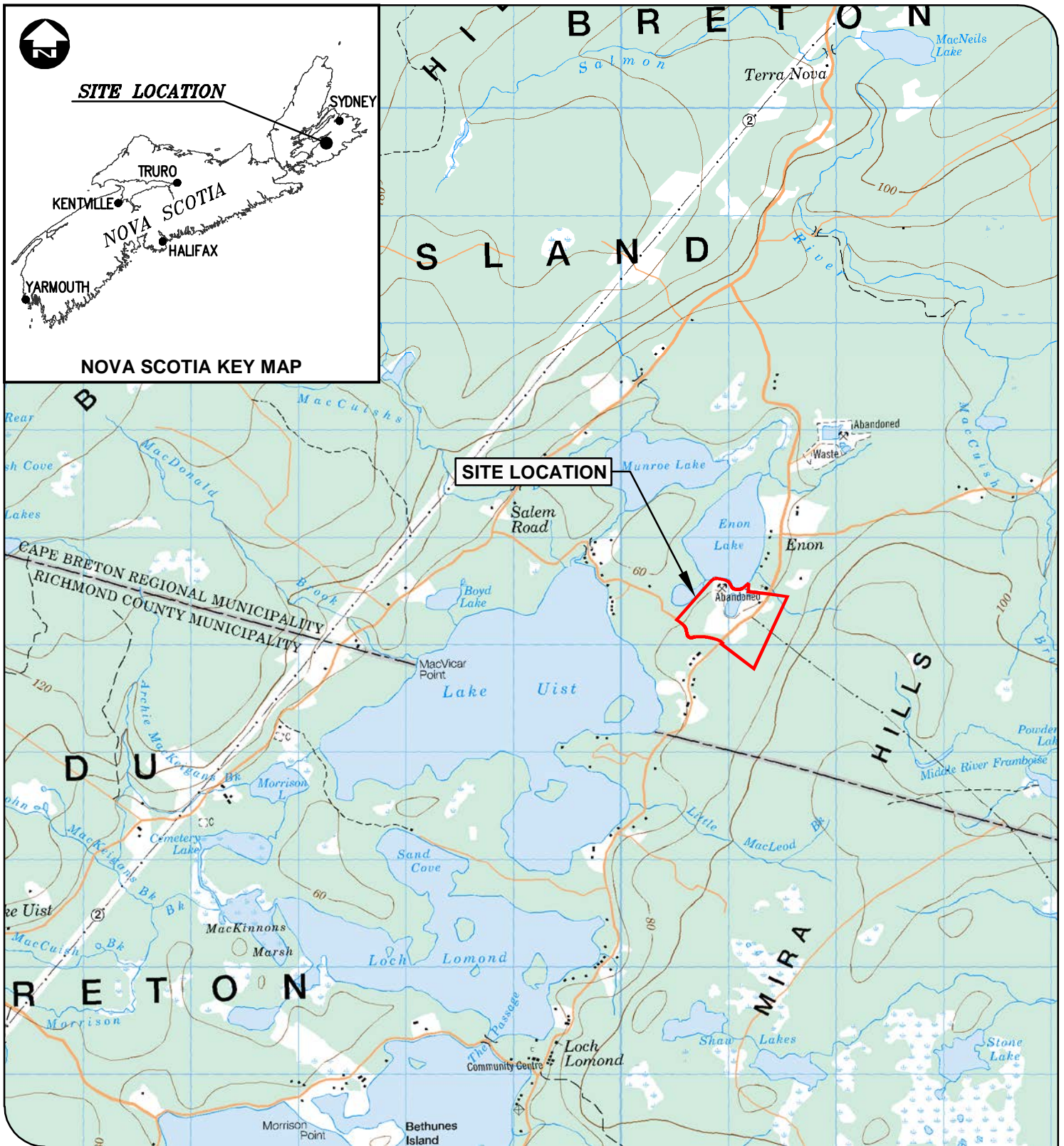



# Appendix A

## *Figures*



**BUILD NOVA SCOTIA  
LAKE ENON FORMER MILL SITE  
HUMAN HEALTH AND ECOLOGICAL  
RISK ASSESSMENT PROBLEM  
FORMULATION**

SITE LOCATION MAP  
FIGURE 1

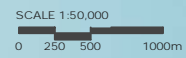
 STUDY BOUNDARY



MAP/DRAWING INFORMATION  
National Topographic System Mapsheet 21A/02.

CREATED BY: TLR  
CHECKED BY: LIM  
DESIGNED BY: RJE

File Location:  
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2022\dillon\_50tr\dms83791\223723-05-03\_fig1.dwg  
March, 08, 2023 12:44 PM



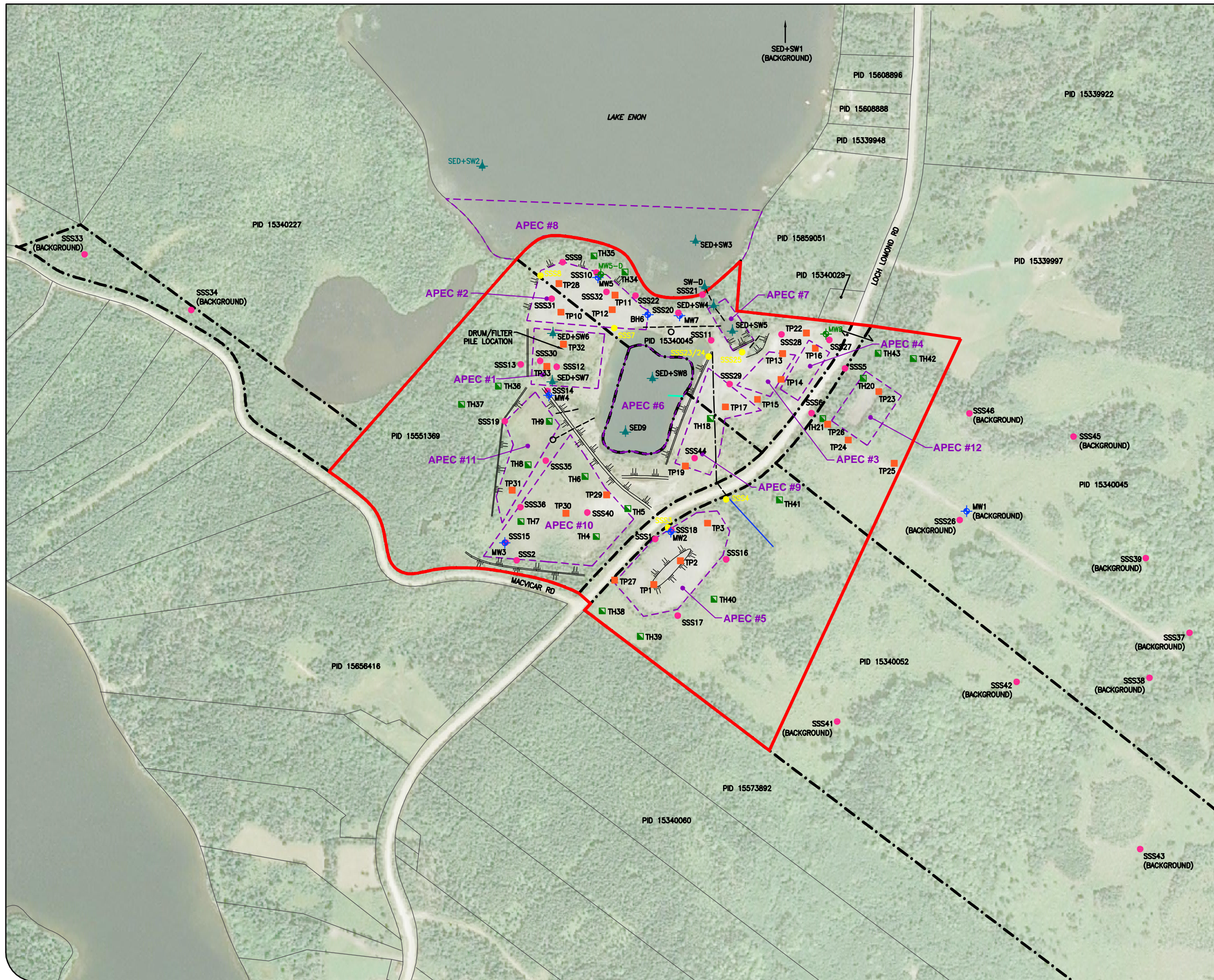
PROJECT: 22-3723

DATE: MARCH 2023

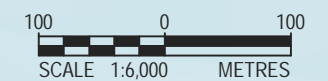


# BUILD NOVA SCOTIA LAKE ENON FORMER MILL SITE HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT PROBLEM FORMULATION

SITE SAMPLES  
FIGURE 3



- STUDY BOUNDARY
- ASSESSMENT PROPERTIES
- PROPERTY LINE
- BERM
- DRAINAGE DITCH
- BROOK
- CULVERT
- OUTFALL
- VERTICAL DRAIN
- STEEP SLOPE
- APECs (AREA OF POTENTIAL ENVIRONMENTAL CONCERN)
- + MONITORING WELL
- + DEEP MONITORING WELL
- ▲ SEDIMENT AND/OR SURFACE WATER SAMPLE LOCATION
- TEST PIT
- TEST HOLE
- ARD SHALLOW TEST HOLE
- SURFACE SOIL SAMPLE



MAP/DRAWING INFORMATION  
GeoNOVA Civic Address Finder, Nova Scotia Property Online and Bing Maps. Property lines are approximate only. This is not a legal survey.

CREATED BY: TLR  
CHECKED BY: LJM  
DESIGNED BY: RJE

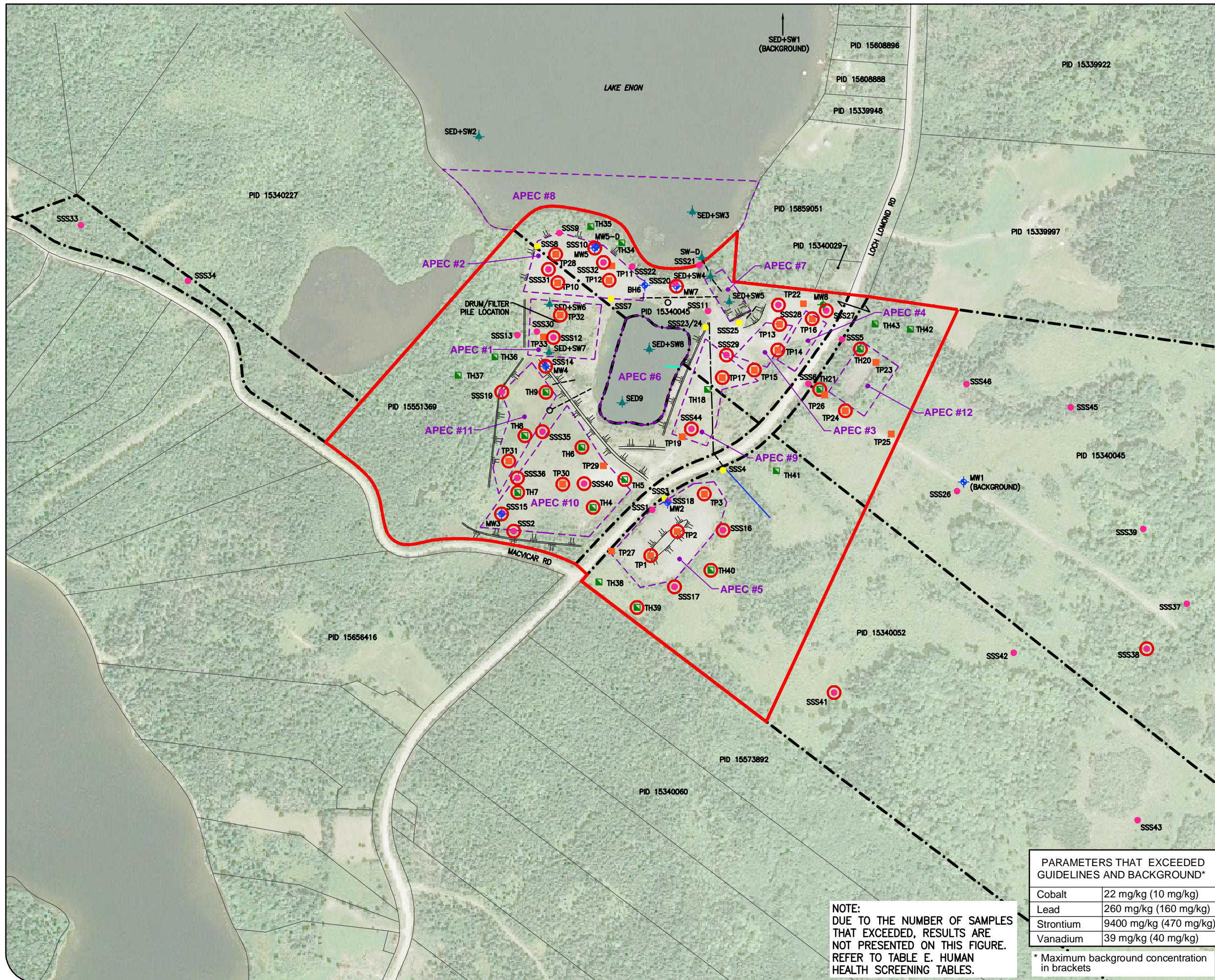
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PROJECT: 22-3723  
DATE: MARCH 2023

# BUILD NOVA SCOTIA LAKE ENON FORMER MILL SITE HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT PROBLEM FORMULATION

EXCEEDANCES OF HUMAN HEALTH  
BASED SOIL GUIDELINES AND  
BACKGROUND (COMMERCIAL LAND USE,  
DIRECT CONTACT - ALL SOIL DEPTHS)  
FIGURE 4



- STUDY BOUNDARY
- ASSESSMENT PROPERTIES
- PROPERTY LINE
- BERM
- DRAINAGE DITCH
- BROOK
- CULVERT
- OUTFALL
- VERTICAL DRAIN
- STEEP SLOPE
- APECs (AREA OF POTENTIAL ENVIRONMENTAL CONCERN)
- + MONITORING WELL
- + DEEP MONITORING WELL
- + SEDIMENT AND/OR SURFACE WATER SAMPLE LOCATION
- TEST PIT
- TEST HOLE
- ARD SHALLOW TEST HOLE
- SURFACE SOIL SAMPLE
- METAL EXCEEDANCES IN SOIL



MAP/DRAWING INFORMATION  
GeoNOVA Civic Address Finder, Nova Scotia Property Online and Bing Maps. Property lines are approximate only. This is not a legal survey.

CREATED BY: TLR  
CHECKED BY: NJW  
DESIGNED BY: BCT

File Location:  
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March, 08, 2023 1:09 PM

PARAMETERS THAT EXCEEDED GUIDELINES AND BACKGROUND*	
Cobalt	22 mg/kg (10 mg/kg)
Lead	260 mg/kg (160 mg/kg)
Strontium	9400 mg/kg (470 mg/kg)
Vanadium	39 mg/kg (40 mg/kg)

\* Maximum background concentration in brackets

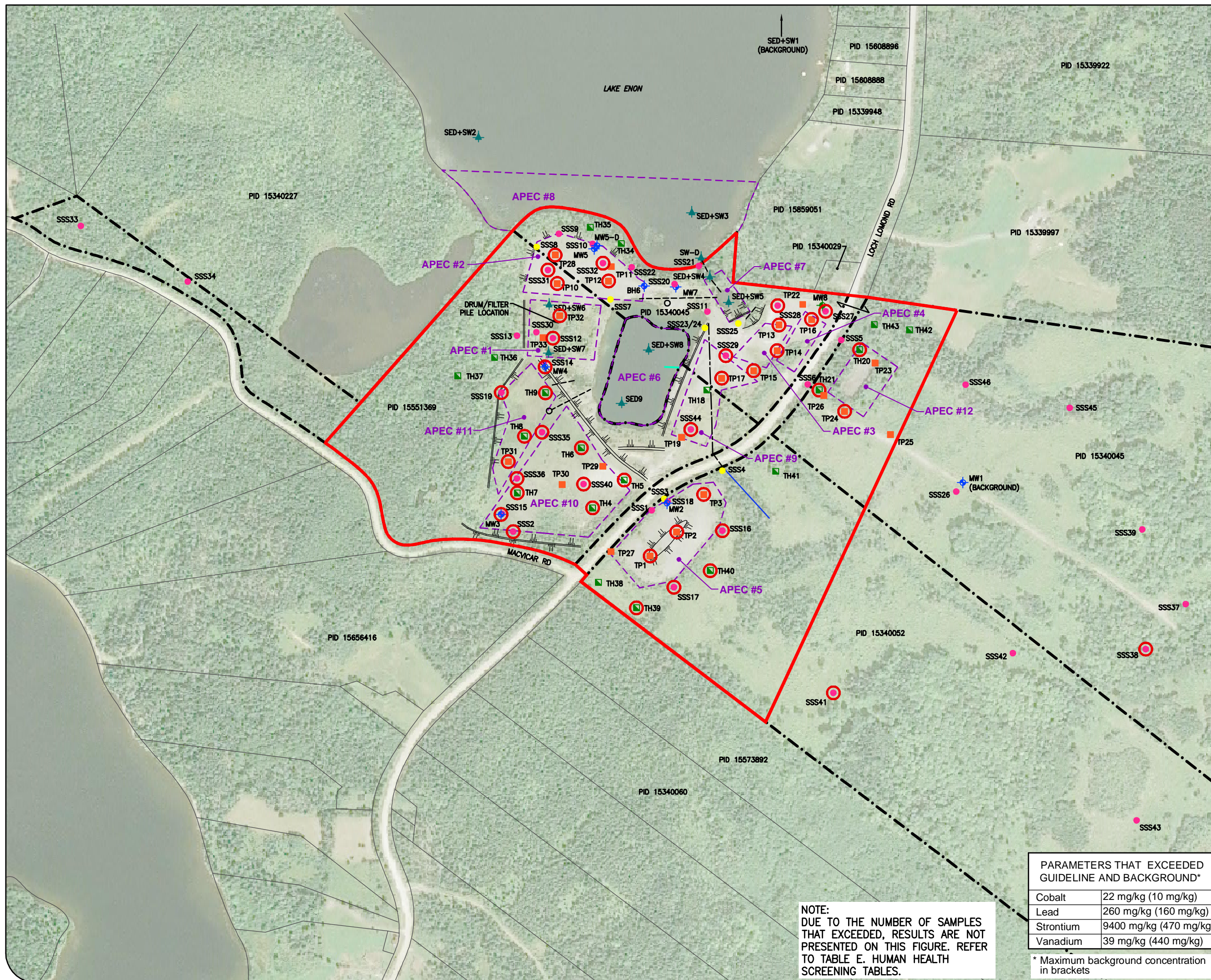
NOTE:  
DUE TO THE NUMBER OF SAMPLES THAT EXCEEDED, RESULTS ARE NOT PRESENTED ON THIS FIGURE. REFER TO TABLE E. HUMAN HEALTH SCREENING TABLES.



PROJECT: 22-3723  
DATE: MARCH 2023

# BUILD NOVA SCOTIA LAKE ENON FORMER MILL SITE HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT PROBLEM FORMULATION

EXCEEDANCES OF HUMAN HEALTH  
BASED SOIL GUIDELINES AND  
BACKGROUND (COMMERCIAL LAND  
USE, DIRECT CONTACT - SURFACE SOIL)  
FIGURE 5



- STUDY BOUNDARY
- ASSESSMENT PROPERTIES
- PROPERTY LINE
- BERM
- DRAINAGE DITCH
- BROOK
- CULVERT
- OUTFALL
- VERTICAL DRAIN
- STEEP SLOPE
- APECs (AREA OF POTENTIAL ENVIRONMENTAL CONCERN)
- + MONITORING WELL
- + DEEP MONITORING WELL
- + SEDIMENT AND/OR SURFACE WATER SAMPLE LOCATION
- TEST PIT
- TEST HOLE
- ARD SHALLOW TEST HOLE
- SURFACE SOIL SAMPLE
- METAL EXCEEDANCES IN SOIL

100 0 100  
SCALE 1:6,000 METRES



MAP/DRAWING INFORMATION  
GeoNOVA Civic Address Finder, Nova Scotia Property  
Online and Bing Maps. Property lines are approximate  
only. This is not a legal survey.

CREATED BY: TLR  
CHECKED BY: NJW  
DESIGNED BY: BCT

File Location:  
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2022\dillon\_50th\dms83791\223723-05-03\_fig5.dwg  
March, 08, 2023 1:14 PM

PARAMETERS THAT EXCEEDED GUIDELINE AND BACKGROUND*	
Cobalt	22 mg/kg (10 mg/kg)
Lead	260 mg/kg (160 mg/kg)
Strontium	9400 mg/kg (470 mg/kg)
Vanadium	39 mg/kg (440 mg/kg)

\* Maximum background concentration  
in brackets

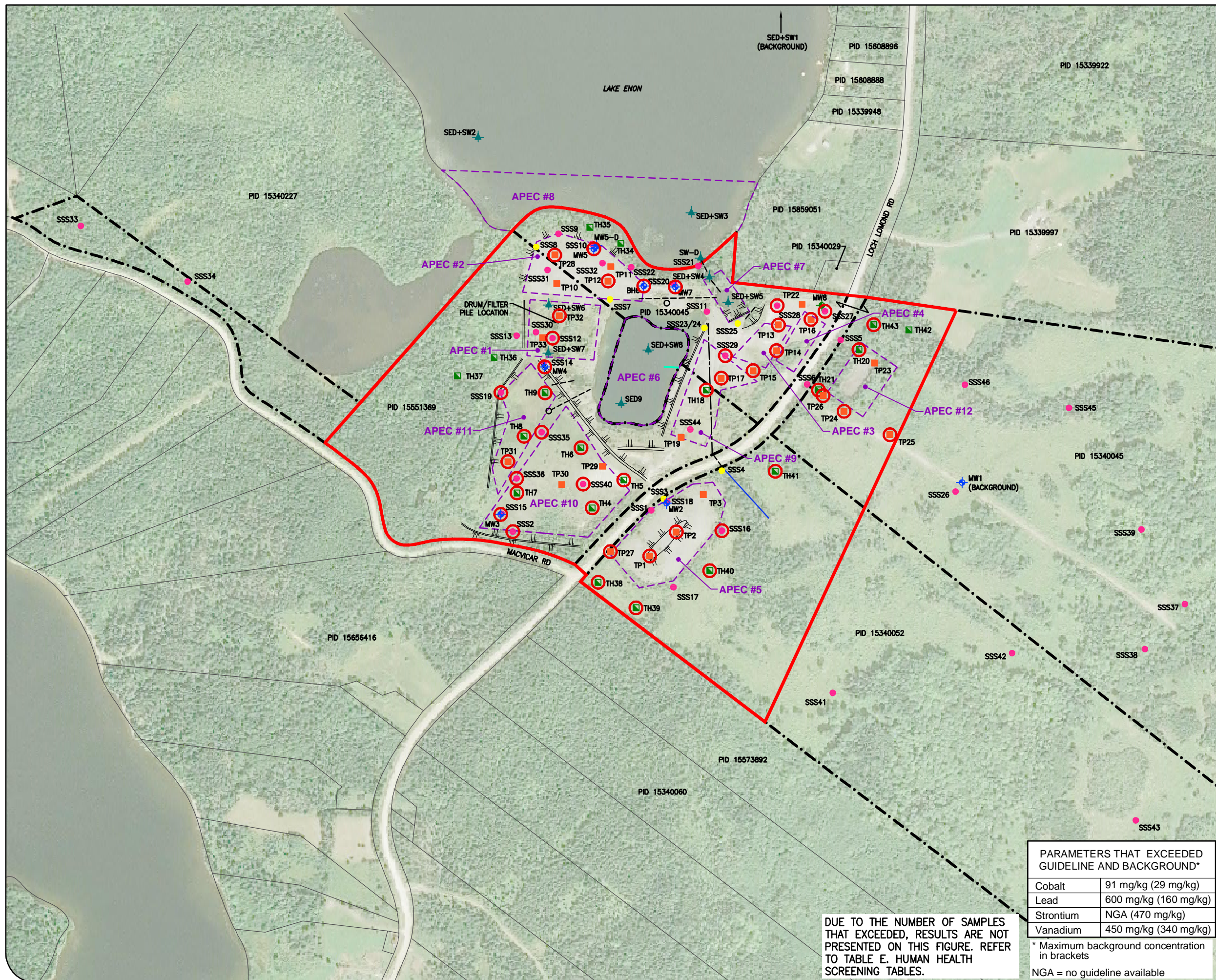
NOTE:  
DUE TO THE NUMBER OF SAMPLES  
THAT EXCEEDED, RESULTS ARE NOT  
PRESENTED ON THIS FIGURE. REFER  
TO TABLE E. HUMAN HEALTH  
SCREENING TABLES.



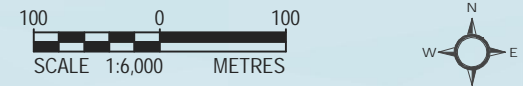
PROJECT: 22-3723  
DATE: MARCH 2023

# BUILD NOVA SCOTIA LAKE ENON FORMER MILL SITE HUMAN HEALTH RISK ASSESSMENT PROBLEM FORMULATION

EXCEEDANCES OF ECOLOGICAL  
HEALTH BASED SOIL GUIDELINES AND  
BACKGROUND (COMMERCIAL LAND USE  
- SOIL INVERTEBRATES AND VEGETATION)  
FIGURE 6



- ASSESSMENT BOUNDARY
- ASSESSMENT PROPERTIES
- PROPERTY LINE
- BERM
- DRAINAGE DITCH
- BROOK
- CULVERT
- OUTFALL
- VERTICAL DRAIN
- STEEP SLOPE
- APECs (AREA OF POTENTIAL ENVIRONMENTAL CONCERN)
- + MONITORING WELL
- + DEEP MONITORING WELL
- + SEDIMENT AND/OR SURFACE WATER SAMPLE LOCATION
- TEST PIT
- TEST HOLE
- ARD SHALLOW TEST HOLE
- SURFACE SOIL SAMPLE
- METAL EXCEEDANCES FOR SOIL INVERTEBRATES AND VEGETATION



MAP/DRAWING INFORMATION  
GeoNOVA Civic Address Finder, Nova Scotia Property Online and Bing Maps. Property lines are approximate only. This is not a legal survey.

CREATED BY: TLR  
CHECKED BY: NJW  
DESIGNED BY: BCT  
File Location:  
c:\pw working directory\projects  
2022\dillon\_50th\dms83791\223723-05-03\_fig6.dwg  
March, 08, 2023 1:11 PM

PARAMETERS THAT EXCEEDED GUIDELINE AND BACKGROUND*	
Cobalt	91 mg/kg (29 mg/kg)
Lead	600 mg/kg (160 mg/kg)
Strontium	NGA (470 mg/kg)
Vanadium	450 mg/kg (340 mg/kg)

\* Maximum background concentration in brackets  
NGA = no guideline available

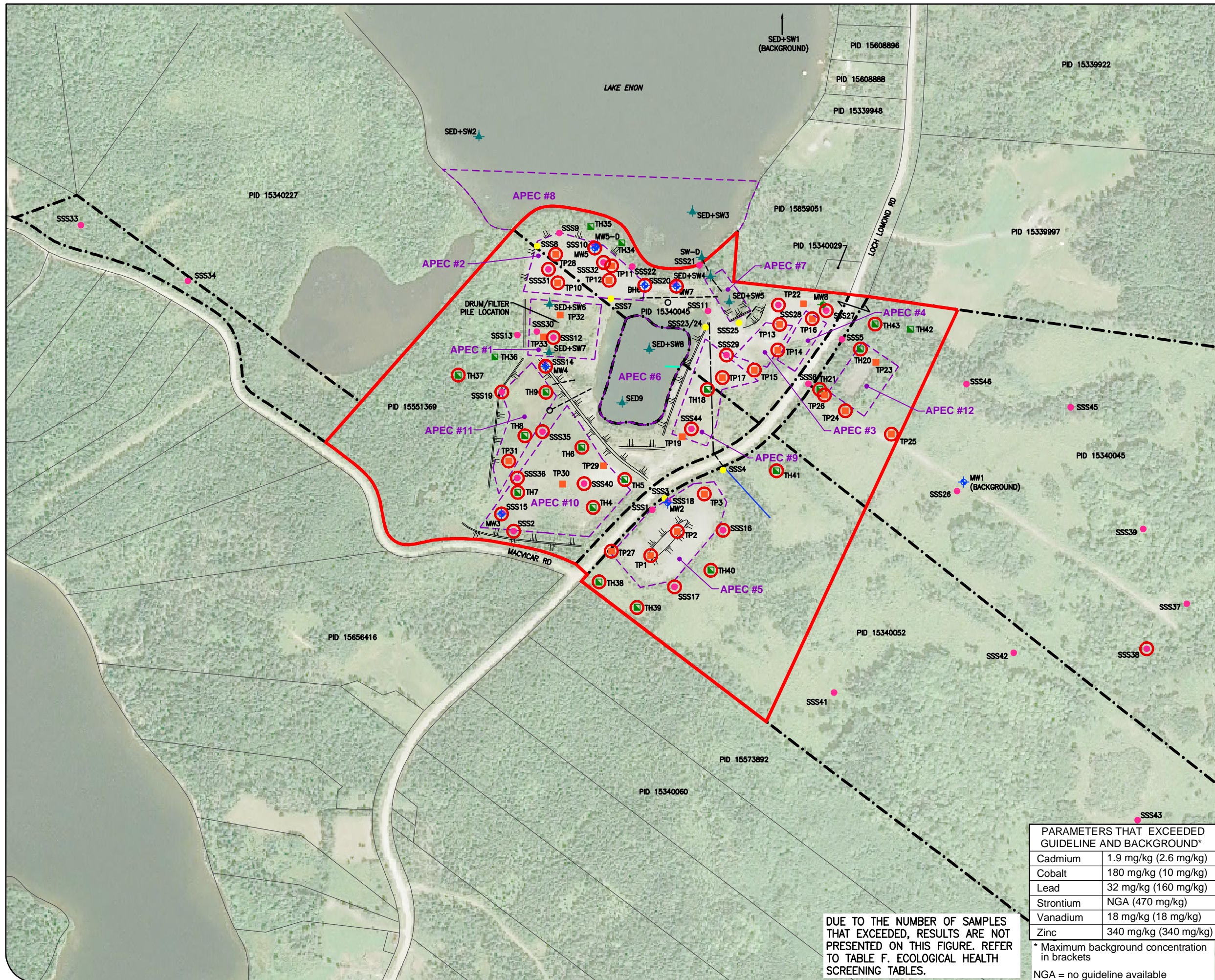
DUE TO THE NUMBER OF SAMPLES THAT EXCEEDED, RESULTS ARE NOT PRESENTED ON THIS FIGURE. REFER TO TABLE E. HUMAN HEALTH SCREENING TABLES.



PROJECT: 22-3723  
DATE: MARCH 2023

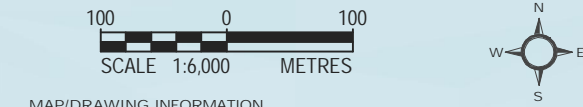
# BUILD NOVA SCOTIA LAKE ENON FORMER MILL SITE HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT PROBLEM FORMULATION

EXCEEDANCES OF ECOLOGICAL  
HEALTH BASED SOIL GUIDELINES  
AND BACKGROUND (COMMERCIAL  
LAND USE - BIRDS AND MAMMALS)  
FIGURE 7



DUE TO THE NUMBER OF SAMPLES THAT EXCEEDED, RESULTS ARE NOT PRESENTED ON THIS FIGURE. REFER TO TABLE F. ECOLOGICAL HEALTH SCREENING TABLES.

- STUDY BOUNDARY
- ASSESSMENT PROPERTIES
- PROPERTY LINE
- BERM
- DRAINAGE DITCH
- BROOK
- CULVERT
- OUTFALL
- VERTICAL DRAIN
- STEEP SLOPE
- APECs (AREA OF POTENTIAL ENVIRONMENTAL CONCERN)
- + MONITORING WELL
- + DEEP MONITORING WELL
- + SEDIMENT AND/OR SURFACE WATER SAMPLE LOCATION
- TEST PIT
- TEST HOLE
- ARD SHALLOW TEST HOLE
- SURFACE SOIL SAMPLE
- METAL EXCEEDANCES FOR BIRDS AND MAMMALS



MAP/DRAWING INFORMATION  
GeoNOVA Civic Address Finder, Nova Scotia Property Online and Bing Maps. Property lines are approximate only. This is not a legal survey.

CREATED BY: TLR  
CHECKED BY: NJW  
DESIGNED BY: BCT  
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March, 08, 2023 1:10 PM



PROJECT: 22-3723  
DATE: MARCH 2023

# Appendix B

## *Site Photographs*



**Photo 1.** One of two discharge points to Lake Enon (May, 2022).



**Photo 2.** Two of two discharge points to Lake Enon (May, 2022).



**Photo 3.** Access road heading northeast toward APEC 9 (May, 2022).



**Photo 4.** Access road looking southeast toward Loch Lomond Road (May, 2022).



March 2023

**SITE PHOTOGRAPHS**

**Human Health and Ecological Risk Assessment - Problem Formulation  
Lake Enon Former Mill Site, Enon, Nova Scotia**

**Project No.**

22-3723

**Photo No.**

1, 2, 3, 4



**Photo 5.** APEC 6 with Lake Enon in the background (May, 2022).



**Photo 6.** APEC 9 (May, 2022).



**Photo 7.** APEC 10 (May, 2022).



**Photo 8.** APEC 11 (May, 2022).



March 2023

**SITE PHOTOGRAPHS**

**Human Health and Ecological Risk Assessment - Problem Formulation  
Lake Enon Former Mill Site, Enon, Nova Scotia**

**Project No.**

22-3723

**Photo No.**

5, 6, 7, 8



**Photo 9.** Culvert between APEC 6 and APEC 7 (May, 2022).



**Photo 10.** Culvert northwest of APEC 6, running east to west (May, 2022).



**Photo 11.** Culvert on east side of APEC 6 (May, 2022).



**Photo 12.** Culvert southeast of APEC 7 (May, 2022).



March 2023

**SITE PHOTOGRAPHS**

**Human Health and Ecological Risk Assessment - Problem Formulation  
Lake Enon Former Mill Site, Enon, Nova Scotia**

**Project No.**

22-3723

**Photo No.**

9, 10, 11, 12



**Photo 13.** Culverts in APEC 7 (May, 2022).



**Photo 14.** Drums located in APEC 1 (May, 2022).



**Photo 15.** End of road between APEC 11 and APEC 1 (May, 2022).



**Photo 16.** Northwest corner of APEC 2 (May, 2022).



**SITE PHOTOGRAPHS**



**Photo 17.** Northwest portion of APEC 1 (May, 2022).



**Photo 18.** Precipitate between APEC 1, 2, and 6 (May, 2022).



**Photo 19.** Vertical drain in APEC 11 (May, 2022).



**Photo 20.** Vertical drain north of APEC 6 (May, 2022).



March 2023

**SITE PHOTOGRAPHS**

**Human Health and Ecological Risk Assessment - Problem Formulation  
Lake Enon Former Mill Site, Enon, Nova Scotia**

**Project No.**

22-3723

**Photo No.**

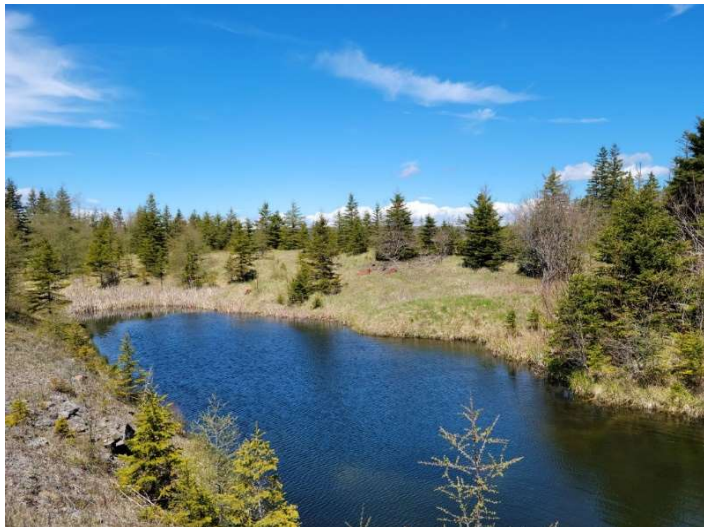
17, 18, 19, 20



**Photo 21.** Miscellaneous drums and debris near APEC 1, situated north of the pond (May, 2022).



**Photo 22.** Old drums southwest of APEC 12 (May, 2022).



**Photo 23.** View of the APEC 1 tailings pond (facing northwest) (May, 2022).



March 2023

**SITE PHOTOGRAPHS**

**Human Health and Ecological Risk Assessment - Problem Formulation  
Lake Enon Former Mill Site, Enon, Nova Scotia**

**Project No.**

22-3723

**Photo No.**

17, 18, 19, 20