

## **APPENDIX 1**

**FIGURE 1: AERIAL PHOTO**

**FIGURE 2: GEOLOGY OF GROS CACOUNA**

**FIGURE 3: LOCATION PLAN (BOREHOLES, GEOLOGY, PHOTOS)**

**FIGURE 4: BOREHOLE LOCATION PLAN**

**FIGURE 5: TEST PIT LOCATION PLAN**

**FIGURE 6: SECTION TANK-100 (SECTION A)**

**FIGURE 7: SECTION TANK-101 (SECTION B)**

**FIGURE 8: SIGMA – SEISMIC REFRACTORY SURVEY 2005**

# Phase 1 – Cacouna Energy, Gros Cacouna, Quebec



Figure 1. Ile du Gros Cacouna and region with future installations.



## Phase 1 – Cacouna Energy, Gros Cacouna, Quebec

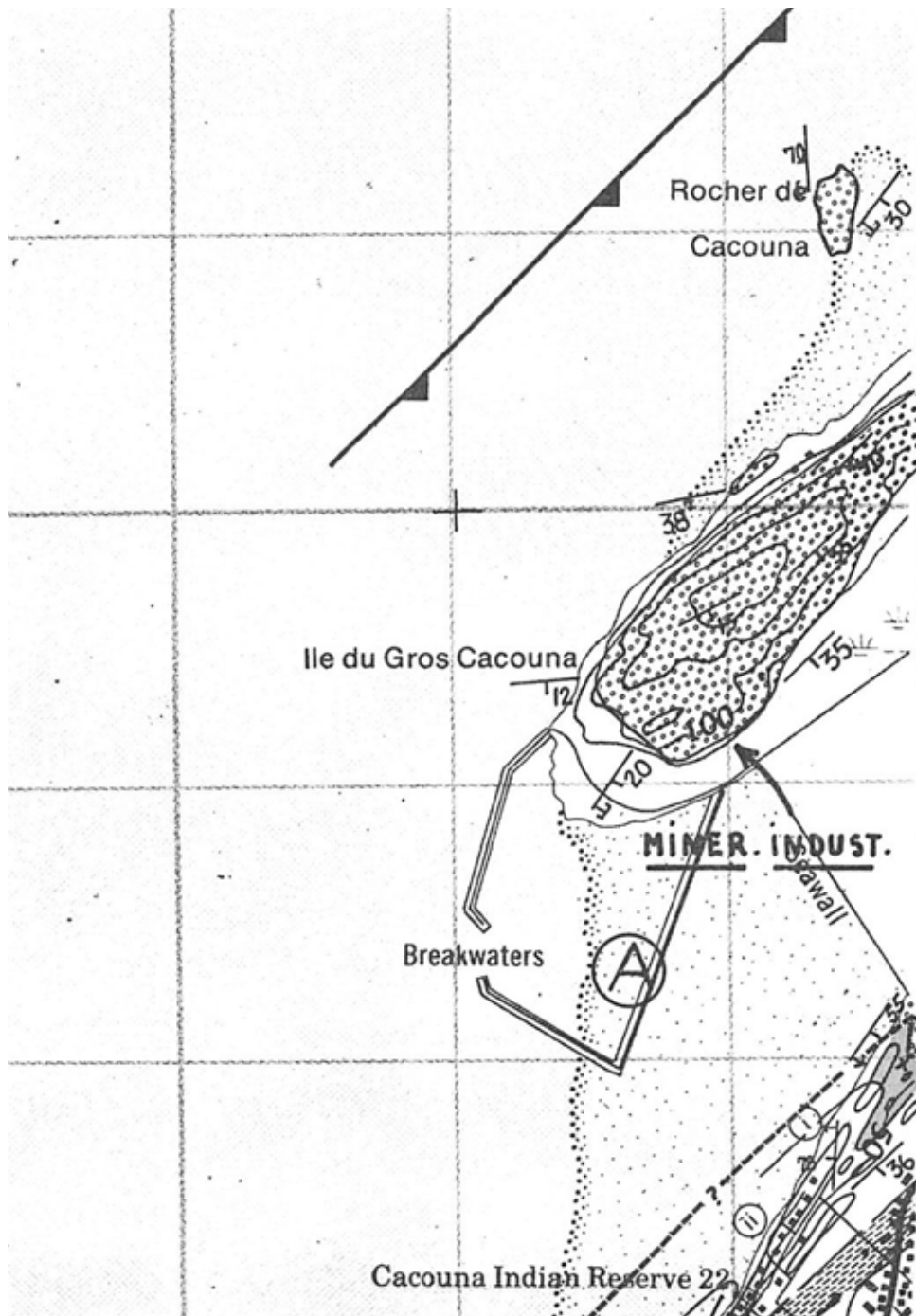
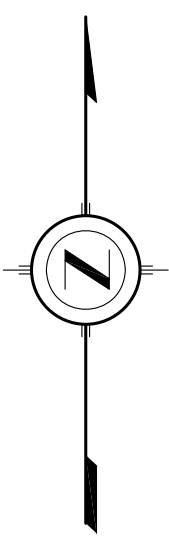
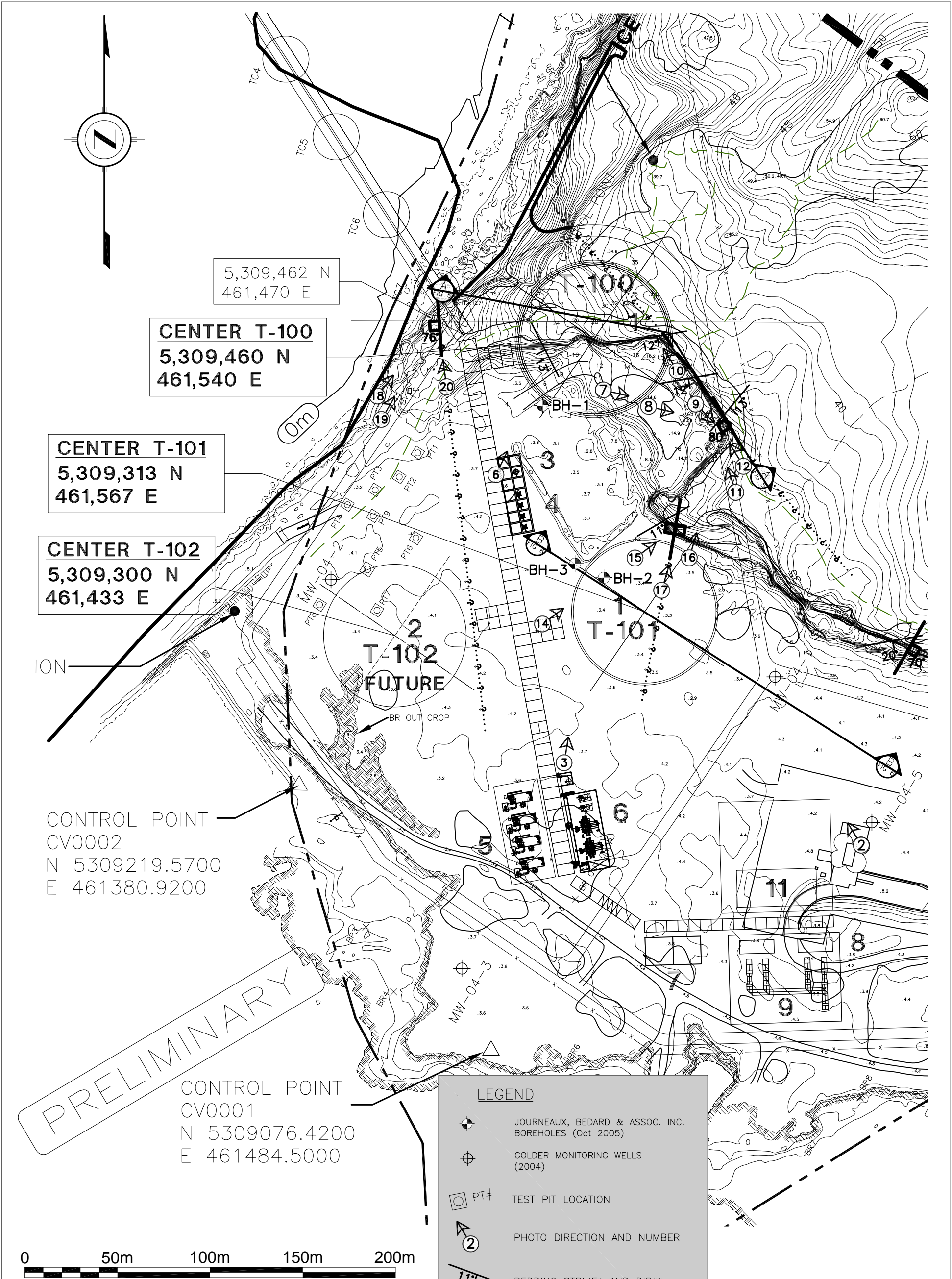


Figure 2. Ile du Gros Cacouna geology as mapped by Vallières, 1977 (modified from Vallières, 1977).







5,309,462 N  
461,470 E

**CENTER T-100**  
5,309,460 N  
461,540 E

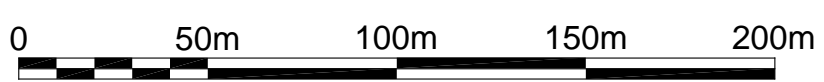
**CENTER T-101**  
5,309,313 N  
461,567 E

**CENTER T-102**  
5,309,300 N  
461,433 E

CONTROL POINT  
CV0002  
N 5309219.5700  
E 461380.9200

CONTROL POINT  
CV0001  
N 5309076.4200  
E 461484.5000

PRELIMINARY



Scale 1:2000

**LEGEND**

- JOURNEUX, BÉDARD & ASSOC. INC. BOREHOLES (Oct 2005)
- GOLDER MONITORING WELLS (2004)
- TEST PIT LOCATION
- PHOTO DIRECTION AND NUMBER
- BEDDING STRIKE\* AND DIP\*\*
- FRACTURE/FAULT STRIKE\* AND DIP\*\*
- VERTICAL FRACTURE/FAULT

NOTE:  
PHOTOS 1,4,5, AND 13 TAKEN SOUTH-EAST OF CEMENT SILOS.

\*DIRECTION OF FEATURE (LINE OF CONSTANT ELEVATION)  
\*\*SLOPE ANGLE OF BED OR FAULT PLANE FROM HORIZONTAL

CLIENT :  
**Sandwell**

DATE : 28 OCT 2005      PROJECT No. : S-05-1743

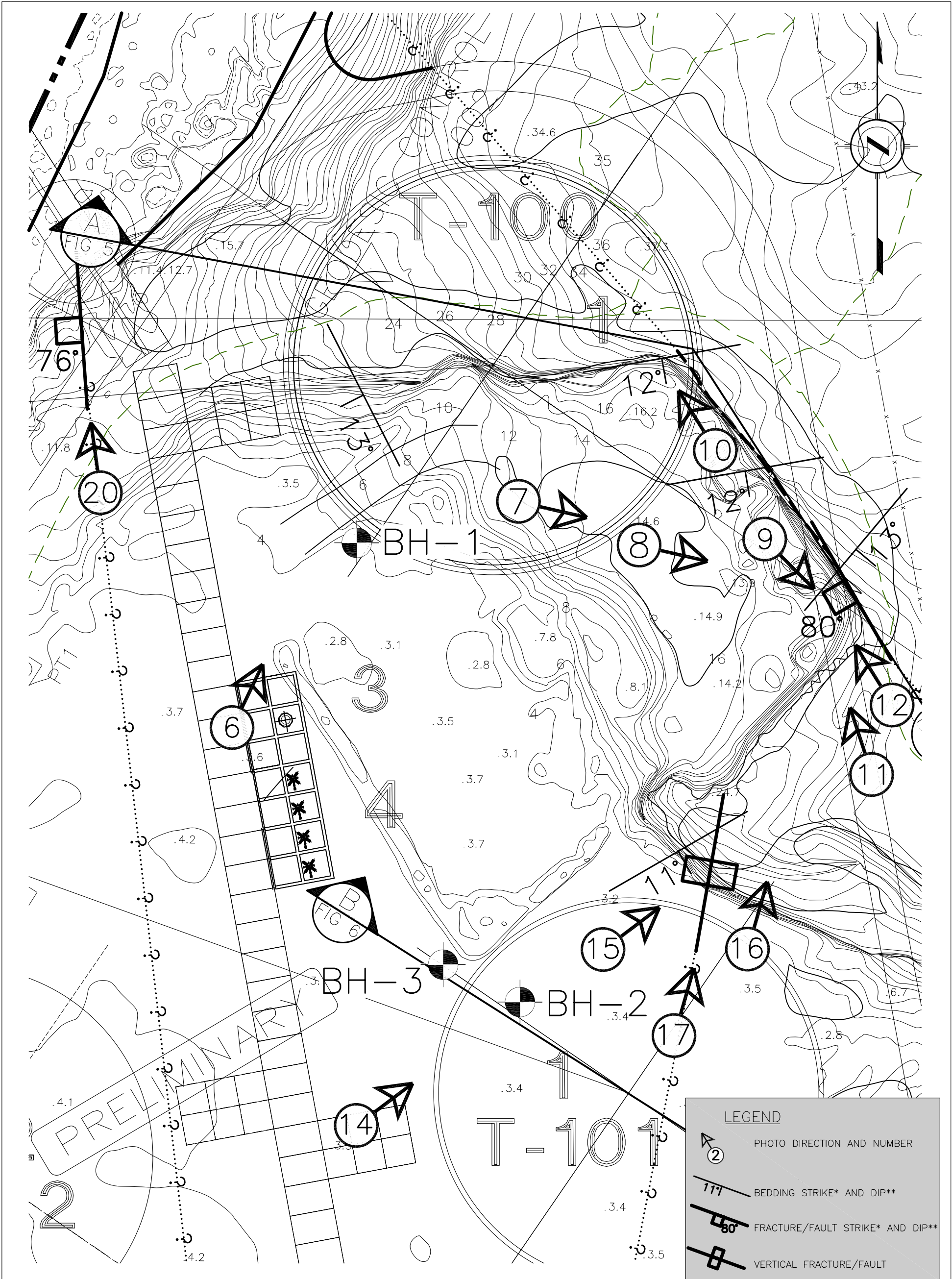
PROJECT :  
**LOCATION PLAN  
GEOLOGY, PHOTOS, AND BOREHOLES  
PHASE 1  
CACOUNA ENERGY  
CACOUNA, QUEBEC**

**JOURNEUX, BÉDARD & ASSOC. INC.**  
1625, Cr. Newman, suite 200, Dorval, QC H9P 2R6  
T 514.636.4102 • F 514.636.8447  
e-mail: jba@journeauxbedard.com

SCALE :	1:2000
DRAWN BY :	D.SIMS, B.Sc.
PROJECTED BY :	N. JOURNEUX, Eng, M.S.C.E.
APPROVED BY :	N. JOURNEUX, Eng, M.S.C.E.
DRAWING No. :	S1743-CS-GT-001.1
FIGURE No. :	FIGURE 3
REV. :	

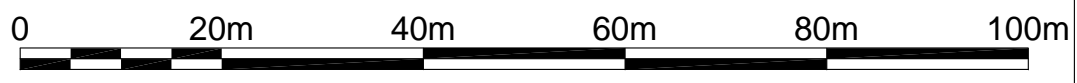
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**LEGEND**

- PHOTO DIRECTION AND NUMBER
- BEDDING STRIKE\* AND DIP\*\*
- FRACTURE/FAULT STRIKE\* AND DIP\*\*
- VERTICAL FRACTURE/FAULT



Scale 1:750

**JOURNEAUX, BÉDARD & assoc. Inc.**  
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SCALE :	1:750
DRAWN BY :	D.SIMS, B.Sc.
PROJECTED BY :	N. JOURNEAUX, Eng, M.S.C.E.
APPROVED BY :	N. JOURNEAUX, Eng, M.S.C.E.
DRAWING No. :	S1743-CS-GT-001.2
FIGURE No. :	FIGURE 4
REV. :	

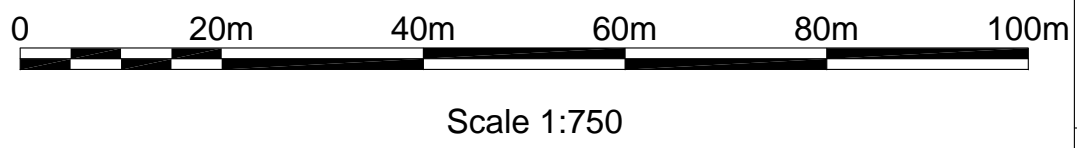
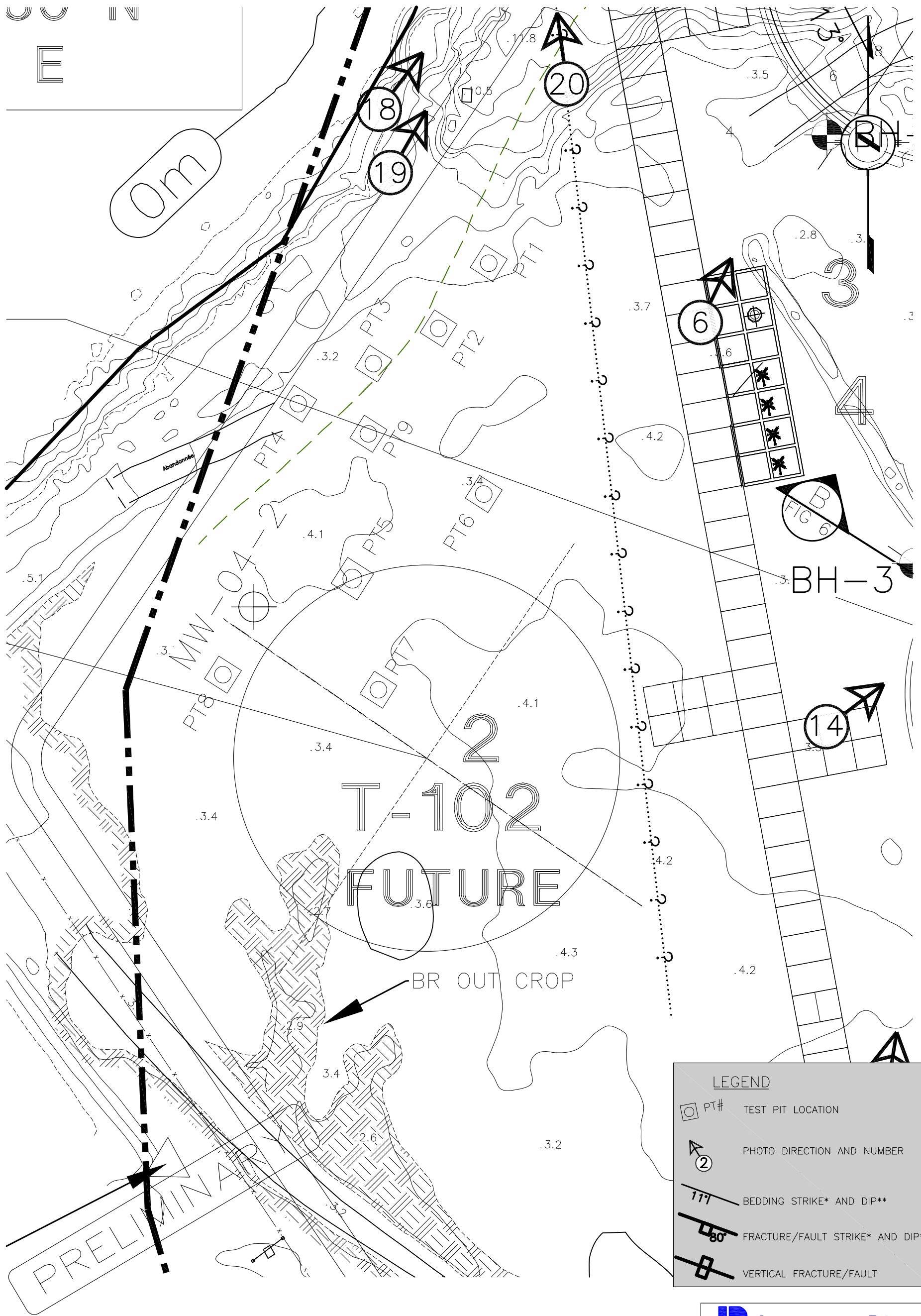
\*DIRECTION OF FEATURE (LINE OF CONSTANT ELEVATION)  
 \*\*SLOPE ANGLE OF BED OR FAULT PLANE FROM HORIZONTAL

CLIENT :	<b>Sandwell</b>	PROJECT :	<b>BOREHOLE LOCATION PLAN</b>
DATE :	28 OCT 2005	PROJECT No. :	S-05-1743
		PHASE 1 CACOUNA ENERGY CACOUNA, QUEBEC	

DATE PRINTED: 20051124.13504713

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LEGEND	
	PT# TEST PIT LOCATION
	PHOTO DIRECTION AND NUMBER
	BEDDING STRIKE* AND DIP**
	FRACTURE/FAULT STRIKE* AND DIP**
	VERTICAL FRACTURE/FAULT

**JB** **JOURNEAUX, BÉDARD**  
 & assoc. Inc.  
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 e-mail: jba@journeauxbedard.com

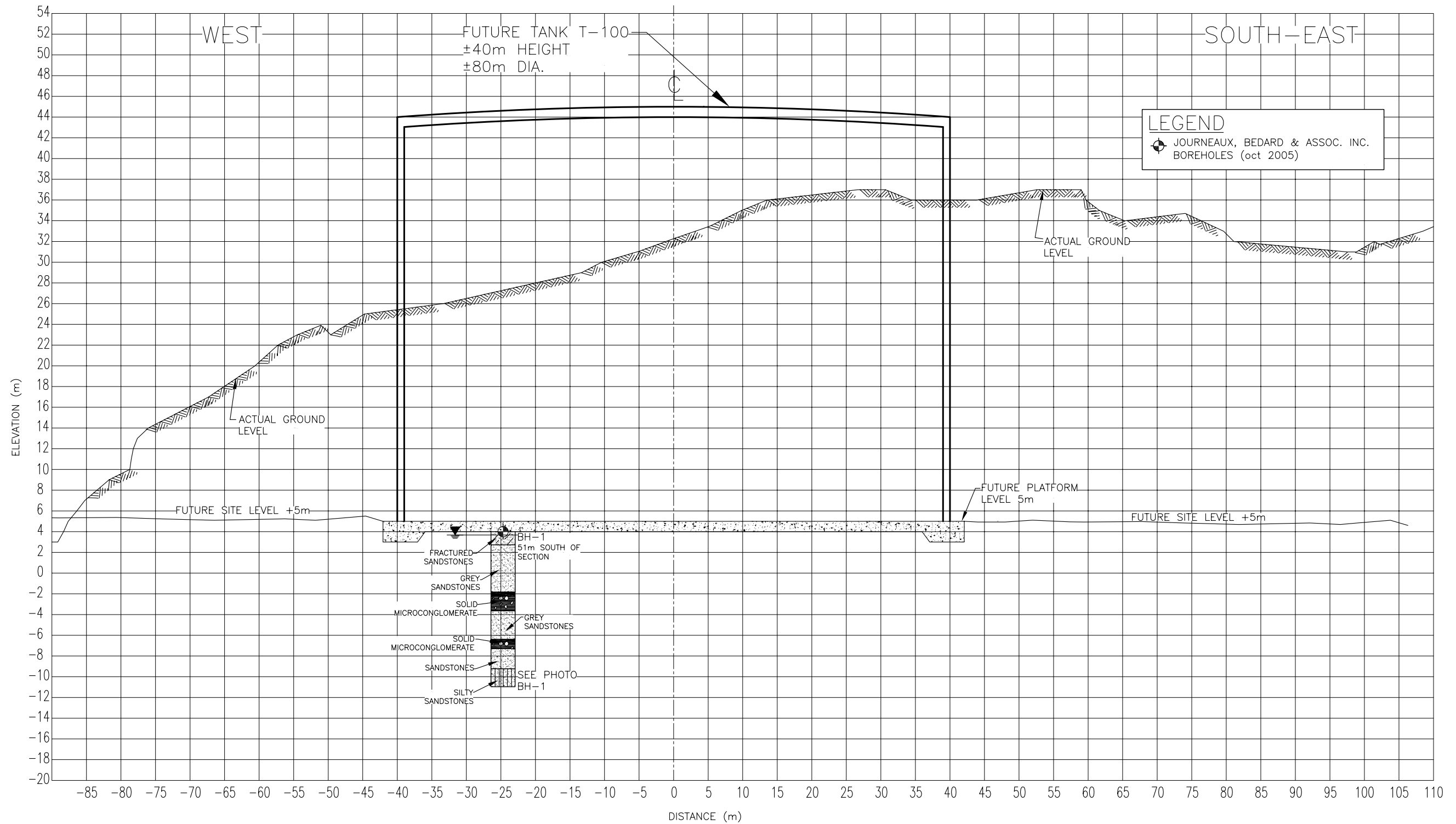
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DRAWN BY :	D.SIMS, B.Sc.
PROJECTED BY :	N. JOURNEAUX, Eng, M.S.C.E.
APPROVED BY :	N. JOURNEAUX, Eng, M.S.C.E.
DRAWING No. :	S1743-CS-GT-001.3
FIGURE No. :	FIGURE 4
REV. :	

\*DIRECTION OF FEATURE (LINE OF CONSTANT ELEVATION)  
 \*\*SLOPE ANGLE OF BED OR FAULT PLANE FROM HORIZONTAL

CLIENT :	<b>Sandwell</b>	PROJECT :	<b>TEST PIT LOCATION PLAN</b>
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DATE PRINTED: 20051124.13524228

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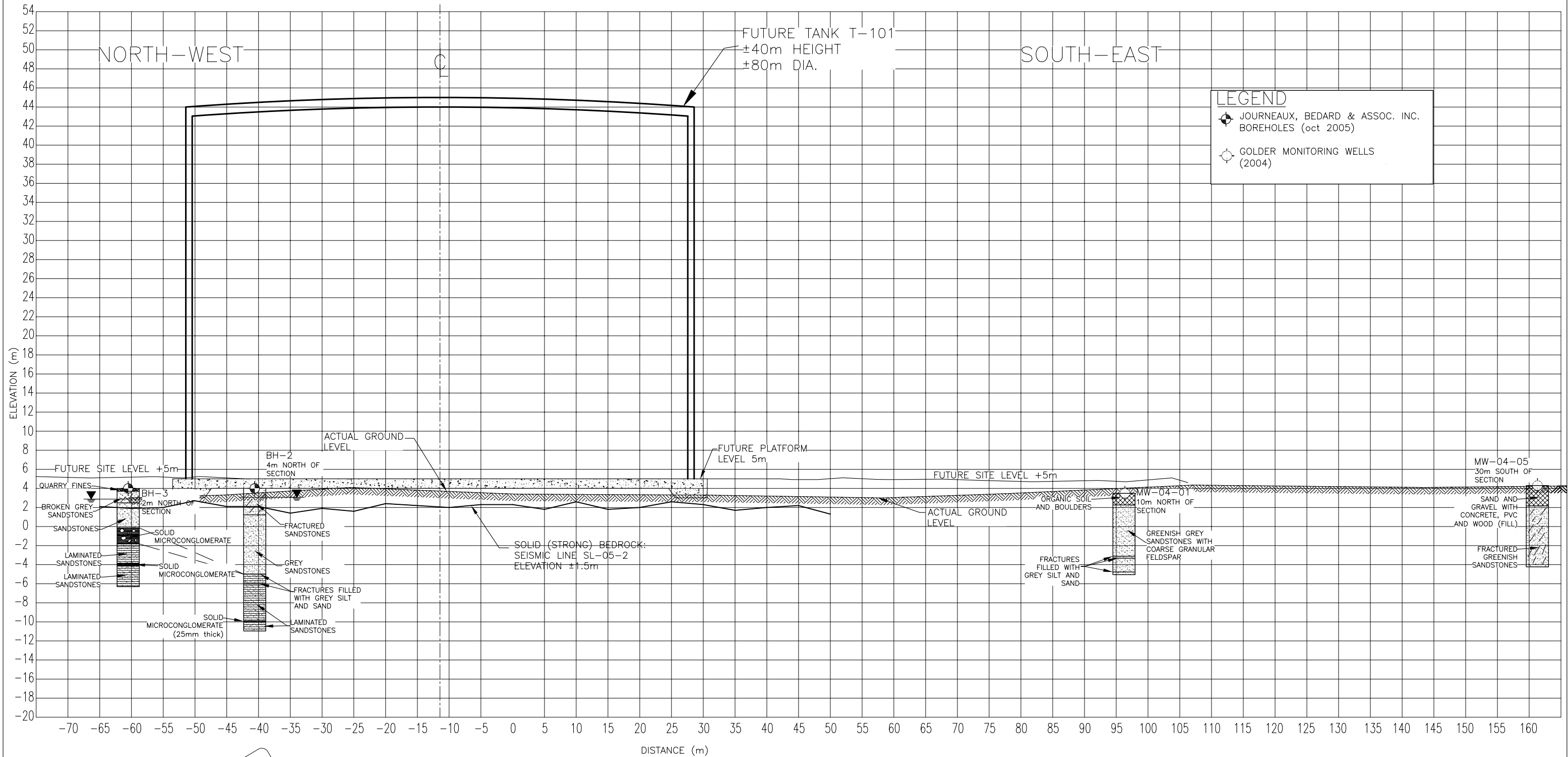
**SECTION A-A**  
**VERTICAL = 1.5 X HORIZONTAL**

PRELIMINARY

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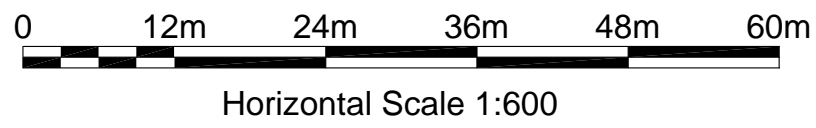
CLIENT : 	PROJECT : <b>SECTION TANK-100 BOREHOLE POSITION</b>  CACOUNA, QUEBEC	DATE : 07 NOV 2005	SCALE : AS SHOWN	 1625, Cr. Newman, suite 200, Dorval, QC H9P 2R6 T 514.636.4102 • F 514.636.8447 e-mail: jba@journeauxbedard.com	PROJECT No. : S-05-1743	DRAWING No. : S1743-CS-GT-002.1	FIGURE No. : FIGURE 6	REV. :
		DRAWN BY : S.HÉNAULT, T.Sc.A.	PROJECTED BY : N.JOURNEAUX, Eng,					

I:\Data-SOIL\Drawings\1743\Drawings\S1743-CS-GT-002.dwg



LEGEND	
	JOURNEAUX, BÉDARD & ASSOC. INC. BOREHOLES (oct 2005)
	GOLDER MONITORING WELLS (2004)

**SECTION B-B**  
**VERTICAL = 1.5 X HORIZONTAL**



**PRELIMINARY**

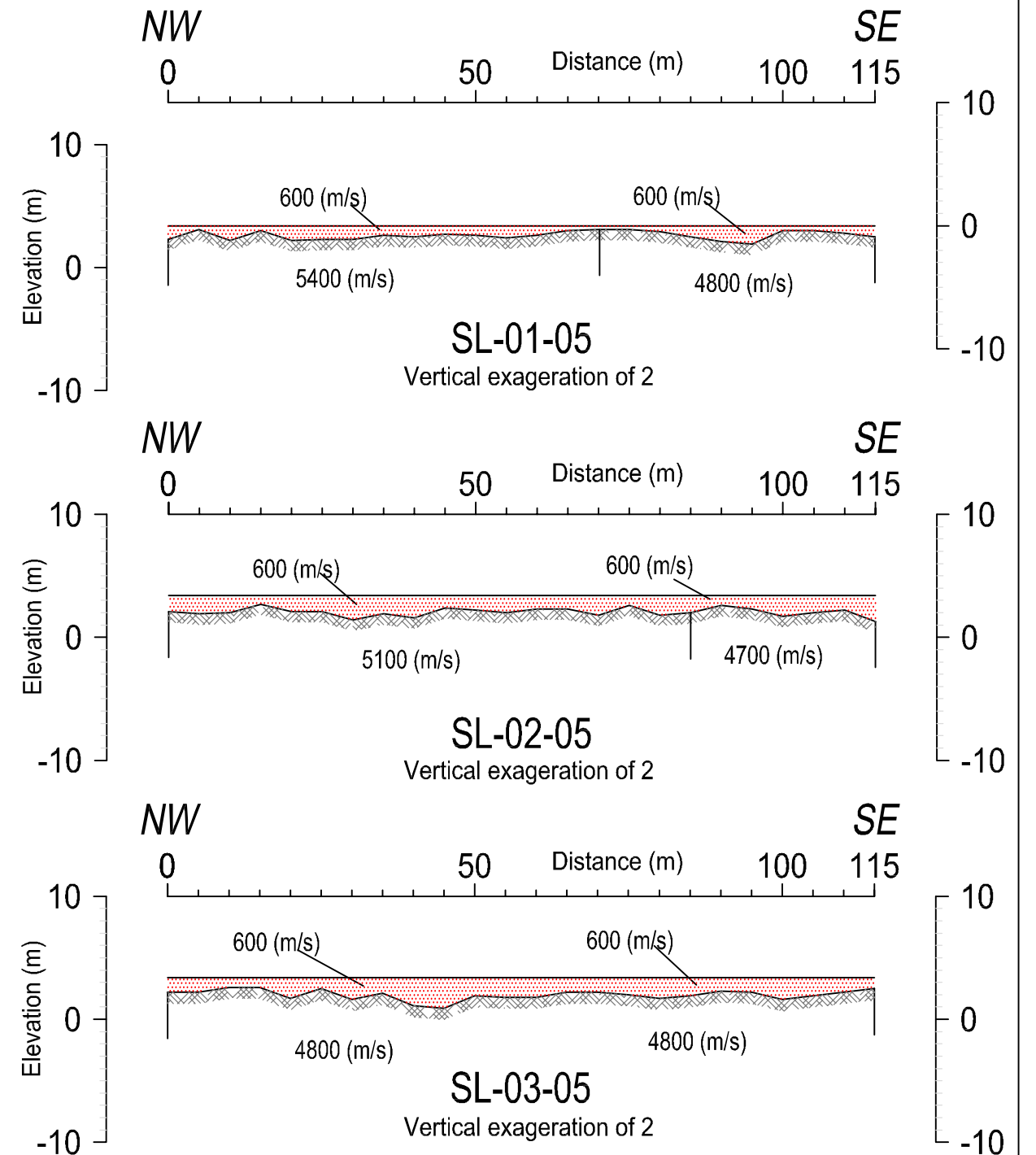
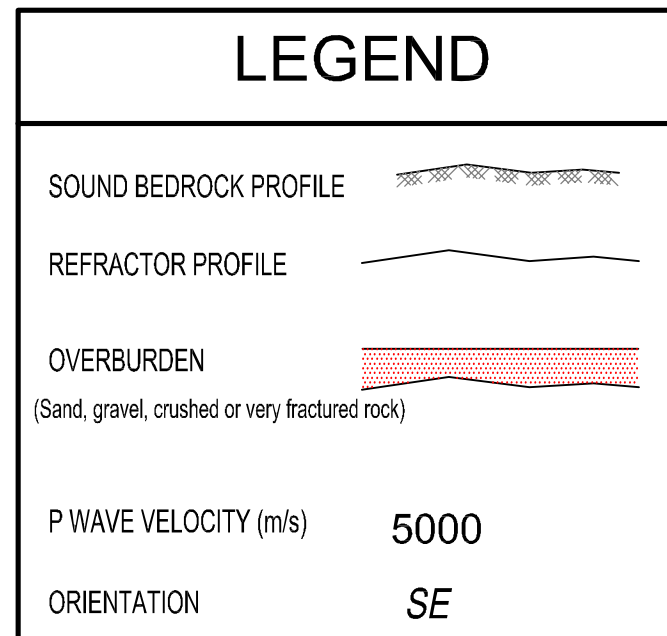
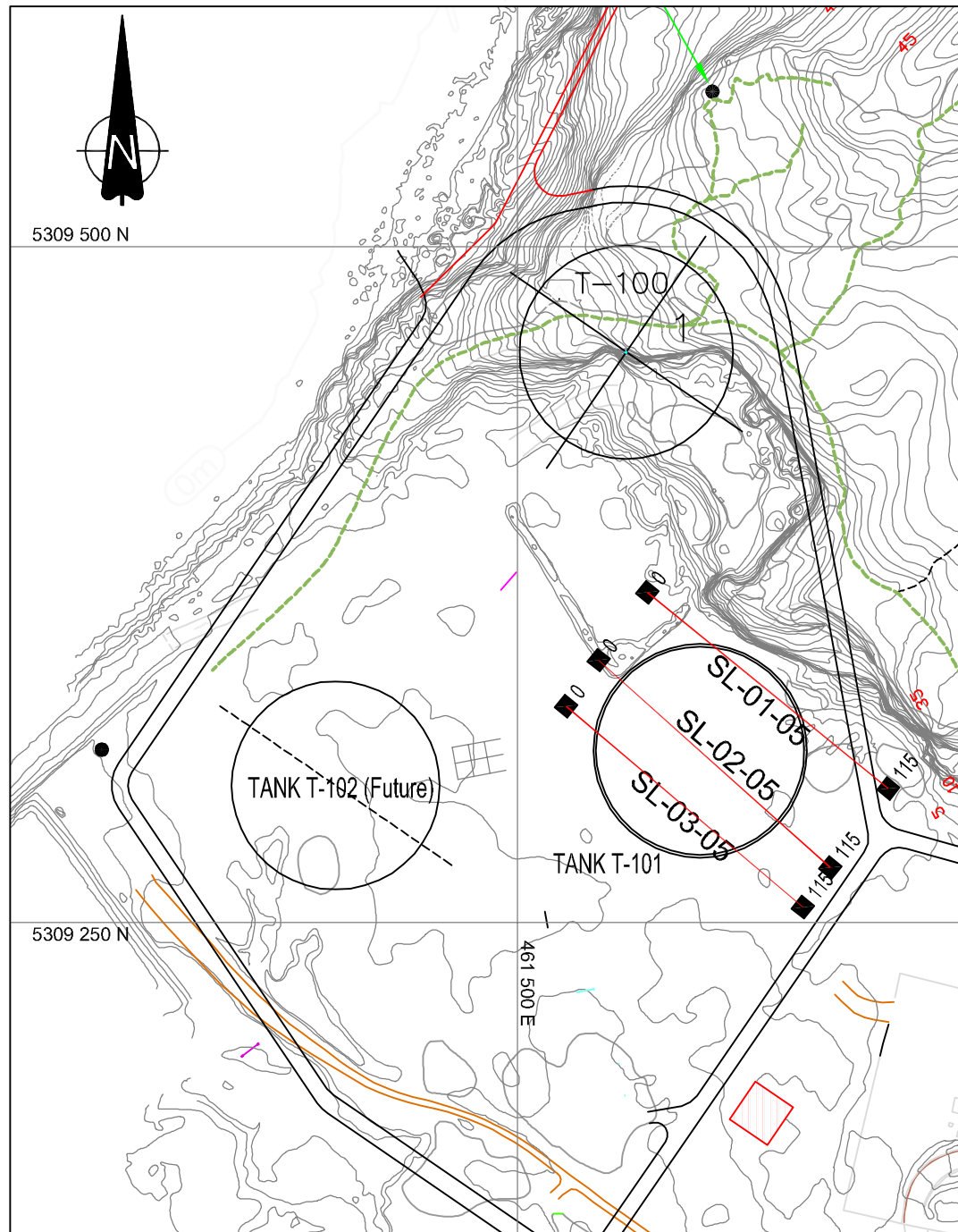
DATE PRINTED: 20051128 11:33033

CLIENT : 	PROJECT : <b>SECTION TANK-101 BOREHOLE POSITION</b>  CACOUNA, QUEBEC	DATE : 07 NOV 2005	SCALE : AS SHOWN	 1625, Cr. Newman, suite 200, Dorval, QC H9P 2R6 T 514-636-4102 • F 514-636-8447 e-mail: jba@journeauxbedard.com		
		DRAWN BY : S.HÉNAULT, T.Sc.A.				
PROJECTED BY : N.JOURNEAUX, Eng,		PROJECT No. : S-05-1743	DRAWING No. : S1743-CS-GT-002.2		FIGURE No. : FIGURE 7	REV. :
APPROVED BY : N.JOURNEAUX, Eng,						

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LOCATION PLAN 1:2,500

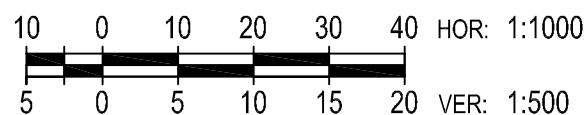


- 1 The seismic survey has been carried out by Sigma Geophysics inc. in Oct 2005.
- 2 A constant elevation of 3.4 m has been assigned to the ground elevation.
- 3 The lines have been positionned with a hand GPS, for a precision of around 3 metres, and are referenced to the UTM grid zone 19 T, NAD 83.



### SCALE

Units: metres



**SIGMA** GÉOPHYSIQUE  
SIGMA INC.

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Telephone : (450) 441-4600 Fax : (450) 441-3703

DRAWING: C.P. VERIFIED: C. Provost, eng.  
DESIGNED: C. Provost, eng. APPROVED: C. Provost, eng.

**SEISMIC REFRACTION SURVEY 2005**

**Seismic sections and location**

DATE: Nov 22 2005	Drawing: 05890-01
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FIGURE 8