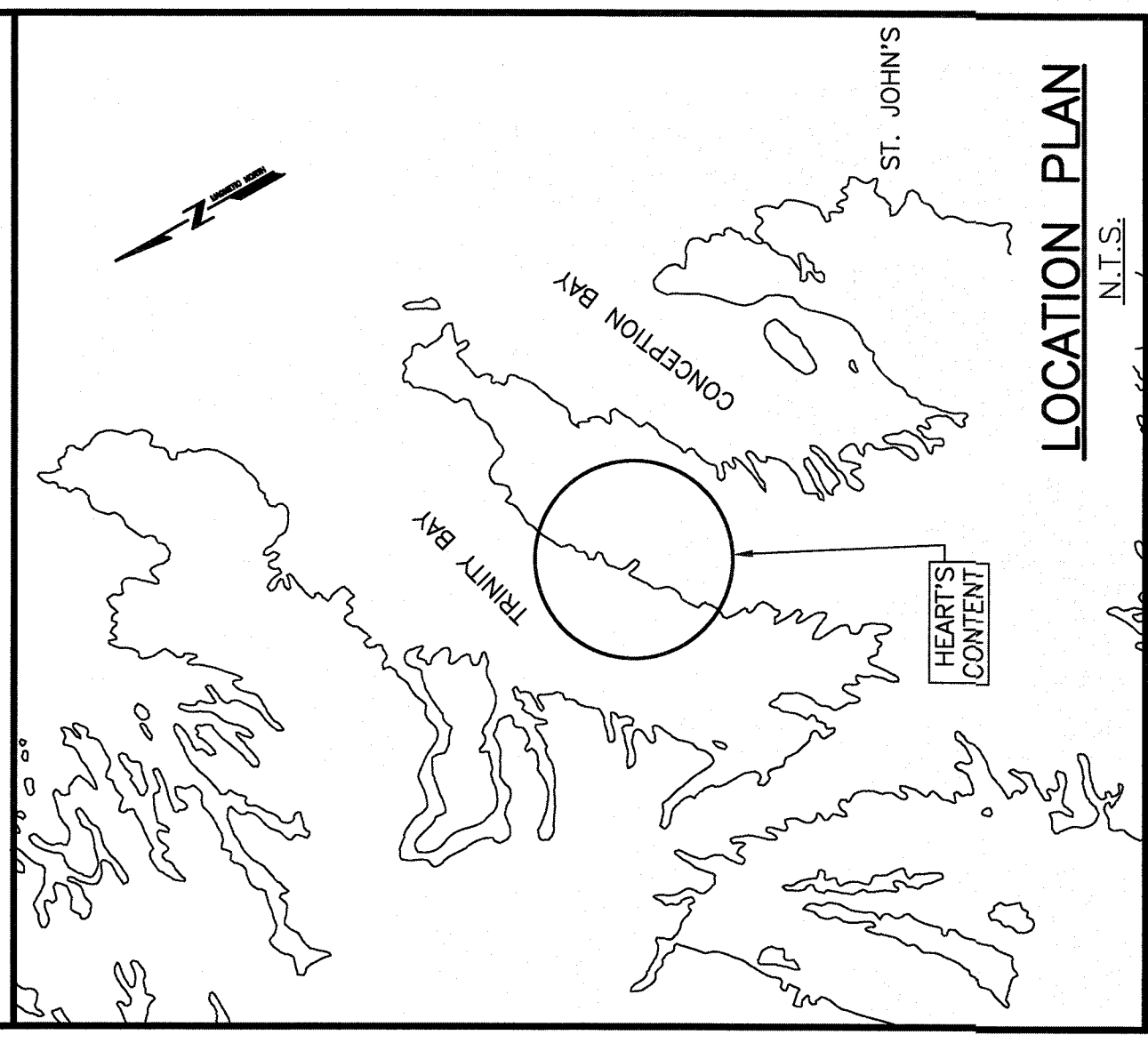
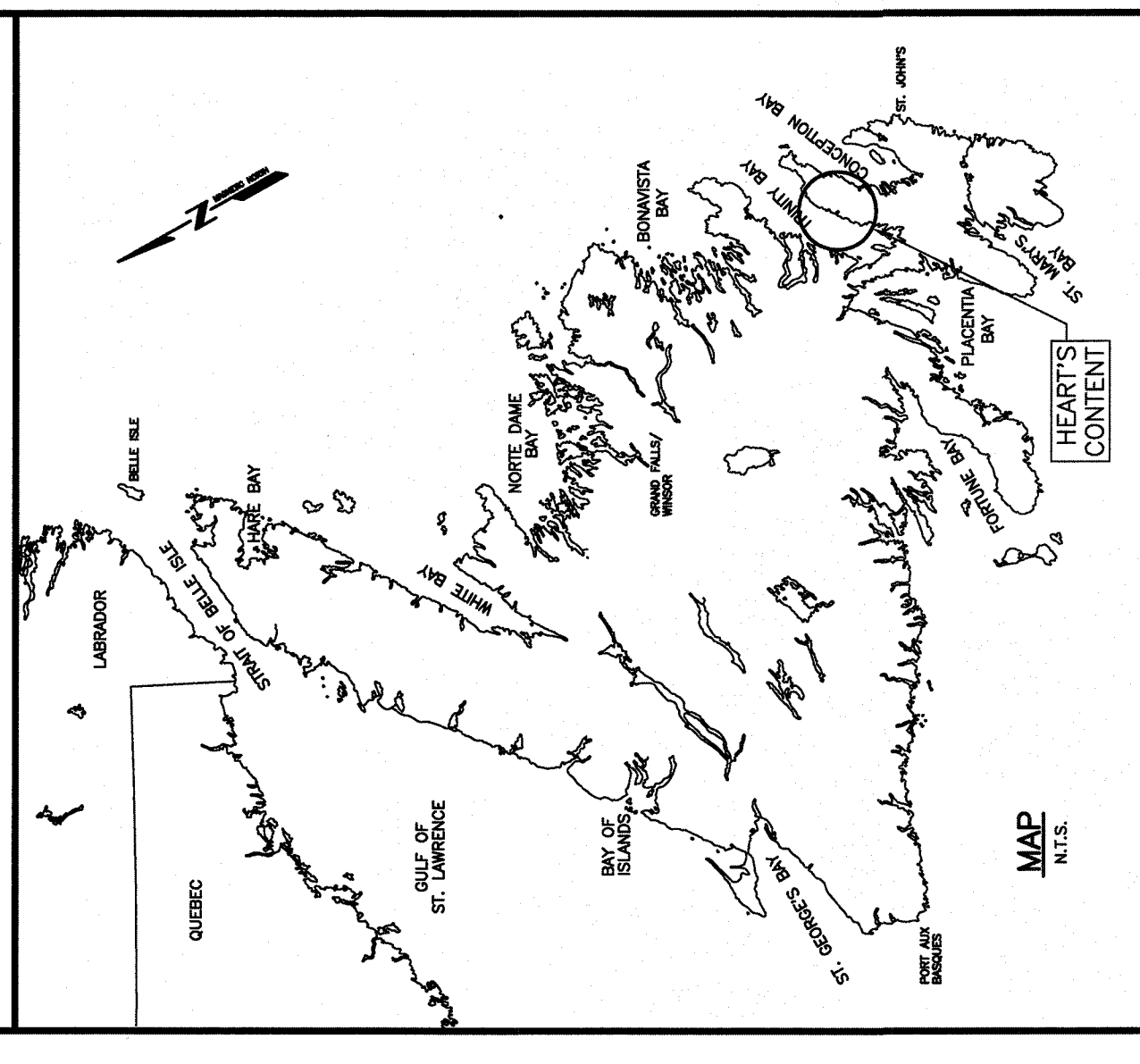
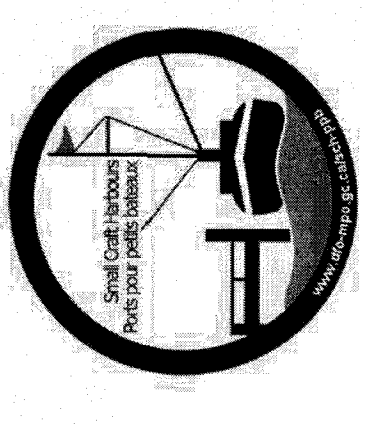


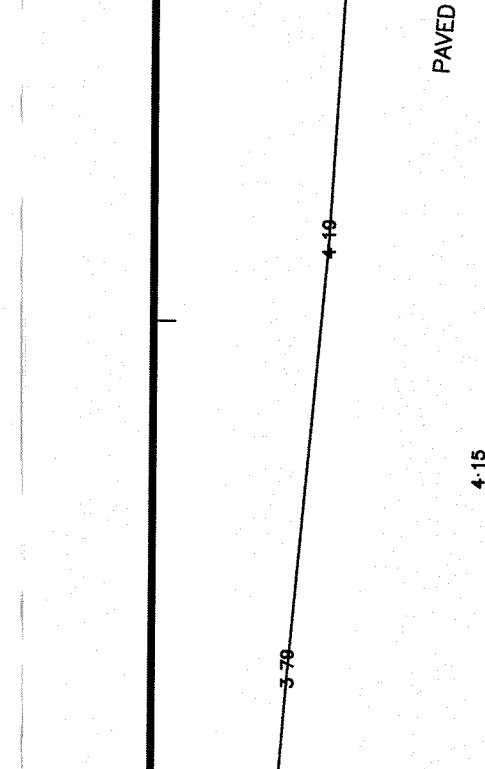
FISHERIES AND OCEANS  
CANADA

SMALL CRAFT HARBOURS



**WHARF REPAIRS  
HEART'S CONTENT  
NEWFOUNDLAND AND LABRADOR**

**PROJECT No. 722062  
ISSUED FOR TENDER**



NOTES:  
 1. ALL ELEVATIONS ARE IN METRES  
 UNLESS OTHERWISE NOTED.  
 2. ALL DIMENSIONS ARE IN MILLIMETRES  
 UNLESS OTHERWISE NOTED.

PROVINCE OF NEWFOUNDLAND  
 PERMIT HOLDER  
 This Permit Allows  
 RAY ENGINEERING INC.  
 to conduct Topographic Engineering  
 in Newfoundland and Labrador  
 Permit No. as issued by AEP/01/0022  
 which is valid for the year 2017.

PROFESSIONAL ENGINEER  
 NEWFOUNDLAND  
 REGISTRATION NO. 101917  
 DATE 01/19/17

ISSUED FOR TENDER  
 1/16/17  
 date project

WHARF REPAIRS  
 HEART'S CONTENT, NL

SOUNDING AND  
 TOPOGRAPHIC SURVEY

designed N.H.  
 16 JANUARY 16, 2017  
 drawn P.H.  
 16 JANUARY 16, 2017  
 date approved  
 16 JANUARY 16, 2017  
 approved  
 TENDER  
 16 JANUARY 16, 2017  
 Project number  
 722062  
 no. of sheets  
 1  
 no. of sheets  
 1



**SURVEY NOTES**  
 SURVEY PARTY CHIEF RICHARD HEALEY  
 SURVEY VESSEL ALUMINUM BOAT  
 SURVEY DATES AUGUST 17, 2010  
 SOUNDING SYSTEM SOUNDBIRD 1520 RT/A  
 POSITONING SYSTEM TRIMBLE 210 MIZ  
 LAMP SURVEY POSITION BY GPS (WITH OTT)  
 DATUM NAD 83  
 DATUM REDUCTION SCHEME REAL TIME DOPS (WITH OTT)

**OFFICE PROCESSOR**  
 EDDIE BRANNAN  
 DATE OF PROCESSING AUGUST 2010  
 MODE OF SURVEYING & METHOD OF REDUCTION OF SURVEY DATA  
 REAL TIME DOPS (WITH OTT)

**CONTROL POINTS**  
 CONTROL POINT NO. CONTROL POINT DESCRIPTION  
 1 223072.253 504049.824 4.493 m  
 2 322682.235 530587.742 4.493 m  
 3 322682.235 530587.742 4.493 m  
 4 322682.235 530587.742 4.493 m  
 5 322682.235 530587.742 4.493 m  
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 8 322682.235 530587.742 4.493 m  
 9 322682.235 530587.742 4.493 m  
 10 322682.235 530587.742 4.493 m

**ALL SOUNDINGS & ELEVATIONS IN METRES**  
 ALL SOUNDINGS & ELEVATIONS REFERRED TO THE DATUM OF 1984 (NAD 83).  
 SOUNDINGS TAKEN USING MANSOURN 210 ECHO SOUNDER AND POSITONED BY TRIMBLE  
 POSITONING SYSTEM BETWEEN FEB. 22, 2010 & JULY 07, 2010 BY  
 RICHARD HEALEY  
 COORDINATES FOR HORIZONTAL CONTROL ARE GIVEN ON THE UTM MAPPING  
 CHARTS BEFORE BEING CORRECTED FOR TIDE & B.M. CHECK CORRECTION.  
 SOUNDINGS WERE REDUCED USING HYPERAC MAX VER.02.12.  
 SPEED OF SOUND WAS OBTAINED USING A DOBER-PRO VELOCITYMETER.  
 ALL FIELD NOTES ARE IN HEARTS CONTENT #330.

**LEGEND**

**SYMBOLS**

- 1 LANDS
- 2 WATER BODIES
- 3 LIGHT CHANNEL
- 4 SHIP CHANNEL
- 5 SHIP CHANNEL
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**UNIT TYPE**

- 1 MESH OUTLINE
- 2 SHIP CHANNEL
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SCALE: 1:250  
 0m 5m 10m 15m 20m 25m

Scale: 1:250  
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Scale: 1:250  
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