

Aquaculture site in a marine environment

Application form

PART B: Site for research and experimentation purposes



Basic information required for the analysis of an application for
research and experimentation purposes in Quebec
April 2012 version

**BASIC INFORMATION REQUIRED FOR THE ANALYSIS OF AN APPLICATION FOR AQUACULTURE
RESEARCH AND EXPERIMENTATION PURPOSES IN QUEBEC**

Ref. no: _____

1. PROPONENT'S IDENTIFICATION			
	Proponent	Contact person	Consultant
Name			
Address			
City			
Postal code	____	____	____
Telephone	() ____ - ____ ext. ____	() ____ - ____ ext. ____	() ____ - ____ ext. ____
Fax	() ____ - ____	() ____ - ____	() ____ - ____
E-mail			
<input type="checkbox"/> Letters patent <input type="checkbox"/> Authorization or power of attorney <input type="checkbox"/> Aquaculture licence number _____ <input type="checkbox"/> CIDREQ number _____			

2. TITLE OF THE APPLICATION (Business, activity, site, region – e.g. ABC Institute, capture experience, Maria, Gaspé)

3. SUMMARY OF THE APPLICATION AND PROJECT (250 words) (Where, what, how, when, why, etc)

SIGNATURE OF PROPONENT: _____

DATE: _____

4. LOCATION																									
<p style="text-align: center;">Name of the main waterway</p> <hr/> <p style="text-align: center;">Name of the secondary waterway (bay, river mouth, etc.)</p> <p>In front of:</p> <hr/> <p style="text-align: center;">Municipality</p> <hr/> <p style="text-align: center;">Administrative region</p> <p>Nautical chart #: _____</p> <p>_____</p> <p>If there are land bases, indicate the topographic map number</p> <p>Topographic map #: _____</p>	<p style="text-align: center;">GEOGRAPHICAL COORDINATES DELIMITING THE AQUACULTURE AREA</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;"><u>Points</u></th> <th style="text-align: left; border-bottom: 1px solid black;"><u>Latitude</u></th> <th style="text-align: left; border-bottom: 1px solid black;"><u>Longitude</u></th> </tr> </thead> <tbody> <tr> <td style="border-bottom: 1px solid black;">_____</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> </tr> <tr> <td style="border-bottom: 1px solid black;">_____</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> </tr> <tr> <td style="border-bottom: 1px solid black;">_____</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> </tr> <tr> <td style="border-bottom: 1px solid black;">_____</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> </tr> <tr> <td style="border-bottom: 1px solid black;">_____</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> </tr> <tr> <td style="border-bottom: 1px solid black;">_____</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Central point</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> <td style="text-align: center; border-bottom: 1px solid black;">° ' " "</td> </tr> </tbody> </table> <p>NOTE: One-tenth of a second precision is required.</p> <p>Coordinates from: <input type="checkbox"/> GPS <input type="checkbox"/> Map</p> <p>Datum : <input type="checkbox"/> NAD 83</p>	<u>Points</u>	<u>Latitude</u>	<u>Longitude</u>	_____	° ' " "	° ' " "	_____	° ' " "	° ' " "	_____	° ' " "	° ' " "	_____	° ' " "	° ' " "	_____	° ' " "	° ' " "	_____	° ' " "	° ' " "	Central point	° ' " "	° ' " "
<u>Points</u>	<u>Latitude</u>	<u>Longitude</u>																							
_____	° ' " "	° ' " "																							
_____	° ' " "	° ' " "																							
_____	° ' " "	° ' " "																							
_____	° ' " "	° ' " "																							
_____	° ' " "	° ' " "																							
_____	° ' " "	° ' " "																							
Central point	° ' " "	° ' " "																							
<p style="text-align: center;">DIMENSIONS OF THE AQUACULTURE AREA</p> <p>Length _____ m Width _____ m</p> <p>Surface area _____ (metres²)</p>	<p style="text-align: center;">CONFINEMENT TECHNIQUE AND USE OF THE SITE</p>																								

5. TARGETED SPECIES				
Species	Scientific name	Variety, lineage or strain	Origin	Quantity produced

6. TARGETED LOCATIONS AND SURFACES REQUESTED: attach a map extract

- Note:** Use an additional copy of pages A-2 and A-3 for each separate area requested.
- Note:** The proponent must adapt the form and information required for specific species and aquaculture techniques while respecting the requirements.
- Note:** The different departments reserve the right to modify or add requirements according to the nature of the request or particular context.

SIGNATURE OF PROPONENT: _____ **DATE:** _____

7. MARKING SYSTEM ((Refer to the illustrations on the following pages for a marking system diagram for an aquaculture infrastructure))		
<p>A & B. STOCKINGS OR COLLECTORS</p> <p>Type: _____</p> <p>Length: _____ (metres)</p>	<p>C. LONG LINES</p> <p>Type: _____</p> <p>Number: _____</p> <p>Length: _____ (metres)</p>	
<p>D. FLOATS</p> <p>Colour: _____ (OTHER THAN YELLOW)</p> <p>FORM: _____</p> <p>Size: _____</p>	<p>E. ANCHORAGES</p> <p>A) Type: _____</p> <p>Size: _____</p> <p>Weight: _____ (mt) Number: _____</p> <p>B) Type: _____</p> <p>Size: _____</p> <p>Weight: _____ (mt) Number: _____</p>	
<p>F. DEPTH OF SITE: _____</p> <p style="text-align: center;">_____ metres</p> <p style="text-align: center;">(REFERENCE: CHART DATUM)</p>		
<p>G. CLEARANCE BENEATH THE SURFACE:</p> <p>Summer season, buoyed site: _____ (metres)</p> <p>Winter season, site non-buoyed: _____ (metres)</p> <p>(Reference: Chart Datum)</p> <p>Note: A minimum clearance of 2 metres must be maintained between long lines and the surface of the water (with the exception of collectors)</p>		
<p>H. CORNER BUOY (see notes bottom of page)</p> <p><u>Number</u></p> <p>___ Yellow cautionary buoys</p> <p>___ Port buoys (green)</p> <p>___ Starboard buoys (red)</p> <p>In accordance with NWPA requirements</p> <p>___ radar reflectors</p> <p>___ (Fl) 4S light(s)</p>	<p>J. INTERMEDIARY BUOY</p> <p><u>Maximum spacing:</u> 400 metres</p> <p><u>Number</u></p> <p>___ Yellow cautionary buoys</p> <p>___ Port buoys (green)</p> <p>___ Starboard buoys (red)</p> <p>In accordance with NWPA requirements</p> <p>___ radar reflectors</p> <p>___ (Fl) 4S lights</p>	<p>K. COMPLEMENTARY BUOYS</p> <p><u>Maximum spacing:</u> 100 metres</p> <p>Colour: yellow</p> <p>Shape: barrel or spherical</p> <p>Size: minimum diameter: 40 cm</p>
<p style="text-align: center;">MARKING BUOY TENDING PERIOD</p> <p>Marking buoys are tended annually during all the navigation period,</p> <p><u>or in accordance with Transport Canada – NWPA requirements</u></p>	<p style="text-align: center;">OTHER RELEVANT INFORMATION</p>	
<p>THE PROPONENT AGREES TO REMOVE ALL EQUIPMENT FROM THE WATER IN THE TIME REQUIRED BY TRANSPORT CANADA IF HE/SHE ABANDONS OR CLOSES THE AQUACULTURE SITE.</p>		
<p>SIGNATURE OF PROPONENT : _____</p>		<p>DATE: _____</p>

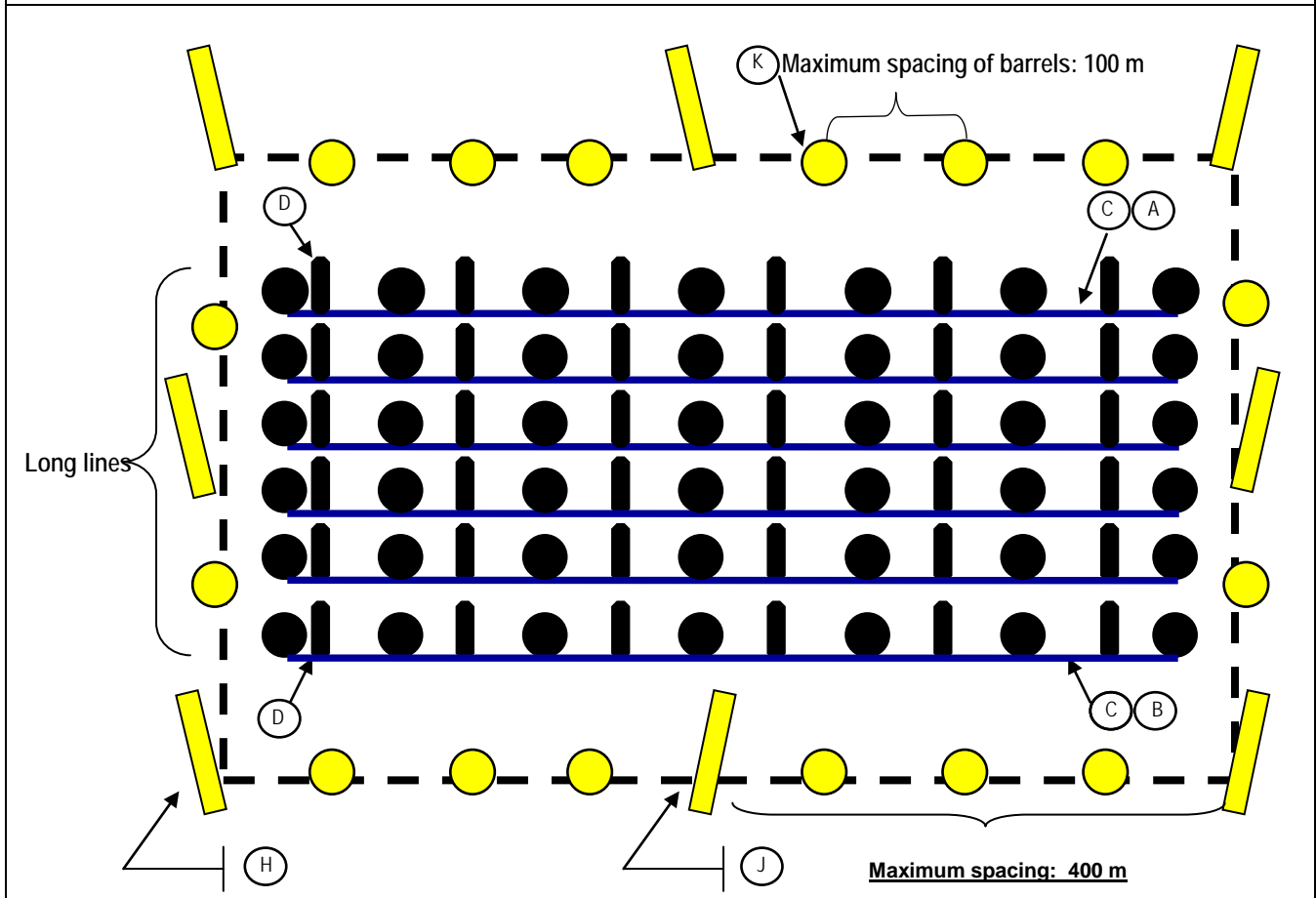
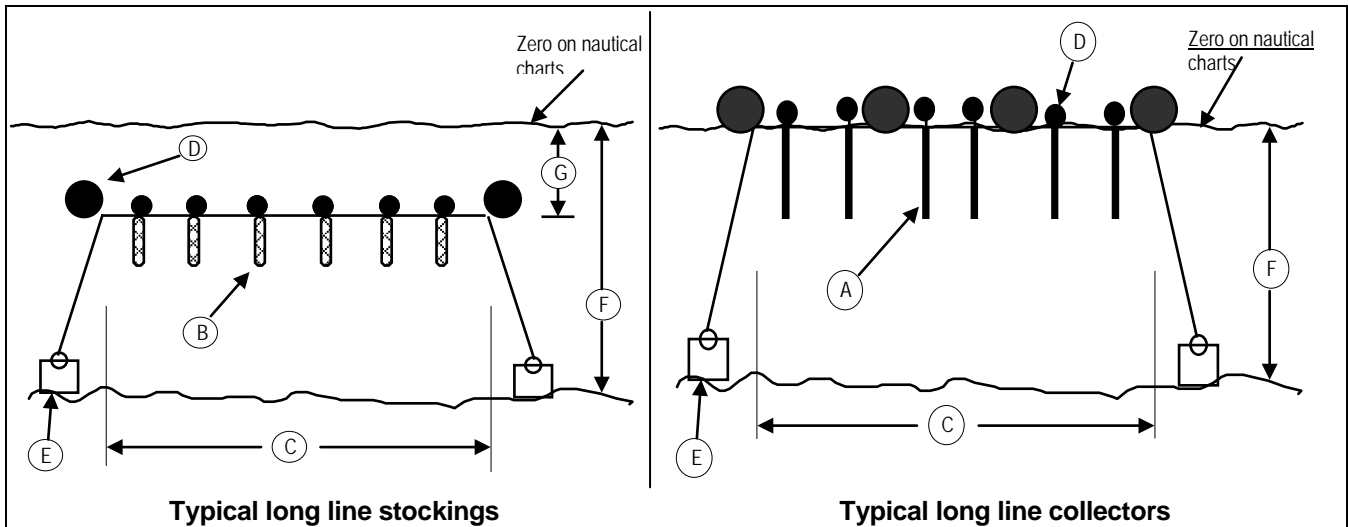
Note 1: The proponent must produce a detailed plan for the buoy marking system, specific to the present application and indicate the position of each type of buoy

Note 2: Refer to the design type of buoy on pages B-4 and B-5 for corner buoys (H) and intermediary buoys (J)

Note 3: Anchorages, buoys, and equipment are located inside the limits of the aquaculture area.

Note 4: The marking system delineates the area used by anchorages and aquaculture equipment in place.

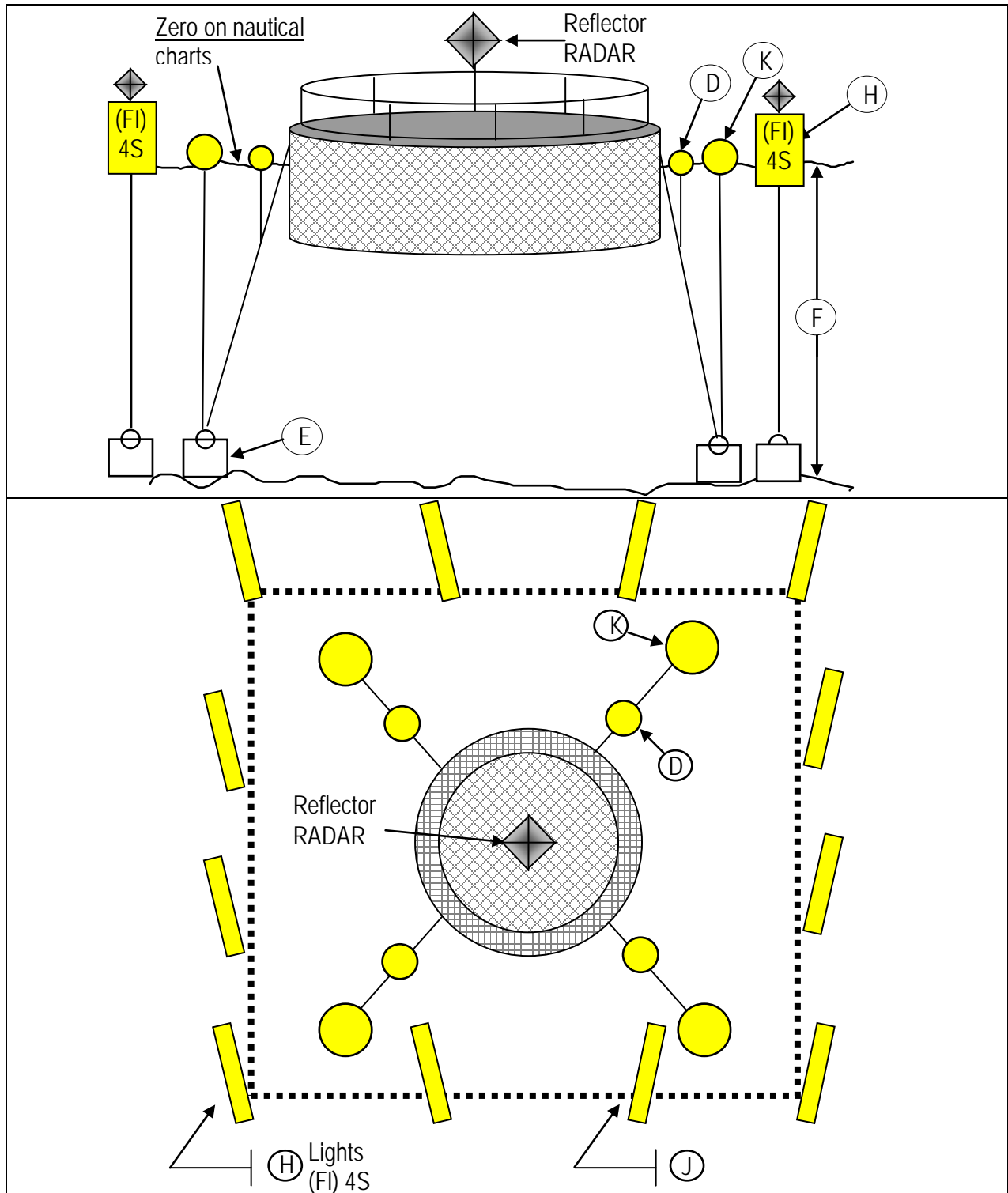
Typical marking of an aquaculture infrastructure (molluscs)



SIGNATURE OF PROPONENT: _____

DATE: _____

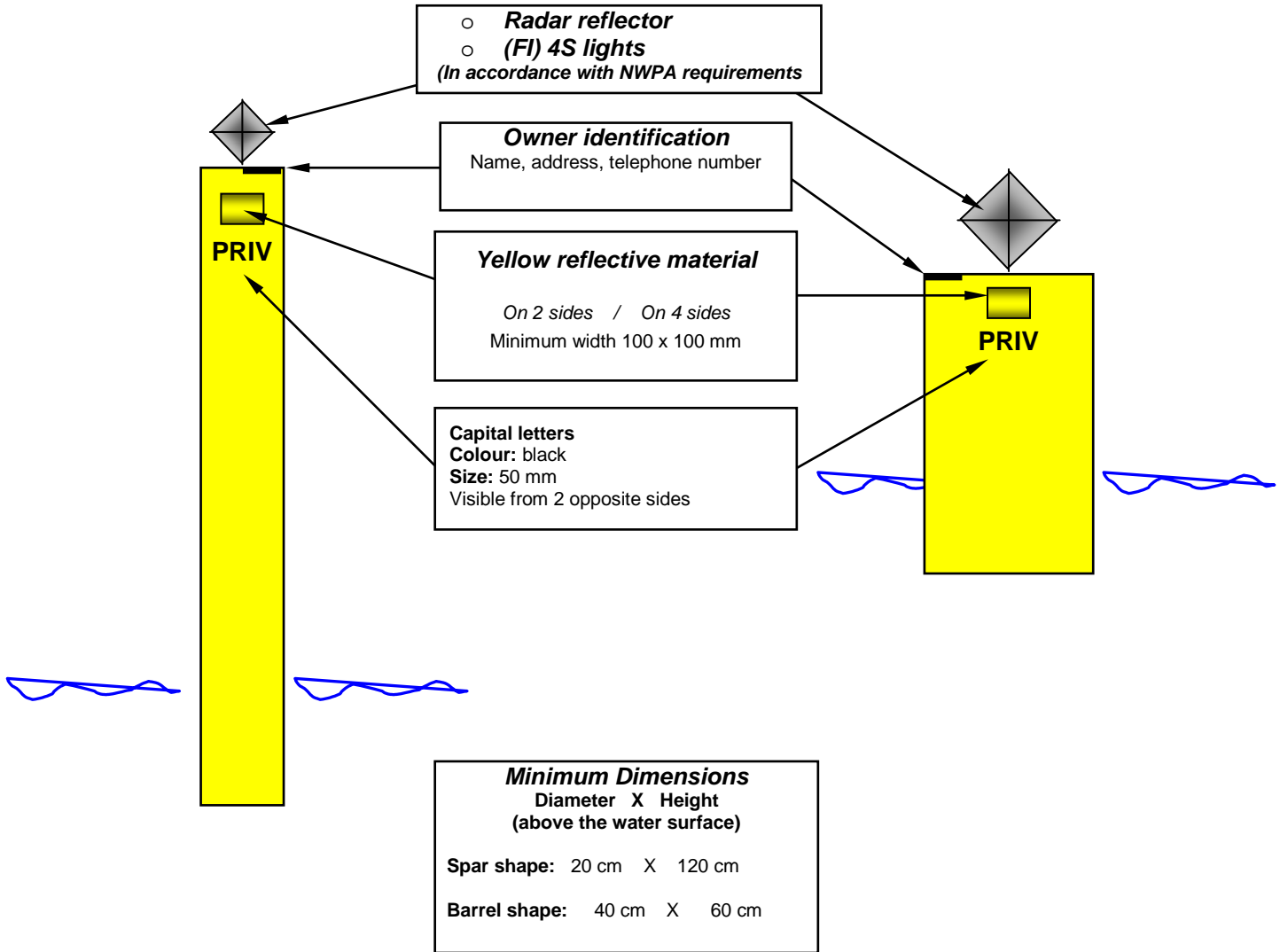
Typical marking of an aquaculture infrastructure (fish)



SIGNATURE OF PROPONENT: _____

DATE: _____

Typical yellow cautionary buoy delineating the aquaculture area (in compliance with Private buoy regulations – SOR/99-335)



SIGNATURE OF PROPONENT: _____

DATE: _____

Depending on the nature of the application, the following information must be supplied in the enclosed **scientific protocol**. This procedure will enable authorities to analyze your application.

8. PROJECT DESCRIPTION

8.1 Objectives

- Breeding or cultivation methods.
- Part of the life cycle.
- Origin and destination of the cultivated organisms. Specify if wild individuals must be captured or caught for aquacultural purposes.
- Supply details and a calendar of planned activities (production and construction) as well as their location.

If need be, supply the following information:

9. DESCRIPTION OF FACILITIES

9.1 Description of facilities

- Type of work.
- Details on the proposed work (cages, long line systems, wharfs, ice booms, etc.).
- Provide copies of the plans (elevation and section) of the proposed facilities.
- Provide details pertaining to other structures and buildings that need to be built or modified because of the project.
- Specify the access requirements to the site (ex. water supply, wharf, etc).
- Supply an overview of the methods of construction or installation (equipment to be used, temporary construction) which could have impacts on navigation or the environment.
- Describe the site selection process, more specifically the possibilities and constraints that were assessed.

10. DESCRIPTION OF RECEIVING ENVIRONMENT

10.1 Environmental and Biological Context

- Specify the main physical features of the environment of the requested site(s) (salinity, temperature, currents, and bathymetry) according to the existing scientific and technical literature. Indicate the features on an overlay that can be placed over the nautical chart or supported by a computer medium compatible with standard Geographic Information Systems (SIG/GIS) software.
- Describe an overview of the main biological features of the environment (fauna and flora in place).
- List all contributing factors with respect to organic material and sources of contaminants which could be present in the sector (raw or treated sewage, agricultural or industrial activities, etc.).

10.2 Features of the environment

- Identify and describe all existing fixed or floating aids to navigation located near the site (buoys, navigation lights, signs).
- Describe visibility conditions: periods of fog or reduced visibility.
- Describe fishing activities (commercial, aboriginal or recreational fishing) and aquaculture activities, tourist and recreational activities (pleasure boating, scuba diving, water skiing, swimming, etc.) practised within the project area.
- Within a 2 km radius (approximately 1 nautical mile) around the site's central area, specify these activities on an overlay (or computer media compatible with standard GIS software systems) that can be superimposed on the site location map.
- Specify the minimum and maximum clearance between the bottom of the sea and the aquaculture structures/facilities at lowest tide and highest tide, in reference to zero on nautical charts (metres).
- Indicate the depth (metres) at the location of structures as well as at the corners of the aquaculture site.

- Indicate the location of potential hazards to navigation, such as rocks, shoals, a ship wreck, etc.
- Describe all of the specific features pertaining to the navigable waterway, such as wharfs, floating pontoons, slipways, established harbour limits, overhead lines, bridges, ferry routes, seaplane bases, etc.
- Specify if the proposed site is located near an existing or potential *Marine Protected Area* or other federal or provincial sanctuaries or parks. List their names and location.

11.1 Accidents and defects

- Specify the potential risks associated with accidents or defects which could occur during the implementation, operation and disposal of the establishment (discharge of hydrocarbons, destruction due to storms, massive losses of fish, etc).
- Specify the follow-up methods which will be in place to ensure the identification and limitation of impacts on navigation and identify the measures to be undertaken after an incident.

Note: In cases when equipment would be moved outside the approved site, the proponent must immediately issue a notice to navigation describing the situation and must replace the equipment in its approved location as soon as possible. The proponent must remove all equipment which does not meet approval in accordance with the Navigable Waters Protection Act, from the water. An emergency plan must be supplied and kept up to date at all times.