Cc: <StephensG@inac-ainc.gc.ca>; <TraynorJ@inac-ainc.gc.ca>; <PolandJ@biology.queensu.ca>;

<SProskin@eba.ca>; "Steve Stowkowy (Cal)" <sstowkowy@UMAGroup.com>

Sent: Friday, July 25, 2003 3:15 PM

Attach: Drawing Title Page.pdf; 102-SITE PLAN.pdf; 103-GRADING AND INTRUMENTATION PLAN.pdf;

104-TYPICAL SECTIONS.pdf; 105-MISCELLANEOUS DETAILS.pdf; 101-OVERALL SITE

PLAN.pdf; Resolution Island Specifications.pdf

Subject: FW: Resolution Island PDF Documents

Jim Wahl and Dionne Filiatrault,

As requested by Glen Stephens, attached for information are the TIER II Landfill Drawings prepared by UMA and EBA in June, 2003. These drawings should address your questions regarding the cross section for the landfill and the locations of monitoring wells and thermistors.

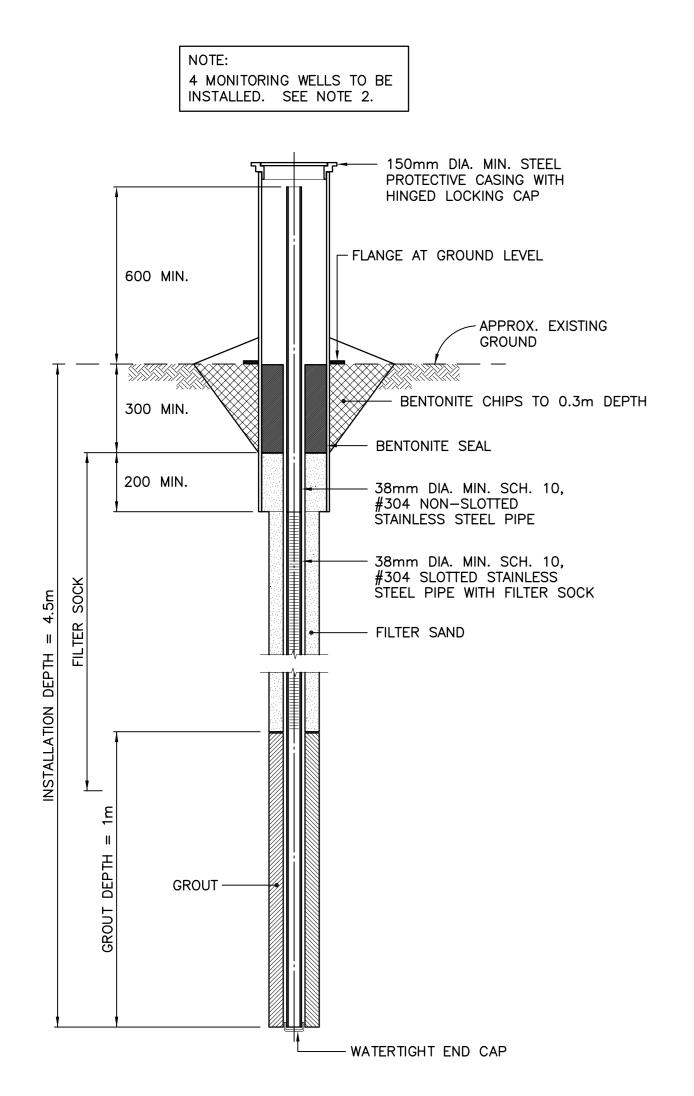
In answer to your question regarding TIER I soil, TIER I soil will be placed above the TIER II soil but contained within the liner as shown on Drawing 104.TIER I soil will not be used in the berm construction.

Please contact me if any further clarifications may be required.

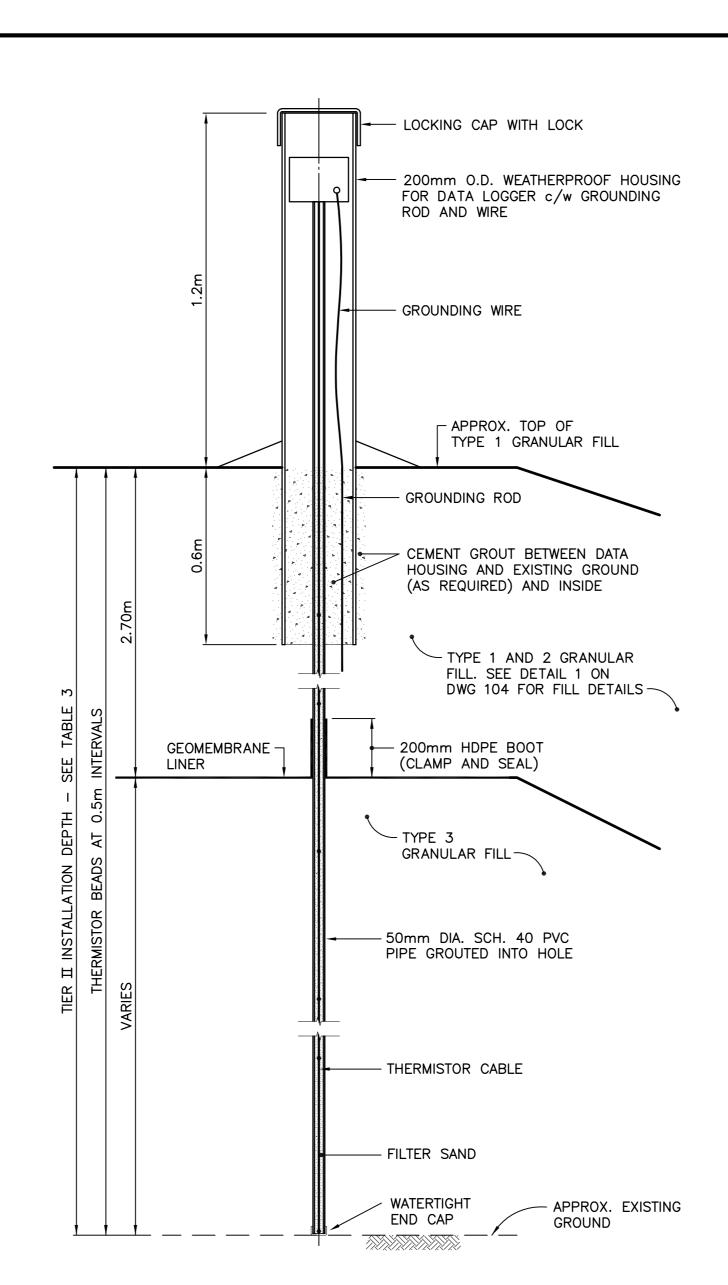
A.S. Washuta, P.Eng.

UMA Engineering Ltd.

780-486-7000



TYPICAL MONITORING WELL



TYPICAL THERMISTOR INSTALLATION — TIER IIN.T.S.

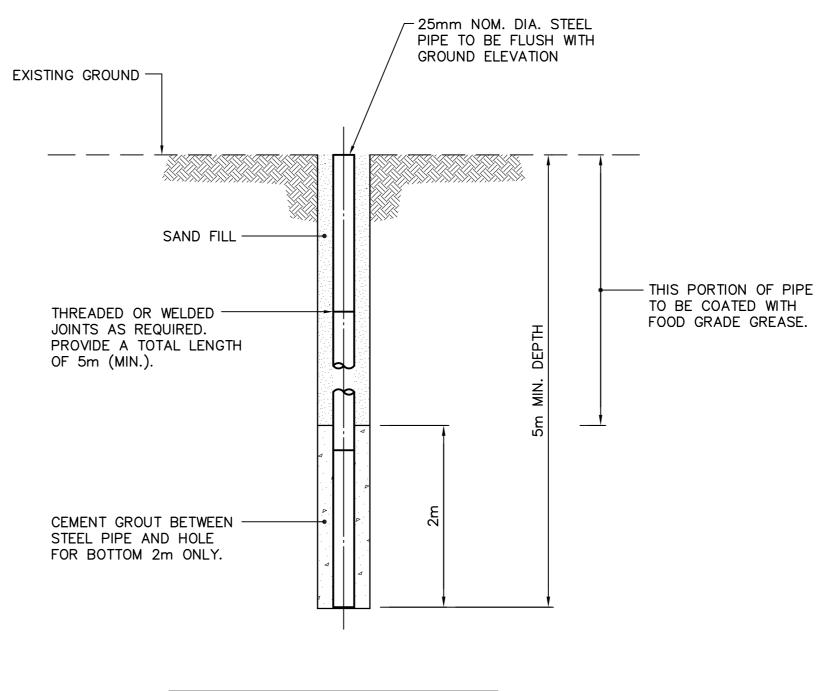
TABLE 3		
VERTICAL THERMISTOR INSTALLATION		
REF. NO.	APPROXIMATE BEAD DEPTH BELOW FINAL GRADE (m)	COMMENTS
VT-1	0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0	CABLE WITH 8m LEAD
VT-2	0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0	CABLE WITH 18m LEAD
VT-3	0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0	CABLE WITH 18m LEAD
VT-4	0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0	CABLE WITH 8m LEAD
VT-5	0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0	TWO CABLES: ONE WITH 8m LEAD AND ONE WITH 18m LEAD. SECOND CABLE TO BE USED TO PROVIDE BEADS BELOW 4m IN DEPTH

NOTES:

- 1. ASSUMES THAT OWNERS CABLES ARE AVAILABLE

 -5 CABLES WITH 8m LEADS AND 8 POINTS AT 0.5m SPACING

 -5 CABLES WITH 18m LEADS AND 8 POINTS AT 0.5m SPACING
- 2. CONFIRM AS-BUILT DEPTH TO LINER FROM FINAL GRADE PRIOR TO INSTALLATION AND ENSURE CABLES DO NOT PENETRATE LINER.



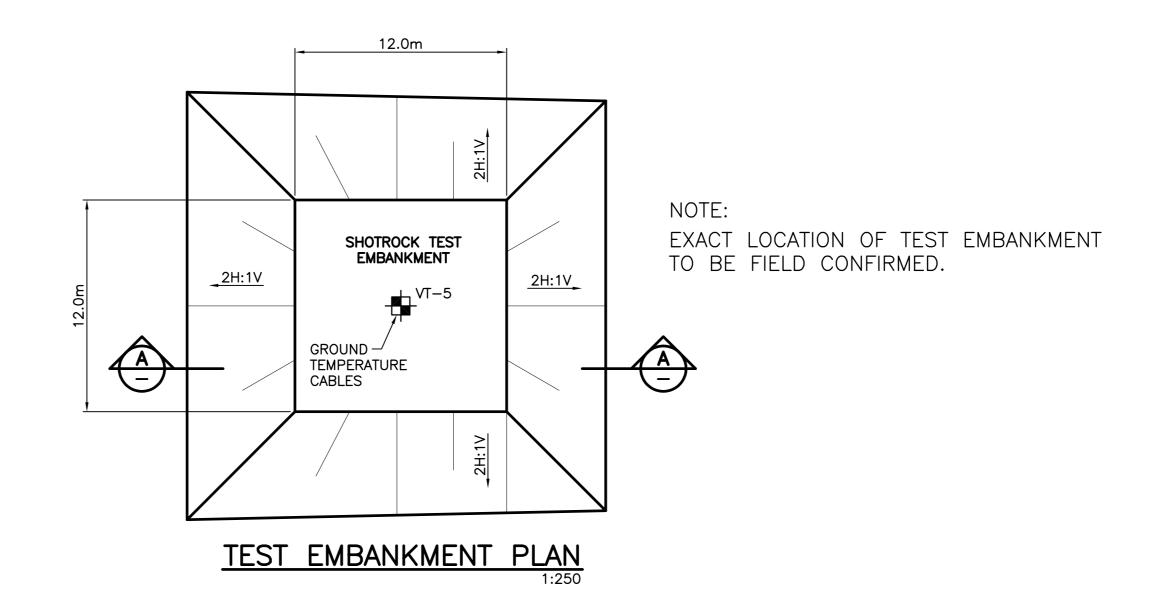
MINIMUM EMBEDMENT CAN BE REDUCED IF ROCK IS ENCOUNTERED. INSTALLATION TO PENETRATE A MINIMUM OF 2m INTO ROCK.

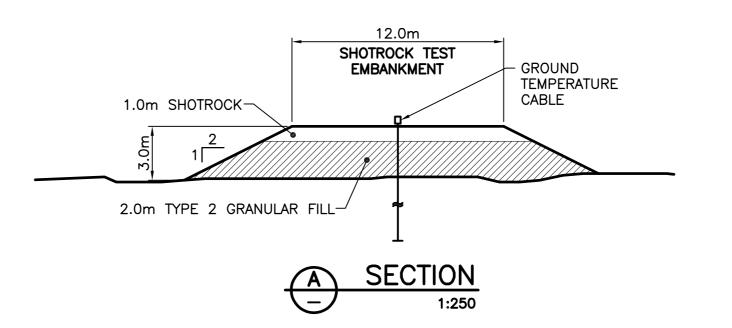
NOTE:
2 PERMANENT SURVEY CONTROL
MONUMENTS TO BE INSTALLED.

TYPICAL PERMANENT SURVEY

CONTROL MONUMENT (BENCHMARK)

N.T.S.







PERMIT TO PRACTICE

UMA ENGINEERING LTD.
PERMIT NUMBER: P 007

ORIGINAL DRAWING
STAMPED AND SIGNED BY:

ART S. WASHUTA
JUNE 5, 2003

Indian and Northern Affaires indiennes et du Nord Canada

CLEAN UP OF ABANDONED POLE VAULT MILITARY SITE

General Notes:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

2. APPROXIMATE LOCATIONS OF ALL INSTRUMENTATION INSTRUMENTS ARE SHOWN ON DRAWING 103. ALL LOCATIONS TO BE FIELD CONFIRMED

BY THE ENGINEER.

3. MOUND FILL AROUND CASING TO PROMOTE DRAINAGE AWAY FROM INSTRUMENT.

Legend:

♥ VT-X VERTICAL THERMISTOR INSTALLATION (#)

0 06/05/03 ISSUED FOR CONSTRUCTION TMS

No. DATE REVISION REVISION APPR





600

SCALE - ECHELLE

PROJECT - PROJET

BAF-5 RESOLUTION ISLAND

TRADE - METIER SITING DATE 2003-03-2

SUBJECT - SUJET

TIER II LANDFILL
MISCELLANEOUS DETAILS

CONCURRENCE - ASSENTIMENT PRODUCTION DESIGNED TMS ETUDIE AGENT CONCEPT DRAWN SECT HD DESSINE CHEF SECT CHECKED DES MGR VERIFIE GEST CONCEPT REVIEWED - REVU COORDINATION ASW KJ

Canadä

DWG. NO. - DESSIN NO.

105