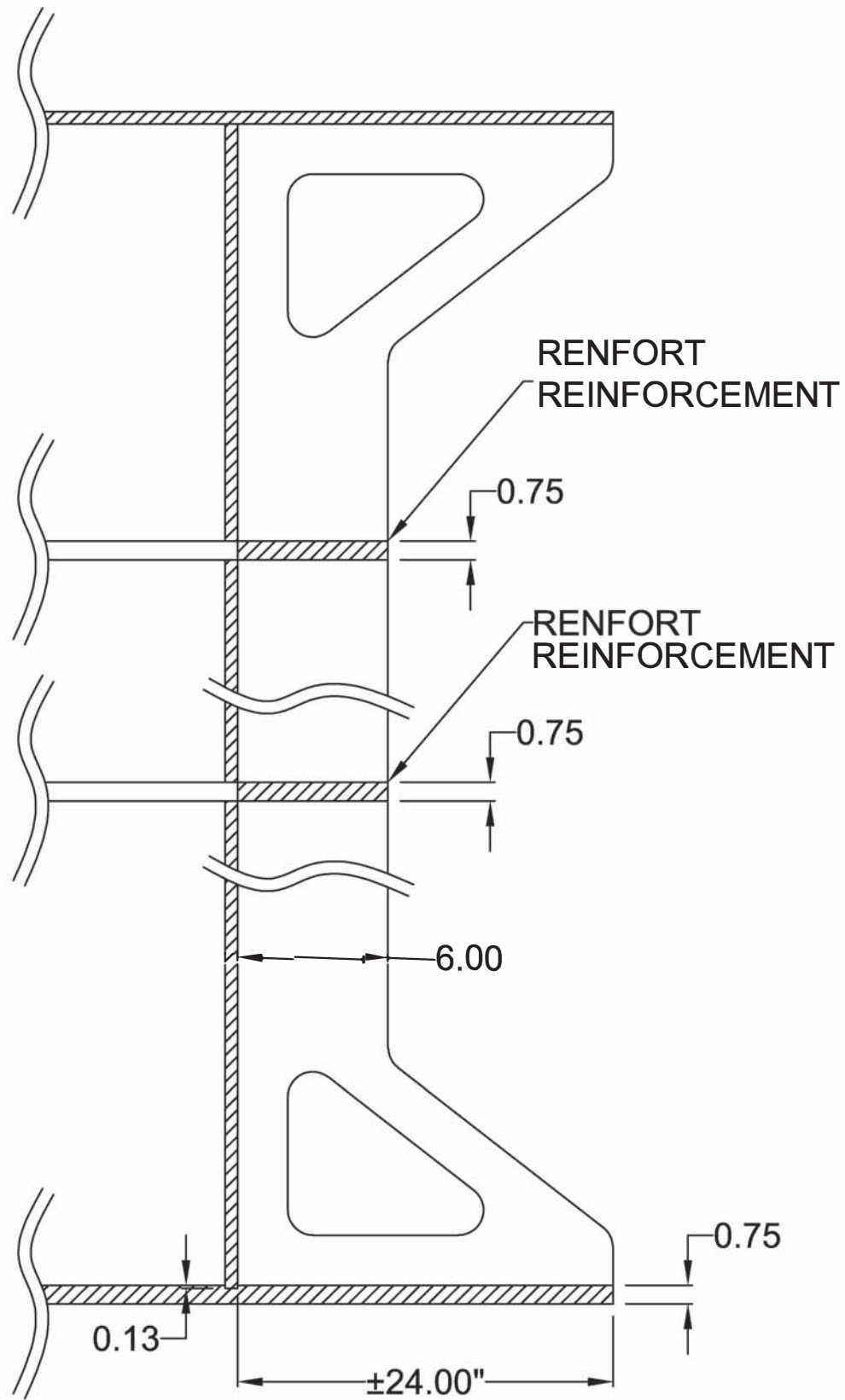
4.1 SEAL

- .1 At the periphery of the main pipe at the outlet of the pre-filter, add a seal to prevent the filter sand from escaping there.

5.1 CONNECTION

- .1 The connection system from the pre-filter to the existing pipe must match. The tip is made of HDPE and the floating flange is made of 316 stainless steel.

Croquis : Structure latérale / Sketch: Lateral Structure



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INSTITUT MAURICE LAMONTAGNE
FILTERED SEA WATER INTAKE
Project: R.089262.002

PRE-FILTER - SPECIFICATIONS

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PART 1 - GENERAL

1.1 SHOP DRAWINGS

- .1 The Contractor must submit the shop drawings and technical information to the Technical Authority, departmental representative, before beginning to manufacture the pre-filter.

PART 2 - PRODUCTS

2.1 GENERAL

- .1 Unless otherwise specified, the pre-filter and all accessories shall be constructed of high density polyethylene (HDPE) conforming to the drawing in attachment.
- .2 The nozzles will be of the model C0012 of Dégremont or equivalent.

The piping will be drilled and threaded with precision according to the characteristics of the nozzles Dégremont.

The interior of the pipes should be cleaned of all polyethylene debris and other residue. All thread should be approved by the Technical Authority prior to installation of the nozzles.

- .3 Characteristics of high density polyethylene HDPE (natural FDA approved):
 - Density 0,955 gr / cm³
 - Elongation at break 900%
 - Tension resistance 4 600 psi
 - Flexibility module 200 000 psi
 - Impact resistance 120 D, at 73 °F 3 pi. lbs / po
 - Hardness Rockwell R 69
 - Water absorption 0%
 - Maximum operating temperature 180 °F

- .4 The pre-filter piping, which will be welded by end-to-end fusion, will have to undergo a pressure test at 1655 kPa for 24 hours. The piping for the installation of the nozzles will be drilled after the pressure test.

- .5 The tanks, cells and lids will be constructed of polyethylene plates welded with the high density polyethylene (HDPE) extruder or by melt pressure if indicated.

- .6 The end of the pre-filter pipe must be closed to prevent the entry of sediment, living organisms or other undesirable elements.

End of section.