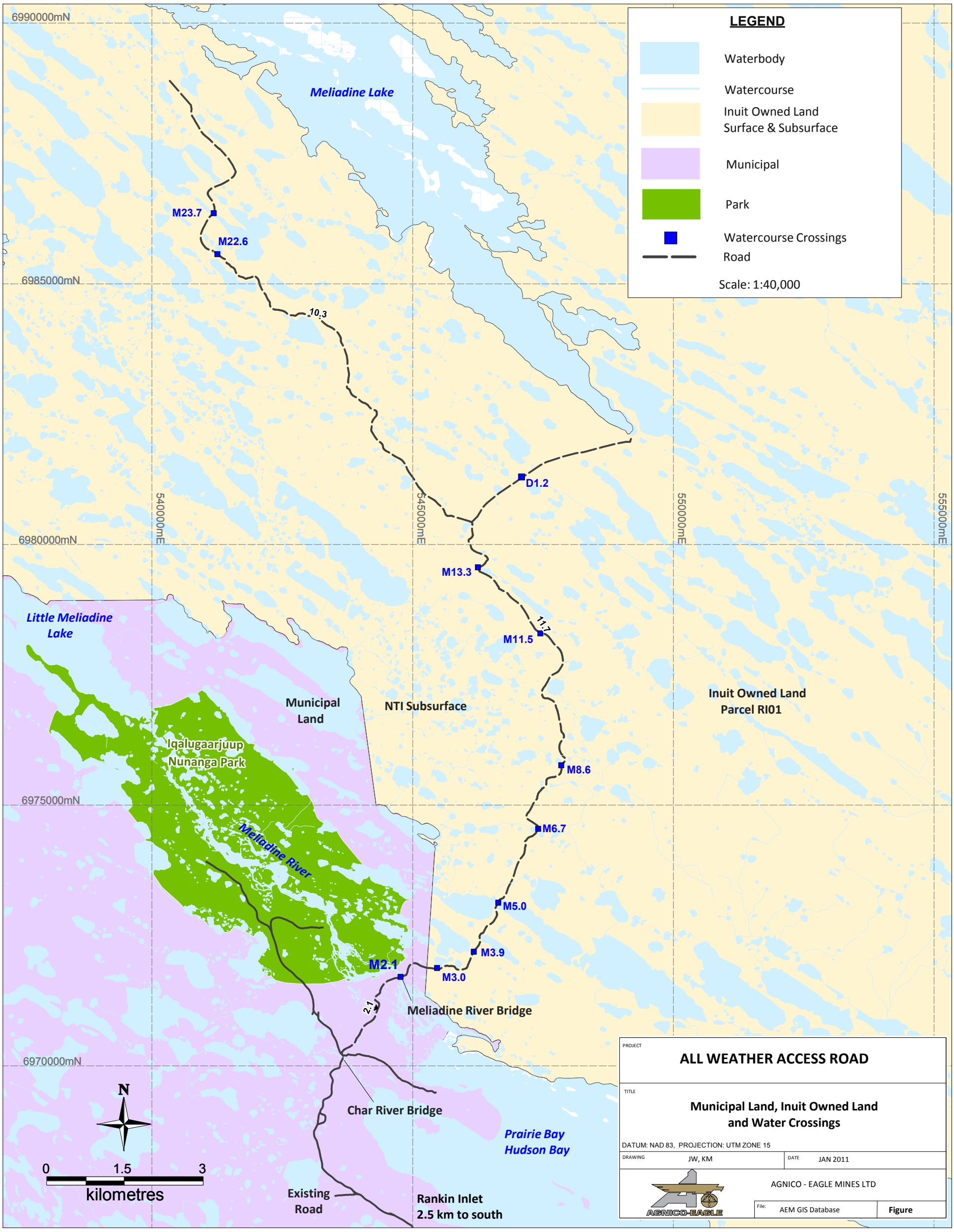
contact water (rather than naturally elevated background conditions) are noted, verification sampling will be completed along the segment of the road within the targeted catchment area. If the results of this testing confirms the risk of metal leaching then AEM will have the offending material removed from the road bed and replaced with more suitable material. The offending material will be disposed of in a closed borrow source in a manner where it can be appropriately controlled and managed.

- AEM will incorporate these procedures into its QAQC procedures for borrow/quarry management practices during the proposed road construction. These practices will be developed prior to the start of construction.


LEGEND
Waterbody
Watercourse
Inuit Owned Land
Surface & Subsurface
Municipal
Park
Watercourse Crossings
Road
Scale: 1:40,000
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Meliadine Lake
M23.7
M22.6
10.3
D1.2
M13.3
11.7
M11.5
M8.6
M6.7
M5.0
M3.9
M3.0
M2.1
2.1
Meliadine River Bridge
Char River Bridge
Little Meliadine Lake
Municipal Land
NTI Subsurface
Inuit Owned Land
Parcel RI01
Iqalugaarjuup Nunanga Park
Meliadine River
Prairie Bay
Hudson Bay
Existing Road
Rankin Inlet
2.5 km to south
N
0
1.5
3
kilometres
PROJECT
ALL WEATHER ACCESS ROAD
TITLE
Municipal Land, Inuit Owned Land and Water Crossings
DATUM: NAD 83, PROJECTION: UTM ZONE 15
DRAWING
JW, KM
DATE
JAN 2011
AGNICO - EAGLE MINES LTD
File:
AEM GIS Database
Figure

AEM Reference: Information Request #21

Made By: Kivalliq Inuit Association and Nunavut Tunngavik Inc.

The proponent needs to provide some detail on the use in the road design of the historical and current snowpack data for the immediate area of the Meliadine Project site. This should include a map showing the potential areas of snow build-up. This information will be used for development of monitoring and management plans for dealing with the impacts of snow build-up on the road.

AEM's Response to Information Request:

The proposed Meliadine All Weather Access Road (AWAR) proceeds in a northeast direction to approximately M9, after which it trends in a northwest direction. The prevailing wind direction in the area is from the northwest, and so it is expected that any drifting that may occur will be in areas where the road direction is perpendicular, or at an oblique angle, to the prevailing wind direction. However, the road alignment has been generally selected to follow higher ground, and so the degree to which drifting may occur will be minimized.

Nevertheless, a preliminary snow drift assessment will be carried out to identify areas potentially susceptible to snow build-up along the proposed road alignment (Golder 2011)[8]. The snow drift assessment will consider snow fall and wind direction data in conjunction with the road alignment, air photo interpretation and topographic contours provided in the feasibility study report (Golder 2011). Information from snowcourse surveys conducted prior to snowmelt in 1997 to 2000 and 2008 to 2009 in the project area, though not specifically on the access road route, will provide additional information. These surveys characterize snow depths for various terrain types over a range of natural variability. A short technical memorandum summarizing the methods and assumptions, and including maps identifying potential areas of snow build-up along the alignment will be developed. It is expected this study can be completed by June 3, 2011. The results of the study, along with the practical experience that AEM have gained through the construction and operation of the Meadowbank AWAR, will be used to develop appropriate monitoring and management plans for the Meliadine AWAR road to address and manage the potential impacts of snow build-up. (See also Information Request # 22 for more information on snow management.)

[8] Golder 2011, Golder Associates Ltd., Report on All Weather Access Road Meliadine Gold Project Feasibility Level Design, Golder Document Number 085 Ver. 0 Rev. 1, January 20, 2011.

Information Request # 22

Made By: Kivalliq Inuit Association

The proponent should include descriptions of experience gained with operating the Meadowbank Gold Mine road and how they will be incorporate this into the Meliadine road construction and maintenance programs. In particular the design and maintenance of culverts needs to make use of the information to prevent snow blockages, overflows and washouts at stream crossings.

AEM's Response to Information Request:

The Meadowbank Gold Mine has over four years of experience operating and maintaining its 110 km long All Weather Private Access Road. What has been learned at Meadowbank will be applied to the Meliadine All-Weather Road.

Snow management at crossings

The Meadowbank experience has shown AEM that snow removal around bridges and culverts is necessary if they are going to accommodate the spring freshet. For example, the RO2 crossing (first bridge) on the Meadowbank All-Weather Road is composed of a bridge crossing the stream and two road culverts in a low lying area near the bridge. In 2010, snow had collected around the bridge and acted as a dam during the early onset of spring freshet. Because of this blockage the water backed up over the level of the two culverts in the road bed. These culverts could not accommodate the water and part of the road washed out as a result.

Routine snow management at the Meadowbank road includes removing any snow that accumulates at bridges and culverts so that water at freshet can move freely through the culverts and under bridges. In the case of culverts, snow is removed from both ends but not from the inside.

Similar snow removal practices will be adopted for the Meliadine road as similar problems can be expected.

Snow management elsewhere along the road

Sections of the Meadowbank road experience snow drifts on the road because of strong winds over the winter period. As much as possible this snow is cleared to the downwind side of the road to limit the wind re-depositing the same snow on the cleared road. This will also be done along the Meliadine road.

Crossings inspection and maintenance program

As with the Meadowbank road, an inspection and maintenance program will be instituted for the Meliadine road with three main components:

(a) a regular inspection program to identify issues relating to watercourse crossings structural integrity and hydraulic function;

(b) an event inspection program to track the impacts of large storm events on watercourse crossings structural integrity and hydraulic function; and,

(c) a culvert location inspection program to ensure culvert crossings have been installed in the adequate location with respect to the water flow because some of the culverts would have been installed in winter where it is hard to precisely locate the location of the water flow.

Regular Inspection Program

The regular inspection program during the snowmelt and ice-free period will be comprised of a scheduled visual inspection twice weekly during periods of high flow during freshet (mid-May through June) and weekly during the remainder of the ice-free period prior to fall freeze-up (July through October). Additional visual inspections will be planned after large storm events.

Regular inspection activities for each watercourse crossing will consist of:

- Visual inspection of its infrastructure to identify defects, cracks or any other risks to structural integrity. Particular attention will be paid to the inlet and outlet structures of culverts, and to bridge abutments and their foundations, as required.

- Visual inspection to identify sediment or other debris accumulation impeding the free flow of water through the crossings. Maintenance operations will consist of hand removal of accumulated debris and repairing damages as soon as possible.

- Visual inspection of upstream and downstream channel to identify bed erosion or scour around the watercourse crossing structure. Particular attention will be paid to bridge abutments and abutment foundations as they are vulnerable to scour and erosion. Particular attention will also be paid to potential sources of sediment transport at the crossing. Inspection results will be recorded and reported in the annual report to the NWB. Maintenance operations will consist of undertaking remediation of any detected problems and repairing damage as soon as possible.

Event Crossing Inspection and Maintenance Program

Following heavy or prolonged rainfall storm events, visual inspection of each watercourse crossing will be completed to identify potential risks to the crossing's structural integrity, debris accumulation and whether erosion and scour have occurred, as described in the regular monitoring program. Results will be recorded. Remediation of any detected problems and necessary damage repairs would be undertaken as soon as possible.

Culvert Location Inspection Program

Following their installation, the culvert crossings will be visually inspected to confirm they have been installed at the appropriate location with respect to the water flow. It will be critical to inspect the location at which the culverts were installed during the first spring freshet period as the culverts are to be installed during the winter, when the watercourse crossings are not readily identifiable.

AEM Reference: Information Request #23

Made By: Kivalliq Inuit Association and Nunavut Tunngavik Inc.

The hydraulic analysis of the Meliadine River bridge crossing should also determine the impact of peak high tides and ice bridging downstream of the bridge during the annual freshet.

AEM's Response to Information Request:

As part of the proposed all-weather access road, a 66-metre single-span bridge will be built across the Meliadine River. The bridge design was prepared by Jivko Engineering, and provides for 1.5 m of freeboard above an assumed ice jam ice thickness of 1.5m (approx. 5 feet), or approximately 3 m above a high open water level observed during the June 2009 freshet (See Figure 2-3 of the Project Description Report).

Based on discussions with the local Hunters and Trappers Organization, it is understood that the river tends to overflow its banks in the vicinity of the bridge crossing during the annual freshet, and ice bridging can be up to 5 feet thick or more in this area. Therefore, the assumed ice jam thickness in the Jivko design bridge design agrees well with local traditional knowledge.

While the Jivko bridge design provides for a total of 3 m of ice and freeboard above a high open water level observed during the June 2009 freshet, the elevation and magnitude of the 2009 flow event is unknown as the river is not gauged. However, the estimated open channel flow depth for a 1 in 25 year design flow event (81 m^3/s) is approximately 1.58 m as defined in Table 3.2 of the Project Description report. Using this design depth, the underside of the bridge would need to be located a minimum of 4.6 m above the channel bed in the absence of potential tidal effects, and accounting for 1.5 m of ice and assuming 1.5 m of freeboard.

The Canadian Hydrographic Service (CHS) website provides tidal information at Panorama Island (station 5090), located approximately 9 km Southeast of the Meliadine River bridge crossing. The highest daily higher high water (HHW) at this is estimated at 4.7 m for the available period of record (2009 to 2011; CHS, 2011)[9]. Based on the Stations Inventory Data (DFO, 1995)[10] the Panorama Island station chart datum is at the Canadian Geodetic Vertical Datum of 1928. Consequently, the design peak high tide can be assumed to extend up to approximately 4.7 m above sea level (masl) within the Meliadine River.

[9] CHS (2011). 2009-2011 Tide Tables. http://www.lau.chs-shc.gc.ca/english/DataAvailable.shtml

[10] DFO (1995). Stations Inventory Data. http://www.meds-sdmm.dfo-mpo.gc.ca/isdm-gdsi/twl-mne/inventory-inventaire/sd-ds-eng.asp?no=5090&user=isdm-gdsi&region=CA

The currently available topographic mapping in the area of the planned bridge is limited and inconsistent, and therefore, the relative influence of tidal effects on water levels at the crossing, although anticipated to be minor, is uncertain. However, a reconciled topographic dataset of the area based on satellite survey is expected for the end of May. Once this information becomes available, AEM will review the hydraulic design capacity of the bridge for potential tidal effects, and adjust the bridge deck and road abutment elevations accordingly. The design assumptions will also be reconfirmed through site specific survey of the river channel and surrounding topography in the vicinity of the planned bridge crossing prior to construction. The survey will extend to the road ROW to ensure that the road abutments on either side of the bridge are designed and constructed to sufficient elevation to minimize the potential of road washout and bridge out flanking during peak freshet conditions.

AEM Reference: Information Request 24

The proponent will ensure the road design will be "caribou friendly". The design parameters should use the proponents experience with the building and operating the Meadowbank Gold Mine road, as well as, the mining industry's experience building roads in areas such as at the Ekati and Diavik Diamond Mines.

Made By: Kivalliq Inuit Association - Geovector

AEM's Response to Information request:

The Ekati and Diavik roads were built using granodiorite waste rock from the open pits. The blast patterns in the open pits resulted in large blocks of rock being used for the base of the roads. Another feature of the Ekati roads was that they did not conform to the contours of the land. Natural undulations in the landscape were filled with waste rock so that the roads remained essentially flat. This building practice resulted in small valleys in a rolling landscape being filled with more than 2 metres of rock. The size of the waste rock serving as a base and the depth of waste rock in the small valleys impeded caribou crossing the roads. This led to caribou crossings being established along the roads where numerous caribou migration paths were found.

The design of the Meliadine all-weather road remains essentially unchanged from the Meadowbank road, bridges being an exception. As well, the Meliadine road will be built in much the same manner as the Meadowbank road[11]. The thickness, or depth, of the road will vary from 1.0 to 1.5 m depending on whether the underlying soils are thaw-stable (1.0) or thaw-susceptible (1.5). The shoulders of the road will be 1:2. While the Meadowbank road was largely built using quarried rock, the Meliadine road will use about one third quarried rock with the remainder being glacial/fluvial material. Both the quarried rock and granular material will be a smaller size than that used at Ekati and Diavik. The limited thickness of the road, small size of building materials and slope of the shoulders will make the road caribou friendly.

Wildlife management practices developed for the Meadowbank road will remain largely unchanged for the Meliadine road.

[11] Golder Associates designed both roads.

AEM Reference: Information Request #26

Made By: Environment Canada

EC noted that a limited number of samples were taken per quarry/borrow site (i.e., on average, 3 samples per site) to determine the respective metal leaching and acid rock drainage potential. EC would like confirmation from the proponent that additional sampling and visual examinations of quarried material will be undertaken during excavation to confirm quarry/borrow materials are suitable for road construction. To that end, EC recommends AEM indoctrinate this practise in their quality control procedures to ensure mineralized or altered materials are not incorporated in the road.

AEM's Response to Information Request:

AEM confirms that it will conduct additional inspection, sampling and geochemical testing at each road borrow/quarry source during road construction to verify that the materials used are suitable for road construction. The following procedure is similar to those that were applied by AEM during construction of the Meadowbank Mine access road.

- During road construction visible inspections will be made at each quarry/borrow site by an AEM appointed qualified person on a daily basis whenever material is being taken from that site. The inspection will look for any sign of sulphide mineralization. When sulphide mineralization is identified, the qualified person will contact AEM's road construction project manager and arrange to have this section of the quarry/borrow area shut down until further geochemical assessment can be completed.

- Prior to the start of construction additional samples will be collected from the surface and drill cuttings at each selected borrow/quarry source and sent to an external lab for geochemical characterization (ABA & metal leaching potential). A time period of at least one month will be allowed for lab turnaround and data interpretation. The results will be used to confirm the suitability of the borrow source for road construction.

- During road construction additional samples of borrow/quarried material will be periodically collected from the active faces in each quarry/borrow sources and sent to an external lab for geochemical characterization (Total Sulphur and metals have been identified as being potentially problematic by the sampling and characterization conducted to date, e.g., As, Al and Cu).

- If the results show similar sulphide and ML to previous testing, that is non acid-generating with an average sulphide content of less than 0.1% and average SFE leachate concentrations below

10 times CCME, then the material will be used for construction. This limit is anticipated to be adequate to avoid potentially negative impacts to receiving water quality.

- Results of receiving water quality monitoring along the road will be used to verify the chemical suitability of the road material. If water quality exceedances associated with road material contact water (rather than naturally elevated background conditions) are noted, verification sampling will be completed along the segment of the road within the targeted catchment area. Based on the results of this sampling, AEM will have the offending material removed from the road bed and replaced with more suitable material. The offending material will be disposed of in a closed borrow source in a manner where it can be appropriately controlled and managed.

- AEM will incorporate these procedures into its QAQC procedures for borrow/quarry management practices during the proposed road construction. These practices will be developed prior to the start of construction.

AEM Reference: Information Request #27

Made By: Environment Canada

EC noted that all test borrow sources were found to be relatively low in sulphur (less than 2% S). The problem with this material is that it is low to negligible carbonate neutralizing potential and relies on the "secondary" minerals. Considering the foregoing, EC recommends the proponent ensure the surface topping meets the highest possible quality.

AEM's Response to Information Request:

Indeed the test borrow samples are very low in sulphur, less than an average of 0.07% sulphide content and often below the analytical detection limit. Over time, the quantity of sulphuric acid that may be generated from such a low sulphide content will be minimal. Furthermore, buffering capacity is available in all samples tested; the solid phase pH for all samples is generally above 9.0 indicating the presence of readily available buffering capacity. Some of the buffering capacity is attributed to carbonate minerals (from carbonate NP measurements), while some is due to non-carbonate minerals as indicated by the elevated paste pH for samples having low carbonate NP values. Based on this information, AEM believes the quarries and borrow locations proposed are suitable for surface topping.

AEM concurs with the comment made by Environment Canada above and will work with its construction management team to incorporate appropriate QAQC procedures during construction to make sure that the road topping materials come from sources with the lowest ABA/metal leaching potential available.

AEM Reference: Information Requests 29, 30 &31

Made By: Government of Nunavut – Department of Environment

A term of authorization of 18 years has been requested for the proposed exploration. That time frame appears rather lengthy for an exploration project at this stage, especially given the prominence of investor confidence as a reason for advancing this project. The application also makes reference to a future mine site, power lines, power plants, tank farms and other infrastructure. There are suggestions in the application, of a mine and associated infrastructure. This appears to contradict the proposal's assertion that the purpose of this project is to contribute to exploration activities. This leads DoE to believe that this proposal is not for a standalone project, but will contribute to a larger one.

Furthermore, it is implied that this road will be a key feature in future community infrastructure. The inconsistency of the current application with the activities of the former owner/operator, Comaplex, the proposal's suggestion of the development of a mine, the questions surrounding the term of authorization for this proposal, and the potentially far-reaching ecosystemic and socioeconomic impacts all imply that the scale of this project may be far beyond that expressed in the proposal.

Based on the above, DoE believes the scale of this proposed project requires further and in-depth review of the anticipated effects on the ecosystemic and socioeconomic impacts. Consequently, we recommend the proposal be subject to 12.4.4(c) of the NLCA. In consideration for the long term implications of this project, the proposal provides insufficient information for DoE to contribute extensive comments.

AEM's Response to Comment:

Notwithstanding the term of authorization requested in its initial application; AEM wishes to make the following clear:

- AEM is applying to construct an all weather access road between Rankin Inlet and the Meliadine Gold Project site to support its underground exploration and bulk sampling of the mineral resource at this location. The intent is to obtain data for a feasibility study to support development of a gold mine at this location. If the Project does not proceed beyond this advanced exploration phase then the road will be decommissioned and reclaimed by AEM at its expense.

- The application before the Nunavut Water Board (NWB) (amendment of our existing Type B Water License and the subsequent environmental screening by the Nunavut Impact Review Board (NIRB)) covers construction and operation of a road for this advanced exploration phase only.

- AEM understands that the development of a mine at this site will be the subject of a separate application to the NWB for a Type A Water License, which will trigger an Environmental Assessment Process under NIRB. The study of the effects of the continued use of this all weather access road to support mine construction, operation and decommissioning will be included in this separate environmental assessment process should the project proceed. Based on current knowledge and market conditions AEM is confident that this project will proceed beyond the advanced exploration phase but the knowledge on the ore deposit that will be acquired during this advanced exploration program;

- The reference made by AEM to the potential for later development of a power line along the access road and reference to future mine related infrastructure was done in an effort to be fully transparent to all reviewers about what may come in the future if the current advanced exploration unfolds as expected. However, none of these items forms a part of the application for amendment of our Type B Water License that is being currently reviewed. Any such additional infrastructure will be a part of a separate application for a Type A Water License for full mine development.

- AEM is applying to build this road to service its advanced exploration at the Meliadine Project site only. It was never our intention to imply that this road will become a part of future community infrastructure. A decision on future public highway development is a subject for the Government of Nunavut in consultation with regional government and the Kivalliq Inuit Association. We do not know how such development could unfold in the future or whether this access road could become a part of such future development. Our application is to build and operate an access road for our stated exploration purpose. If the underground exploration and bulk sampling results support the construction and operation of a mine at the Meliadine site, the use of the road for that purpose will be included in our proposed mine development and it will be assessed with all the other activities. However for the time being, our obligation in the context of the exploration project will be to decommission this road once our permitted activities are completed.

- AEM respectfully disagrees with the GN DoE recommendation that this Type B Water License amendment covering a 27 km long access road for advanced exploration be "*subject to 12.4.4(c) of the NLCA".* AEM is confident that NIRB will direct that there will be a separate extensive environmental review under the NLCA if the Project proceeds beyond the advanced exploration phase. If the Project does not advance beyond exploration then the road will be reclaimed. In our opinion GN Doe is being alarmist and disingenuous in implying that AEM is trying to skirt in some way a full socio-economic and environmental assessment of the Meliadine Gold Mine Project.

AEM Reference: Information Request #32

Made By: Government of Nunavut – Department of Environment

A permanent road may have long term implications for wildlife habitat in the region. The proponent is proposing to remove an estimated two million cubic meters of rock and two million cubic meters of granular material from various sources to build the road and right-of-way. The source point of the material and the associated topographic features (eskers, moraines) can never be restored and would otherwise be used by wildlife as habitat for dens, nests, burrows, insect, and predator avoidance. These aggregate sources are not all within the immediate vicinity of the proposed road and right-of-way, which may necessitate tertiary access roads, the impacts of which have not been explored. The construction of the road will damage the vegetation and at least alter the local hydrology, which can affect habitat quality.

AEM's Response to Information Request:

As per Section 2.3 (Scope) in the Road Project Description, the selection of the road route considered the following: minimizing road length; proximity to ore bodies; minimizing stream crossings; availability of quarries along the route; avoidance of archaeological sites; and topography, among others. In addition, routing of the road also considered following existing ATV trails, of which there is a pronounced network of ATV trails on the landscape, some of which have caused visible damage to the tundra and streams.

The proposed road will be a 27.4 km all-weather road between Rankin Inlet and the Meliadine site and will provide easier access to Meliadine Lake for Rankin Inlet residents. The overall footprint of the road including quarries and the road itself is approximately 250 ha.

The spreadsheet in Appendix 2 of the Project Description list the 5 rock quarries and 10 till/gravel borrow pits that are planned to be utilized for the construction of the all-weather access road and 4 km spur road to the edge of Meliadine Lake. As indicated, the total required quantity of materials is estimated to be 750,000 m^3, of which 240,000 m^3 will be quarried rock and the remainder, or 510,000 m^3, will be glacial/fluvial deposits.

Although rock outcrops are widespread within the Project area, the planned rock quarries (5) and granular (10) borrow pits are not widely distributed within the region, and all are located within immediate or close proximity to the road. All of the planned rock quarries occur within a couple hundred metres of the proposed road, while the furthest granular borrow pits (B12 and B13) are located less than approximately 300 m away (see Maps A to C of Appendix 2). As such, there will not be an associated tertiary network of access roads that extend out a great distance from the planned road footprint.

Vegetation community along the road route was assessed in detail in 1998 by local vegetation expert Page Burt. According to the availability of vegetation communities in the Regional Study Area, the Heath-Lichen and Lichen-rock vegetation communities most closely correlate with esker habitat. These plant communities make up about 4% (i.e., 18,339 ha and 19,273 ha, respectively) of the RSA and are widely distributed within the RSA. Esker habitats would be used as dens by foxes and wolves, and some of the outcrop areas may provide good raptor habitat. There are some raptor nests within the vicinity of the road that will be monitored during construction and operations.

The rock quarries and road footprint comprise approximately 250 ha or <1% of the vegetation communities mentioned above. The overall loss of vegetation from the Project will be largely attributed to the road footprint itself (~30 ha), as the majority of the Project footprint is a result of quarry development, which has little to no vegetation cover.

In summary, the habitat-related effects to wildlife as a result of the Project are anticipated to be minimal. Consideration will be given to identifying potential wildlife crossing areas along the road based on traditional knowledge and well-used caribou trails, if any. Monitoring of raptor nest locations will also be completed during construction and as part of the overall monitoring plan during operations.

AEM Reference: Information Request #33

Made By: Government of Nunavut – Department of Environment

Sampling of aggregate sources suggests a large percentage (47%) of the tested potential quarries may have significant concentrations of metals like aluminum, copper, and zinc. Therefore, road materials have the potential for metal-leaching, which may have long term systemic effects on the quality of wildlife habitat in the area. It is unlikely that the permanent road would ever be restored to pristine conditions. In fact, doing so may further contribute to habitat destruction. The cumulative impacts associated with long term development may also further contribute to the degradation of wildlife habitat quality.

AEM's Response to Comment:

Labile components of geologic materials depend on the form in which the chemical is present, namely the mineralogical phase into which it occurs. Not all chemicals are releasable, as illustrated by the difference between the total content and leachate content of a given element in a sample. The shake flask extraction (SFE) test used as the basis to evaluate metal leachability as recommended in MEND (2009), shows that the quarries and borrow locations selected for use have a relatively low potential to leach metals to the receiving environment when considering the conservative nature of the SFE test (using finer crushed materials and intimate particle contact with water), and the comparatively small source area (the road) relative to the overall catchment area. While any metals leached from the road will generally be in the "dissolved" phase, it is worth noting that there are additional complexation reactions that occur in water courses and in soils (e.g., with humics, fulvics) that limit bioavailability, and as a result any metals leached from road materials will not necessarily be bioavailable.

The impacts of the use of local quarry and borrow materials to build the road will be evaluated through further geochemical testing of the quarry sites and monitoring of receiving stream water quality after road construction and during mining operations. The results of monitoring will be reported to NWB, KIA and NIRB.

As noted above, quarries and borrow areas with the lowest metal-leaching potential have been chosen as construction material sources to minimize potential negative environmental effects resulting from road construction and operation. Reclamation of the road is anticipated to promote habitat that is analogous to eskers and may provide suitable conditions for small mammal burrows, fox dens and wolf dens.

AEM Reference: Information Request #34

Made By: GN Department of Environment

The project proposal does not provide a clear indication on the intensity of the road usage by community members. There are significant implications on how the road and right-of-way will contribute to future developments (e.g., power plant, tank farm, power lines) that have long term systemic impacts.

AEM's Response to Information Request:

Based on our consultations in Rankin Inlet, AEM predicts that the intensity of usage of the proposed road by community members will vary quite significantly by season and that such usage may not all be incremental from current access into the Meliadine Lake area. There are cabins wide spread throughout this region now that are accessed by community members using snowmobiles, ATV's and boat. There is a network of existing ATV trails along the proposed road route. Community members are currently accessing the Meliadine Lake area using these routes. Access numbers are believed to peak during summer months when the weather is more comfortable but access is occurring year round. We know of no hard statistics available on access numbers and so quantification is difficulty. AEM predicts that the road will increase access to Meliadine Lake just because access will become easier using the road as compared to the existing ATV trails. Our predictions are speculative but based on what we have heard.

AEM expects to see the following usage pattern:

- Winter Months
  - Week days – between 1 and 2 pickup trucks and 5 to 10 snowmobiles daily when the weather is good, dropping to 0 when the weather is bad.
  - Weekend days – between 2 and 5 pickup trucks and 10 to 20 snowmobiles daily when the weather is good, dropping to 0 when the weather is bad.
- Summer months
  - Week days – between 2 and 5 pickup trucks and 5 to 10 ATV's daily when the weather is good, dropping to 0 when the weather is bad.
  - Weekend days – between 5 and 10 pickup trucks and 10 to 20 ATV's daily when the weather is good, dropping to 0 when the weather is bad.

We estimate that between 25 to 50% of these trips will be incremental to current access.

The issue of how road use will change or how the road will contribute to greater eco-systemic effects if and when the road is used to support the construction, operation and decommissioning of a mine should be left as a subject of the environmental and socio-economic impact assessment of the mine

project. The current assessment should only deal with what is proposed and known today and should not speculate on what may happen or what may be built. We do not know today whether development of the Meliadine Mine will end up with a new power plant being constructed in Rankin Inlet or at the Meliadine Site and thus we do not know whether there will be a power line built or where fuel tanks will be built. We only know that there is such a possibility and it needs to be assessed once we know the full mine project will proceed.

AEM Reference: Information Request # 35

Made By: GN Department of Environment

We are aware that there is a great deal of public support for this project. The concerns being expressed are in reference to scale of this project and its potential contribution to multiple large scale developments. Another concern is with respect to the Iqalugaarjuup Nunanga Territorial Park Master Plan. The Plan is an agreement among Inuit, the community and Government about the management of the Park. The Plan explicitly states the concerns of local people regarding vehicle noise in the vicinity of the Park and its impacts on both wildlife and on the enjoyment of the Park. These are enforceable under 11.(1)(c)(ii) and (iii) of the Territorial Parks Act.

AEM's Response to Information Request:

AEM is unaware of any other large scale development along the proposed road that could adversely impact the Iqalugaarjuup Nunanga Territorial Park.

AEM is aware of the importance of the Iqalugaarjuup Nunanga Territorial Park to the Kivalliq Region and its residents. Consequently the proposed road alignment was selected by Comaplex to avoid impacting the park. The road crosses the Meliadine River south of the park and was aligned to skirt the park boundaries. AEM is not proposing any off road activity that would adversely impact the park.

AEM Reference: Information Request #36

Made By: GN Department of Environment

The proposal does not indicate the use of new technologies, but the projects implied in the proposal do indicate the use of new technologies in relation to the potential leaching of metals.

AEM's Response to Information Request:

In the current proposal, an all-weather road to support the underground exploration and bulk sampling program at Meliadine, AEM has not proposed to use any "new" technology in relation to the potential leaching of metals. AEM has applied well documented Canadian best practise guidance in sampling and testing of road construction materials to assess which materials should be used and which should not be used. This was done to avoid using road building materials that could become a source of acid rock drainage and/or unacceptable metal leaching in the future.

AEM Reference: Information Request # 38

Made By: GN DoE & GN ED&T

The Department of Economic Development & Transportation requires clarification on a couple of items found in the proponent's application. First, in the NIRB Part 1 Form, the dates of operation for the road are listed as from 2012 to 2026. It is our understanding that this road is being proposed for the 2011-2014 underground exploration and bulk sample project. The Department therefore requests that the proponent provide clarification on the dates of road operation. It is our expectation that the road would be decommissioned at the end of the 2011-2014 project unless required for additional project activities.

AEM's Response to Information Request:

Notwithstanding the term of authorization requested in its initial application; AEM wishes to make the following clear:

- AEM is applying to construct an all-weather access road between Rankin Inlet and the Meliadine Gold Project site to support its advanced underground exploration and bulk sampling program at this location (nominally 2012 thru 2014). The intent is to obtain data for a feasibility study to support development of a gold mine at this location. If the Project does not proceed beyond this advanced exploration phase then the road will be decommissioned and reclaimed by AEM at its expense.

AEM Reference: Information Request #39

Made By: Culture, Language, Elders and Youth

We appreciate that AEM hired an archaeological consultant for the 2010 season. The consultant's report submitted to CLEY came to us limited in its reporting to the All-Weather Road.

In contrast, the proponent's submission for the current NIRB 11RN017 indicates more potential disturbance than the subject All-Weather road. These additional areas, including emergency airstrip, power lines and areas not covered by the 2010 field assessment.

Our recommendation is that there must be more advanced planning on the part of AEM in respect to heritage resources. The clarification our department seeks is for detailed information for all land areas surveyed by the archaeologist, both for the All-Weather road and previous year for file 10EA018, all in relation to developed, planned and activities currently in place. The activities of Aim and their effects on valued economic components, all need to be assessed fully and in respect to the company's explicated stated applications to both NIRB as well as CLEY's permit process.

AEM's Response to Information Request:

The additional areas for the emergency airstrip[12] and power lines[13] were covered during the initial Archaeological Impact Assessment (AIA) for the all weather road that was undertaken under permit NU 2008-003A[14]. During the 2008 survey a low-level aerial reconnaissance of the road alignment and adjacent borrow source area was conducted by helicopter to assess the archaeological potential of locations within the development area and buffer zone. The buffer zone was generally 500 m on each side of the proposed alignment centerline. The results of the 2008 AIA resulted in identifying 18 new sites and revisiting 12 previously recorded sites. The 2010 field assessment carried out under permit NU 2010-005A was designed to mitigate sites and features associated with sites that were within a 30 m of the proposed Project impact area, this being the all-weather road only. Seven sites were revisited and features associated with the sites that would be impacted by the Project were mitigated with detailed

[12] See also Information Request # 4. The airstrip will not be built.

[13] The reference made by AEM to the potential for later development of a power line along the access road and reference to future mine related infrastructure was done in an effort to be fully transparent to all reviewers about what may come in the future if the current advanced exploration unfolds as expected. However, none of these items forms a part of the application for amendment of our Type B Water License that is being currently reviewed. Any such additional infrastructure will be a part of a separate application for a Type A Water License for full mine development. See also Information Request 29_30_31

[14] The 2008 survey happened well before an application for the all-weather road was being contemplated.

mapping, photography and limited test excavation as per the *Nunavut Archaeological and Palaeontological Sites Regulations*.

AEM will provide CLEY with detailed information for all land areas surveyed by the archaeology studies that have been completed for the Project to date in relation to developed, planned and activities currently in place for the Project. Any gaps that are identified in the coverage will be discussed with CLEY and appropriately addressed through fieldwork during the 2011 field season and subsequent reporting.

AEM Reference: Information Request #41

Made By: Kivalliq Inuit Association

Section 3.1 Overview of Project Environment, Socio-economic and Traditional Knowledge Studies – Paragraph 3 on Page 24

It states that the VEC of predatory animals would not be included here as there is a low probability that these would be affected by the road. However, any road development will have the potential for vehicle-caribou collisions causing caribou mortality. This could cause an increase in predatory animals, in particular wolves. Therefore, the collection of data on wolves should be included as part of the baseline study of the road.

AEM's Response to Information Request:

The speed limit on the All-Weather Road is 50 km/hr or less if required. This should allow a driver to stop over a short distance if any animal is on the road. If an animal is accidently hit and killed by a vehicle, it would not be left on or beside the road. The carcass would be collected and the nearest Conservation Officer contacted to report the incident and seek advice.

One of the mitigation measures recommended by the Department of Environment, Nunavut includes:

> *"To prevent and minimize project related impacts on wildlife, it is important that the proponent is aware that encounters with wildlife are possible and have the necessary protocols, training, and equipment to mitigate their impacts. DoE asks for the proponent to develop a wildlife mitigation plan to address collisions with wildlife and emergency kills from problem wildlife. The plan should include a detailed reporting system that will track every animal harmed or killed by the proponent's activities."*

AEM commits to developing a wildlife monitoring plan as part of the overall road management plan; this plan will cover all aspects of the road including wildlife interactions. The presence of wolves and other animals along the road will be monitored and recorded.