Technical Memorandum

Date: February 7, 2007

To: **Tania Gordanier (FOC, Iqaluit)**

Cc: **Craig Goodings, Brad Thiele, Raj Anand (Cumberland)**

Cam Clayton, Dan Walker, Valerie Bertrand (Golder)

Martin Gebauer (Gebauer and Associates)

Colette Spagnuolo (Environment Canada, Iqaluit)

From: **Gary Mann and Randy Baker (Azimuth)**

RE: **Cumberland Meadowbank NNLP – Habitat Compensation Addendum**

Pursuant to our 23 January 2007 conference call, Azimuth has modified the habitat compensation strategy outlined in our No Net Loss Plan (NNLP; November 2006) for Cumberland Resources Ltd.'s Meadowbank Gold Project to include additional habitat features in Second and Third Portage Lakes to increase the number of habitat units to further offset the habitat deficit during the operations period.

Background

The November 2006 NNLP was completed incorporating numerous suggestions from D. Moggy. The final document also examined a number of "A" and "B" list habitat compensation options evaluated in 2006 to address the deficit during the operations period (see Appendices B [6 March 2006 Technical Memorandum to FOC listing "A" and "B" options] & C [options feasibility review] of the November 2006 NNLP). Ultimately, none of these options were pursued when it was determined that complete submersion of the finger dike surfaces (i.e., to – 3 m) yielded far more high value habitat during operations and beyond indefinitely. During the 23 January 2007 conference call, you requested that we consider providing additional habitat gains for the operations period, particularly in Second Portage Lake. The primary option discussed was the creation of several small underwater mounts in the deeper basin areas. For Third Portage Lake, we discussed extending the southern most finger dike in an "s" curve manner. In addition, we have included a finger habitat extension off the East Dike in Second Portage Lake. All these features will be constructed using iron formation (IF) rock, which is low metal leaching and the same material being used to construct the dikes and dike fingers. An overview of the additional habitat features and the dike realignment are presented in the following section.

Additional Habitat Compensation Features

We are proposing three significant improvements in the NNLP habitat balance for the Meadowbank Project (see **Figures 1 and 2**):

- *East Dike Extension* - A finger dike is proposed for the northern end of the East Dike, extending to the west over low value, deep sediment habitat. This feature will be

constructed in a similar manner (i.e., end dumping and return side casting) to the finger dike cluster in Third Portage Lake (i.e., final dike surface approximately 3 m below water level).

- *Second Portage Mounts* - The six mounts are situated in areas where it should be feasible (i.e., not too deep) to achieve high value habitat (i.e., top of feature within 3 to 6 m below water surface). The bases have a diameter of approximately 50 m or so. These are slated for winter construction by placing the material on the ice; this may occur over two winter seasons. Their locations are strategically situated away from the East Dike, but not too far away to address transportation and safety issues.

- *Third Portage Finger Dike Extension* - The southern-most finger dike will be extended into low value, deep sediment habitat in an "S" curve manner. Construction will be similar to the other finger dikes.

Habitat Unit Gains from Proposed Changes to NNLP

Habitat units (HUs) gained from the aforementioned proposed changes to the NNLP are as follows:

- *East Dike Extension* – This feature will provide 5.03 ha of high value habitat during operations and beyond in perpetuity. Given the habitat suitability index (HS I) score of 8.90 for high value habitat, this feature provides in 44.8 habitat units (HUs). Factoring in the loss of the original low value habitat (with an HS I of 2.34), the net gain in habitat is 33.0 HUs.

- *Second Portage Mounts* - The six mounts provide 1.25 ha of high value habitat (from the operations period in perpetuity) in areas formerly comprised of low value habitat. The net habitat gain from these features is 8.2 HUs (i.e., 11.1 HUs new habitat – 2.9 HUs existing habitat).

- *Third Portage Finger Dike Extension* – This feature provides an additional 11.07 ha of high value habitat to Third Portage Lake, resulting in a net gain of 81.6 HUs (i.e., 107.5 HUs new habitat – 25.9 HUs existing habitat).

These additions increase available habitat during mine operations from 206.3 HUs (NNLP, November 2006) to 369.7 HUs (i.e., an increase of 163.4 HUs or 79%). These gains will also apply to the post-closure period.

We trust that this addresses your concerns and provides you with sufficient information to proceed with scheduling the proposed tailings impoundment area and approving the NNLP for the project. Please let us know if you require anything further.

Figure 1. New Habitat Compensation Features for Second Portage Lake.

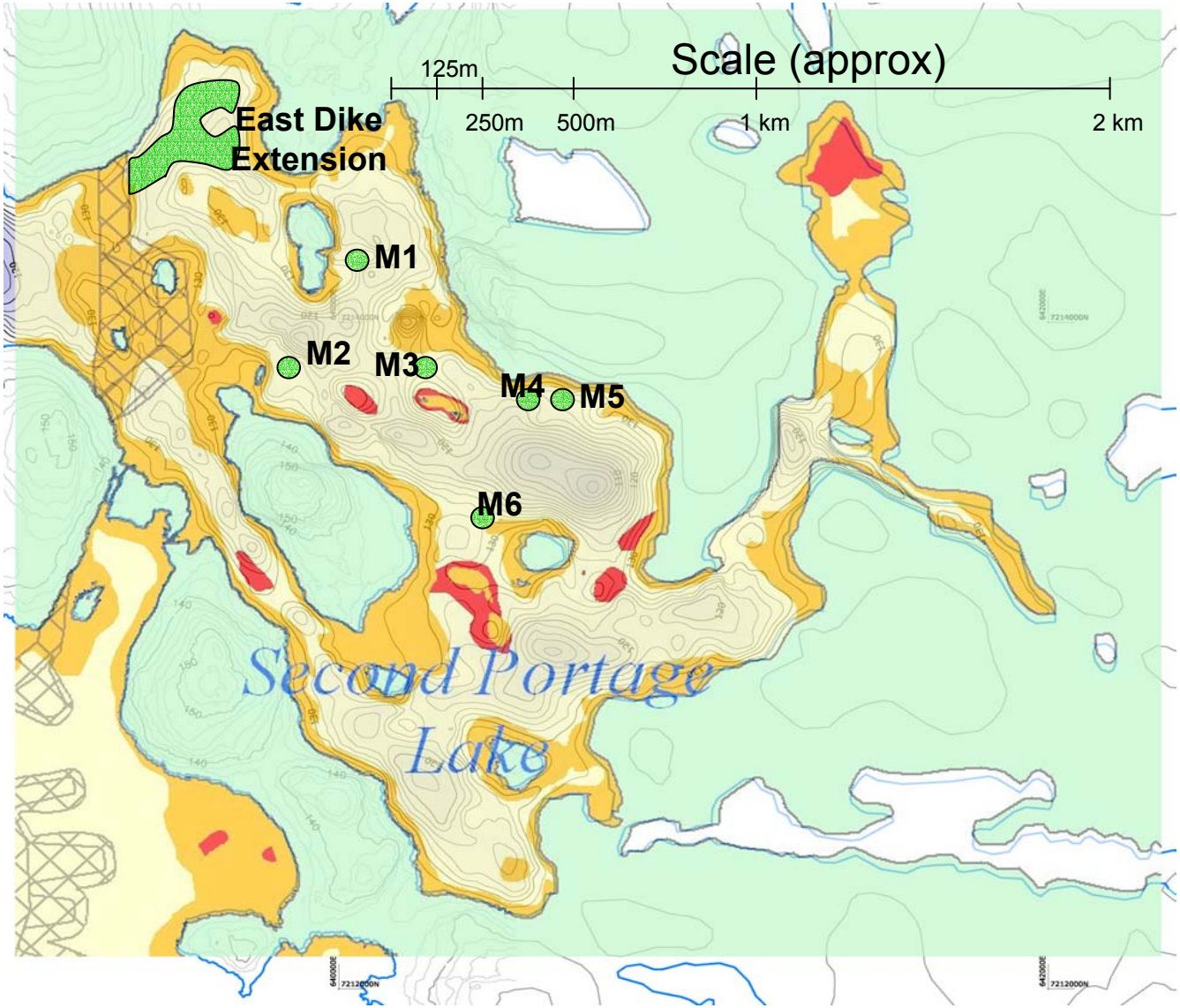

Figure 2. New Habitat Compensation Features for Third Portage Lake.